RESEARCH REPORTS AND NOTES

HEALTH CARE FINANCING IN CENTRAL AMERICA AND THE ANDEAN REGION

A Workshop Report*

Dieter K. Zschock
SUNY at Stony Brook

INTRODUCTION

The goal of "health for all by the year 2000" was endorsed by member nations of the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) at the International Conference on Primary Health Care, held at Alma Ata, U.S.S.R., in September 1978. The goal of attaining total health care coverage of the population had been agreed upon by the Ministers of Health of the Americas at their III Special Meeting in 1972. Meeting again in 1977, the ministers took stock of the region's accomplishments and remaining shortcomings in preparation for the Alma Ata conference. They concluded that their institutional

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health care systems, which bear the major responsibility for providing total coverage, had not yet attained this goal; among the reasons mentioned were institutional rigidities that made it difficult to determine and respond to unattended needs for health care, and the financial inaccessibility to large population groups of the institutions providing health services. These problems were compounded by a "significant increase in the cost of medical care . . . which reduces the resources available for providing universal coverage."[1]

In November 1977, WHO convened a Study Group on the Financing of Health Services that, for the first time, comprehensively examined the complex problems of insufficiency, inefficiency, and inequality of health care financing in developing countries. On the basis of the study group's report,[2] the executive director of WHO, in November 1978, recommended that "countries should be urged to undertake periodic surveys of financing and resource allocation in their health sector, as an integral part of their health planning processes."[3] Meanwhile, the Alma Ata conference had defined and endorsed the primary health care approach to achieving total coverage and "agreed that the translation of the principles of primary health care into action would require the priority allocation of budgetary resources to primary health care, better distribution and use of existing resources. . . ," as well as better management processes and information systems.[4]

Coincidentally, the Office of International Health of the U.S. Department of Health, Education and Welfare had in 1977 sponsored the production of a manual for the preparation of health care financing analyses.[5] Subsequently, the International Health Programs Division of the American Public Health Association (APHA) commissioned a monograph[6] to outline a conceptual framework for the analysis of health care financing in developing countries. In response to the WHO executive board's recommendation and in light of previously expressed concern by the health ministers of Latin America, APHA decided to sponsor this workshop. Due to time and financial constraints, participation was limited to the twelve Central American and Andean countries and five international agencies. The countries sent representatives who held senior administrative, planning or budget positions in ministries of health and finance, social insurance organizations, and national planning departments. The international agencies including PAHO, USAID, AMI, the Inter-American Development Bank, and the Canadian International Development Research Centre also sent high-level representatives.[7] The substance of the workshop and its objectives were introduced in an opening address by Dr. Antonio Ordoñez Plaja, former Minister of Health of Colombia (1966–70) and currently consultant to the World Bank.

SOURCES OF HEALTH CARE FINANCING

Three background documents (see notes 3, 5, 6) were distributed to workshop participants beforehand in order to provide them with guidelines for the analysis of how much countries spend on health care and what sources and methods of financing might be most efficacious in providing adequate support for the

efficient and equitable delivery of health care for all of a country's population. Major sources of health-care financing include general tax revenues, deficit financing, social security, sales tax revenues, net income from lotteries and betting operations, direct employer payments, private health insurance, charitable contributions, direct household expenditures, and communal self-help.

General tax revenues typically are the single most important source of public health care support, but they are subject to economic fluctuations and political manipulation which account for considerable uncertainty in the level of support to—and its allocation within—the health sector. National financial authorities can augment general tax revenues through borrowing, both domestically and internationally. Such "deficit financing" involves a decision to spend funds currently with repayments to be made from future revenues, thus reducing the level of public funds available for future expenditures.

The other major source of deficit financing is bilateral and multilateral foreign aid loans. In some countries in the region, foreign aid has at times been a major source of health care support. Governments may readily accept aid loans because they make immediate progress possible when general revenues are insufficient to permit large expenditures on health care. However, disbursement of aid loans usually is completed within three to five years; thus, aid loans constitute only a short-run source of support. In countries where the percentage of general tax revenues allocated to health care has increased in recent years, this has often been the result of counterpart funding requirements connected with the acceptance of foreign aid loans. For some countries it is doubtful, however, that governments are able or willing to continue the proportionately higher levels of funding once the aid loans have been disbursed.

At state and local levels, governments in the regions tend to rely on sales taxes to support public sector activities. Although sales taxes are not yet a major source of public revenue, they often are used to finance specific programs, such as health care, in which case they may be a significant source of funds for that particular sector. Lotteries and betting operations also serve as public sector sources of earmarked income for health and other social services in a number of countries.

Social security finances health care for employed workers, as well as invalid and old age support. This semiautonomous health care system imposes mandatory insurance payments as a percentage of wages, paid in varying proportions by workers and employers. In some cases, the government is a third contributor to the scheme, and workers may have to pay a user fee in addition to their wage deductions. Social security has been introduced in most of the region's countries. Its appeal lies in the fact that it has tapped a major new source of financing for health care; its principal shortcoming is its limited coverage.[8]

Countries also rely on a variety of private sector sources of support in their effort to expand and improve health care. Foreign-owned enterprises in agriculture, mining, and manufacturing often provide minimal health care for their workers, sometimes including their dependents. Large, domestically owned enterprises, e.g., mining operations, railroads, construction and steel companies, may also directly finance health care for their employees. An institu-

tionalized form of employer-provided health care is through group health insurance, which differs from social security in that it is voluntary, typically covers only health care, and does not include pensions. Private health insurance is more prevalent in countries that do not have social security systems.

Local *beneficencias* (charitable institutions) also constitute an important source of support for health care in many Latin American countries. They may operate health care facilities directly or serve as conduits for contributions to finance local hospitals. Substantial charitable contributions also come from foreign bilateral or multilateral organizations such as CARE and UNICEF in the form of grant aid (as distinct from loan aid).

Communal self-help is also increasingly regarded as an important source of health care support, and includes local volunteer services in health promotion and first aid and community labor provided for construction amd maintenance of local health facilities, including clinics and water and sanitation projects. Undoubtedly, there are additional sources of support for health care at all levels. There is danger, however, in the excessive diversification of sources of support. Duplication of efforts may occur, and the use of funds may not be sufficiently flexible to allow health care administrators to allocate them efficiently and equitably. The major sources of organized health care support in the region remain general tax revenues and social insurance.

Financial data on the public, semiautonomous, or private agencies that provide health care and on their sources of support are usually difficult to obtain. Data are often limited to the budget of the ministry of health and of the social security system, and not all of their expenditures are for health care. Either or both organizations may administer old age and invalid pension payments. In a number of countries, ministries of health operate various welfare services, such as child care centers, only some of whose functions would normally be considered as health care.

SUMMARIES OF COUNTRY REPORTS

Representatives from ten of the twelve countries represented at the workshop prepared draft papers for discussion, which are summarized below. Because of a change in government in Venezuela and political turmoil in Nicaragua, representatives of those two countries were unable to contribute to the written proceedings.

Colombia

Since 1973, Colombia has made a concerted effort to determine how much the public and semiautonomous subsectors spend on health care and how these expenditures are financed. It has proven difficult to develop closer cooperation among the two leading institutions of the health sector, the Ministry of Health and the Colombian Institute of Social Security, although such cooperation may have been initiated with the passage in 1979 of a law that mandates it. An

additional complication is that the level of social security financing of health care has surpassed the level of resources made available to the ministry, thereby solidifying the relative strength of the semiautonomous sector which serves an estimated 15 percent of the labor force, including limited services for dependents.

The data on the semiautonomous sector reported in the ministry's analyses of health sector financing include not only the Institute of Social Security but also several family welfare funds (*cajas de compensación familiar*).These provide a wide variety of social services, not all of which could be regarded as health services. Organizationally, both the institute and the funds are semiautonomous dependencies of the Ministry of Labor and Social Welfare. Since 1977, the several social security institutions have been legally bound to conform to the health care norms established by the Ministry of Health under a so-called National Health System. This system, however, does not involve actual integration of their financing and operations.

The largest semiautonomous institute under the aegis of the Ministry of Health is the Colombian Institute of Family Welfare, which provides primary health care, nutrition, and other social services through its child care centers. It receives a substantial allocation of general revenue from the ministry, as well as a 2 percent payroll tax levied on employers. This separate source of income, and the fact that the institute is administered by a board chaired by the wife of the president of Colombia, gives it great independence from the ministry.

Information drawn from the workshop report and related background documents shows that in 1978, the public and semiautonomous health subsectors together had revenues equivalent to 4.0% of GDP. The Ministry of Health, by itself, accounted for 1.5% and the Colombian Institute of Social Security and the cajas de compensación familiar accounted for 2.5% (as noted above, these proportions probably overestimate the level of financial support actually allocated to these two subsectors). The ministry's estimates also indicate that other public sector agencies and private sector institutions providing health care each account for about 0.2% of GDP. Health care coverage is inequitably distributed, however, with the semiautonomous and private subsectors providing modern health care to about 25% of the population at five to ten times the level of support per capita of the public sector, which covers about 45% of the population; the remaining 30% have no access to modern medical care.

The expansion of primary health care to reach all of the population is regarded as a responsibility primarily of the Ministry of Health. Its 1978 budget of COL$ 11.2 billion (US$ 320 million) represented about 8% of the national budget; its sources are shown in table 1. In addition to general revenue from the national treasury, it also shares with the Ministry of Education a 15% slice of the national budget, the *situado fiscal*, which by law is earmarked for primary education (11.1%) and primary health care (3.9%). The law provides for the increase of this share to 25% at the discretion of the government, but since the law's passage in 1973, the percentage has remained at 15. Sales of services include fees collected from patients by hospitals and health centers, as well as laboratory services sold by the National Institute of Health, one of the ministry's several

TABLE 1 *Sources of Revenue, Ministry of Health, 1978*

General revenue	24.3%
Situado fiscal	20.3%
Sales of services	14.2%
Beneficencias & lotteries	7.7%
Liquor tax	6.1%
Beer tax	4.1%
State and local taxes	1.8%
Various other sources	3.6%
Domestic credit	6.5%
International loans	0.3%
Balance from 1977	11.1%
Total	100.0%

semiautonomous agencies. The beneficencias in past years were autonomous sources of support for hospitals; in addition to receiving bequests from private sources, they traditionally administered state lotteries. The beneficencias now have to give their net income to the ministry which incorporates this revenue with other sources in financing its regional health services. Taxes on liquor and beer are also collected at the state and local level and earmarked by the ministry for the financing of hospital operating costs. Among various other sources are taxes on winnings from lotteries and betting operations. Domestic credit, obtained largely through the issuance of interest bearing bonds, is used to finance hospital construction. These bonds are purchased primarily by the semiautonomous social insurance institutions. International aid and technical assistance have dwindled from a level of about 10% of the budget during the mid-seventies to an insignificant share in 1978. The relatively large balance of income carried forward from the previous year suggests that the ministry contends with considerable inefficencies in the collection and distribution of its revenue. It is worth noting that general revenue, representing about one-fourth of total income, is the only source whose funds are not earmarked for specified purposes.

Although in 1978 an estimated 30% of the population did not yet have access to primary health care, the official goal of achieving universal coverage by 1983 is not entirely unrealistic. A rough calculation by this author suggests that a two- to threefold increase in the situado fiscal allocation to health care would be required, which would increase the ministry's budget by 20 to 40 percent. The government, as noted above, has the legal authority to increase the situado fiscal. Alternatively, the same increase in financial support for primary health care expansion could be attained if between 15 and 25 percent of semiautonomous sector revenue were made available for that purpose. Although the general magnitude of additional funds required to expand primary health care is substantial, an ultimately more important priority may be to improve the quality of public health care nominally covering 45 percent of the population. The additional funds required to improve existing services is less readily estimated.

One example of improving public health care in Colombia is a program sponsored by the National Coffee Growers Association. It was reported at the workshop that for the department of Quindio, the association in 1978 had allocated a budget of COL$ 29 million. These funds come from a capital fund of COL$ 1.5 billion whose interest income the association makes available to improve and expand health care in the coffee-growing departments. In 1976, Quindio received COL$ 69.3 million from the ministry for personal health care in the public sector; this allocation probably reached COL$ 100 million by 1978 (assuming an increase proportional to the increase in the ministry's total budget). The coffee growers thus subsidized public health care in Quindio by close to a third in additional funds. Their support program is carried out in close cooperation with the ministry's regional health service for the department. Subsidies are used largely to improve the qualifications of auxiliary nurses and health promoters, to supplement medical supplies and to provide additional communications and transportation services.

Guatemala

The public and semiautonomous health subsectors of Guatemala are similar to those of Colombia, except that most investment in public health facilities appears in the budget of the Ministry of Public Works. It is important to recall that the major earthquake suffered in 1976 makes the investment data for 1977 and 1978, the years of reconstruction, unrepresentative of general tendencies in health care financing. The latest representative data available are for 1975, in which year the Ministry of Health accounted for about 1.0% of GDP and 8.9% of the central government budget. In addition, investment in the health sector by the Ministry of Public Works, financed primarily with general tax revenue and international loans, averaged about 20% of total public health care expenditures, raising the proportions of public health care with reference to GDP and the central government budget to 1.2% and 11.1%, respectively. Social security in 1975 represented 1.0% of GDP, but the semiautonomous subsector covers 33% of the labor force, which is a relatively large proportion at that level of expenditure.

Health care expenditures by the Ministries of Health and Public Works are supported mostly from general revenues (90%) and external assistance (5%), with the balance received from fees and sales of products. The Social Security Institute receives 58% of its revenue from payroll taxes levied on employers and 26% on employees, with the balance of 16% financed by the government from general revenue. Nominally, Guatemala has a national health system that assigns roles to the public and semiautonomous sectors. The workshop presentation by the ministry emphasized this policy and presented all data jointly for the two subsectors. Thus, for the period 1973–77, 49% of combined expenditures were for curative care, 23% for preventive care, 19% for administration and 9% for other purposes (presumably including investment). The report presented by the Social Security Institute of Guatemala shows that practically all its revenue is spent on operating costs. The institute contracts with the ministry for the use by

its members of public hospitals, but it staffs its 72 medical centers independently of the ministry. The report states that social security funds should not be diverted for the benefit of noncovered segments of the population. The strategy, instead, is to expand social security coverage for curative care (which in Guatemala already includes a growing proportion of the rural population), while the Ministry of Health is to focus its activities increasingly on preventive and environmental health services. About 20% of the population, however, is still without ready access to modern health care services.

Costa Rica

One of only three countries represented at the workshop that have fully integrated their public and semiautonomous health sectors, Costa Rica claims that by 1980 it will have achieved universal coverage of health care for its population of 2.2 million by universalizing social security coverage for curative health care.[9] Since 1976, affiliation with the Social Security Institute has been made mandatory for everyone, and the government is obligated to subsidize the institute in order to provide coverage for the indigent population. The Ministry of Health remains responsible, however, for all preventive and environmental health services and for primary health care (including both curative and preventive care) in the outlying rural areas that account for 31% of the total population. The Social Security Institute has taken over responsibility for financing and operating all health care facilities in the urban areas to which patients from the rural areas are to be referred when necessary. This referral system justifies the claim of universal coverage by curative health care through the Social Security Institute. The ministry's responsibility to provide health care to the rural population is supported in part by a National Fund for Family Assistance, created in 1974 and financed by a 5% payroll tax levied on employers and a 37.5% share of revenues from a nation-wide sales tax. About two-thirds of family assistance is allocated for health services, the balance to housing subsidies and pensions for the indigent. All foreign assistance to Costa Rica for the development of its national health system was terminated in 1977.

Since the implementation of the universalization of social security coverage, including the transfer of hospitals from the Ministry of Health to the Social Security Institute, the health sector budget composition has shifted heavily in favor of the latter. In 1974, the ministry still accounted for 52% of the combined total, whereas by 1978, its share had dropped to 21%. In absolute terms, the ministry's budget was about the same in 1978 as in 1974 while the Social Security Institute's budget had grown fourfold. The combined health sector allocation that year represented about 20% of the national budget, and 6% of GDP, the largest proportions among the countries represented at the workshop. In 1978, the principal sources of revenue of the combined health sector in Costa Rica were: wage taxes, 55.3%; other taxes, 20.4%; national lottery, 8.5%; fees and sales, 8.5%; and other, 7.3%.

Chile

Chile has the longest experience of a financially and organizationally integrated national health system. Beginning in 1918, Chilean social security organizations grew until their number approached fifty. In addition, local beneficencias were created to finance hospital construction and some operating costs, but they increasingly received government subsidies. The social security organizations relied largely on the existing medical facilities rather than constructing their own. By 1952, the government's role in the health sector had become strong enough to facilitate the creation of a National Health Service, which combined hospitals and clinics as well as the government's preventive and mother and child care programs. The National Health Service, however, was limited to servicing blue-collar workers and the indigent, who together accounted for about 65% of the population; the public and private sector white-collar and professional employees and their families, since 1938, have been served by the Employees National Medical Service (SERMENA), which covered about 20% of the population; and the remaining 15% relied on private health care. This was the situation in 1970, with general tax revenues financing about 65–70% of the combined costs of the National Health System and SERMENA, 16–18% contributed from wage taxes, and the balance from fees and other direct income of health services. Public sector expenditures represented about 2.8% of GDP.[10]

The workshop report outlines how the present government has modified the financial and organizational arrangements of the public health sector. The basic policy of current health care coverage is to give everyone free and equal choice in the selection of medical attention, regardless of source of support and ability to pay. In order to implement this policy, a National Health Fund has been created through which all sources of public sector financing are channelled to regional health care units. The latter constitute the newly decentralized health care system which is to replace both the National Health Service and SERMENA. The Ministry of Health remains the central policy determinant and provider of preventive and environmental health care services. Public health care financing in 1978 represented an estimated 3.5–4% of GDP, suggesting a substantial increase in the level of support. Nevertheless, costs and utilization of public health care are to be controlled through free choice facilitated through a voucher system together with an official schedule of fees. Thus, the revenue of health care units and their individual facilities will increasingly come from vouchers and fees and decreasingly from direct budgetary allocations. Chile appears to have attained universal coverage of health care.

Panama

Panama has also legally integrated its public health services. In addition to eliminating the duplication of services and achieving universal access to health care, Panama—like Chile—has also committed herself to the goal of providing equal quality in health care for all. This policy has been in effect since 1973. According to the workshop report, eight of nine provinces of the country have

achieved this goal. Yet, the budgets of the Ministry of Health and Social Security Fund continue to be separately administered: in 1978, the budgets of these two institutions accounted for 1.5% and 2.8% of GDP, respectively; the ministry's budget constituted 9.6% of the central government budget; the separately administered Institute for Water and Sewage Installation (IDAAN) had a budget equivalent to 0.8% of GDP; the combined public health services thus represented 5.1% of GDP.

Sources of revenue are rather diverse, not only for the Ministry of Health but also for the Social Security Fund, although a detailed accounting of their relative importance was not provided. The report, however, stressed the contributions expected from communities, including funds collected through *patronatos* (family welfare funds), fees, and local tax revenue. The ministry also receives the net income from a national lottery and its allocation of general tax revenue is supplemented through foreign aid despite the country's relatively high per capita income. The Social Security Fund's income derives not only from taxes on wages and pensions, but also from sales taxes on alcoholic beverages. IDAAN finances its investments primarily through foreign aid and user fees. Most of the Panamanian population now appears to have access to health care.

Peru

Peru reported that it had especially serious difficulties in coordinating its health sectors financially and organizationally. The budgets of the Ministry of Health and the Social Security Institute each represented 1.0% of GDP in 1978. The ministry's allocation, moreover, accounted for only 4.1% of the central government budget, a significant reduction from 5.2% in 1977. The public health sector in Peru, however, also includes a number of other health-care providing institutions, such as beneficencias and social welfare agencies, that function autonomously and together account for another 1.2% of GDP. The report points out that the diversity of public health care services that function outside the Ministry of Health and the Social Security Institute is a serious obstacle in expanding coverage and in efforts to increase the ministry's level of income.

At least one-fourth of Peru's twelve million people have no access to modern health care, and among those who nominally are within reach of existing facilities, many do not in fact receive minimally adequate services. The report associates the poor financial situation of the public and semiautonomous subsectors of health care with the negative growth rates of the Peruvian economy in recent years, which have preempted any stimulus to social development. It also points out that the Social Security Institute and other semiautonomous institutions have increased their revenues in proportion to those of the Ministry of Health. The ministry's budget is especially sensitive to general economic conditions since 84% of its income derives from general tax revenue; moreover, the ministry is obligated to transfer substantial proportions of its income to several semiautonomous agencies. The only hope for improvement in the ministry's finances was the prospect of substantial foreign aid receipts, starting in 1979.

Ecuador

In Ecuador, the health sector is disorganized and for the most part poorly financed. The Ministry of Health has been in existence only since 1967, and even today, it is overshadowed by the beneficencia of Guayaquil, a semiautonomous agency that serves the health needs of the country's industrial and commercial center. The Social Security Institute covers about 15% of the labor force, including limited coverage of family members of workers, but it is relatively poorly financed with a 3.4% payroll tax levied on employees, without, apparently, any employer contribution. An innovative source of health care financing in Ecuador is the Rural Social Insurance Fund, supported by premiums paid by households, which covered 87,500 individuals in 1978. A major effort to integrate the public health sector involves the construction of a network of regional and local hospitals under Ministry of Health auspices, financed largely by a loan from the Inter-American Development Bank. The ministry estimates that with this network in operation, 70% of the population will be covered by the health care services of the three organizations mentioned above. The ministry received 6.7% of the central government budget in 1978. If one combines the revenues of the three organizations, the ministry accounted for 51%, the Social Security Institute for 36%, and the beneficencia of Guayaquil for 13% of the total.

Bolivia

The Ministry of Health budget in 1978 represented 0.9% of GDP and 5.7% of the central government budget. Social security, including at least ten separate insurance funds that are only loosely integrated into the Bolivian Social Security Institute, accounts for about 1.3% of GDP. If one combined their resources, the ministry would have 36% of the total and the social security system 64%. With the exception of about 10% of the population who can afford private modern health care, 70 to 80% rely on the ministry's services; only between 10 and 20% are covered by social security. A large proportion of the population, in effect, has no access to public health services; the rural population (about 71% of the total population) for the most part relies on traditional practitioners such as faith healers and midwives.

Efforts to improve the quality and expand the coverage of health services in Bolivia have been carried out primarily by the ministry with the help of international financial aid and technical assistance. In 1974–75, the country's health situation was comprehensively analyzed in a project jointly sponsored by the ministry and USAID. A subsequent pilot program to regionalize health care programs and integrate curative and preventive services was financed primarily through foreign aid grants from the United States and the Federal Republic of Germany. The pilot program at Montero was discussed at the workshop. The importance of foreign aid in carrying it out was stressed, and the program was criticized by participants for its heavy reliance on such sources. Doubts about the replicability of such pilot programs with ordinary revenues are usually well founded although in the Bolivian case a USAID loan is intended to help the

ministry expand the Montero model to other rural areas of the country. The workshop report emphasizes, however, that available resources are far from sufficient to implement the current national health plan.

El Salvador

During the period 1977–78, the country allocated between 7.0 and 8.5% of its national budget to the ministry of health; between 1970 and 1976, the proportion varied between 10 and 12%. This decline was explained in workshop discussions as resulting from a decrease in investment in physical facilities as needs for them had been satisfied. Most of the construction of facilities apparently occurred in 1975–77, financed by foreign aid loans which represented between 8 and 13.5% of the ministry's budget in those years. The current national health plan (1978–82), however, refers to the need to modernize and expand the network of public health facilities. The country has a social security system that in 1972 covered about 9% of the labor force; no data on the system were reported at the workshop. The ministry estimates that its services cover about 60% of the population and 15% rely on private health care; if social security now covers 10%, only about 15% of the population are left without coverage.

Honduras

Honduras allocates about 8.1% of its national budget to the ministry of health; this represents 1.7% of GDP. Revenues of the country's social security system account for 0.8% of GDP and the system covers close to 10% of the labor force. A workshop paper also included data on the water and sewage agency and the national child welfare agency, which are separately funded and administered. If one included both agencies with the ministry, the combined total would represent 12.8% of the national budget and 2.7% of GDP. The child welfare agency is said to contribute substantially to the financing of rural health services, particularly for family planning and nutrition programs. The ministry, aside from general tax revenue, also receives the net income from a national lottery. The report mentions no coordination of financing or functions between the ministry and the social insurance system, nor does it provide information on the proportion of the population without access to modern health care. (During 1980, Honduras undertook a comprehensive analysis of its health sector with technical assistance provided through USAID.)

SUMMARIES OF INTERNATIONAL AGENCY REPORTS

The Inter-American Development Bank

The largest source of foreign aid lending for the health sector in the region has been the Inter-American Development Bank, which also has provided extensive—though usually project-specific—technical assistance. In support of the region-wide strategy of expanding primary health care coverage since 1974, the

Bank has made loans and provided technical assistance to twelve countries, including five of the six Central American countries (excluding only Panama) and two of the Andean countries represented at the workshop (Chile and Ecuador). These seven countries have received US$ 120.5 million in loans and US$ 2.5 million in technical assistance from the Bank to help finance the construction of health posts, which are the smallest service units providing only outpatient care, health centers which in most cases have beds, and a number of local and regional hospitals ranging in size from fifty to five hundred beds which receive referrals from the lower levels and provide services directly through outpatient clinics and admissions. This relatively recent decision by the Bank to finance infrastructure development for primary health care complements a policy of longer standing to help finance water and environmental sanitation projects. Between 1967 and 1978, the Bank financed water projects with loans totalling US$ 949 million, and sanitation projects for a total of US$ 305 million. In addition, the Bank has included health components in many of its rural development loans.

In order to be eligible for Bank lending in the health sector, countries must have a well-defined national policy of expanding primary health care coverage. The Bank's support is then intended to help implement such a policy through investments in the necessary physical facilities and equipment. In providing support for hospital construction and equipment, the Bank has endorsed the need for referral services and other support for primary health care from centralized facilities. Regional hospitals are intended to offer comprehensive curative services while also serving as centers of continuing education and basic training of auxiliary health care personnel who work at the lowest level of the system. Smaller local hospitals also are viewed by the Bank as bases from which preventive campaigns can be implemented, with priority given to the eradication of transmissable diseases and to mother and child care. In its loan agreements, the Bank insists on a commitment by governments to provide adequate operating budgets for the investment projects financed with Bank loans. The Bank estimates that yearly operating costs for a rural health post run between 27 and 70 percent of the investment cost. For health centers and hospitals, this ratio is estimated to range betwen 11 and 30 percent annually.

The Bank's loans and technical assistance usually are provided for the use of ministries of health and for water and environmental sanitation agencies. In the case of Costa Rica, however, it is noteworthy that the Social Security Fund is the recipient of a loan for facilities, construction, and equipment. Under the country's recently integrated health system, this fund now has the responsibility to provide hospital and outpatient care for all Costa Ricans; the Bank's loan is intended to help the fund live up to this new responsibility. Similarly in Chile, a Bank loan is intended to help the newly created regional health care units attain the capacity required to provide adequate universal coverage. In the case of Ecuador, a Bank loan has the objective of assisting the Ministry of Health to consolidate its control over the country's hospitals and health centers in accordance with country's national health plan.

Pan American Health Organization

Operating with a budget of US$ 76 million in 1978,[11] PAHO provides a wide range of technical assistance and support services to all countries of the region on a continuing basis. The organization is the representative body of the member countries' ministries of health and as such helps them formulate and implement basic policies such as the expansion of coverage through primary health care. For the past two decades, PAHO has pioneered in the development of a health planning methodology for the region, based on a cost-effectiveness approach to the evaluation of health sector expenditures.[12] In the area of economic analysis PAHO has focused on the efficiency with which available resources are utilized, more than on the nature of financing sources and the levels of support they provide. In a paper presented at the workshop, however, Dr. José Vera Lamperein, Regional Advisor in Health Economics, indicated that the deficit in health care coverage stems from a combination of insufficient financing, inappropriate technologies, inefficient allocation of funds among the major health subsectors, and the inefficient use of resources by each of them. He suggested that about half of the 40 percent deficit in coverage in the region as a whole could be eliminated through improved efficiencies in the use of available resources, leaving a net financing deficit of about 20 percent. A guide for analyzing the efficiency of resources allocation and utilization, distributed by Dr. Vera, provides a useful model for the analysis of these important aspects of the problem.

U.S. Agency for International Development

Bilateral aid by the United States in support of development in Latin America has in recent years been concentrated in the areas of health, education, and agriculture. During the 1976–78 period, all six of the Central American countries and Colombia, Peru and Bolivia in the Andean region received substantial assistance in their efforts to expand primary health care and nutrition programs. (Total USAID financing of health sector development in Latin America and the Caribbean amounted to US$ 187 million over the three years, including also four other countries besides those mentioned; two-thirds of these funds have supported primary health care expansion). The policy of the U.S. has been to encourage countries in the hemisphere to emphasize preventive health care and this has determined the orientation of technical assistance and loan agreements. The strategy has been to introduce new types of auxiliary health personnel who are trained and motivated to provide preventive care while limiting curative care to first aid and referrals to local or regional hospitals. U.S. technical assistance has been oriented toward improving the planning and administrative capabilities of host countries as necessary for the expansion of primary health care coverage.

After a loan agreement has been reached, disbursements typically are completed within two to five years, leaving the recipient country with the full responsibility to continue financing a project thereafter; this procedure is com-

mon among aid agencies. The USAID presentation at the workshop recognized the potential hazard of short-term aid disbursements and called for greater attention to be paid by both donor and recipient in the analysis of the financing implications of expanded coverage and the orientation toward preventive care. The report also called attention to the lack of coordination among sources of foreign aid which frequently results in wasting resources and duplicating efforts. Considering that about 10 to 15 percent of many countries' public health expenditures are financed by foreign aid and that this aid usually requires the allocation of domestic counterpart funds, the need to improve interagency coordination is seen as a high priority for future aid programs.

International Development Research Centre (Canada)

The center was founded in 1970 by the Canadian Parliament to provide financial support for research in developing countries in the areas of agriculture and nutrition, human resources, information sciences, and health sciences. Of CAN$ 26.4 million earmarked for Latin America and the Caribbean as of January 1979, CAN$ 4.9 million have been allocated to research and evaluation projects in the health sector. Among sixteen countries that have received grants are Costa Rica, Guatemala, and Panama in Central America and five of the six Andean countries, excluding only Bolivia. Priority areas for support have been research on fertility, rural primary health care, tropical diseases, and water and environmental sanitation. Research projects dealing with primary health care have focused on the analysis of referrals from basic to higher levels of a health system, of the effectiveness of auxiliary health workers, and of cost-benefit relationships. In the areas of tropical diseases and environmental sanitation, the center has recently focused on problems of malnutrition and gastro-enteric illness and on the development of appropriate technologies to deal with these problems. The center's support is usually closely coordinated with technical assistance programs of the Pan American Health Organization.

American Medical International, Inc.

While a number of nonprofit and for-profit organizations are active in the health sector in many Latin American countries, only one among several who were invited to participate in the workshop was represented. American Medical International, Inc., a U.S. based, for-profit organization provides a number of services relating to the construction and operation of health care facilities. These services include feasibility studies, planning and design of physical facilities, equipment selection and installation, personnel training, and administration contracts for limited periods of time in preparation for indigenous assumption of full management responsibility. A number of projects have been completed in Latin America since 1970; clients have included public, semiautonomous, and private health care agencies. Financing for these projects has been provided through international agencies and consortia of private banks and investment groups, with AMI often assisting the client in obtaining part or all of the neces-

sary financing. Venezuela and Ecuador are among several Latin American and Caribbean countries that have invited AMI to provide technical assistance.

OBSERVATIONS AND CONCLUSIONS

Data on health care financing in countries represented at the workshop, drawn from their reports, are summarized in table 2. This type of comparison of proportions of GDP and government budgets allocated to the public and semiautonomous subsectors of health care is usually of considerable interest to foreign aid agencies who view the percentages as indices of what might be called a country's "health effort." However, any international comparison of these indices should be regarded wih scepticism and used with caution: aside from varying inaccuracies in data collection and reporting, such a comparison fails to reflect differences in the quantity, quality, and composition of goods and services produced by the sector. Moreover, levels or proportions of resources allocation tell us little about the distribution of resources among different population segments, and since available data are usually limited to institutional financing, omitting the private subsector, one cannot know what proportion of total national spending on health care the public and quasi-public subsectors represent.

Workshop participants were impressed by the examples of Costa Rica, Chile, and Panama because of their unified institutional health care systems.

TABLE 2 Levels of Health Care Financing in Central America and the Andean Region

Country	GDP per Capita (US$)	Ministry of Health Budget as Percentage of: GDP	Government Budget	Social Security as Percentage of GDP
Bolivia	390	0.9	5.7	1.3
Chile	1,050	3.8	7.6	*
Colombia	630	1.5	8.0	2.5
Costa Rica	1,040	6.0	20.0	*
Ecuador	640	n.a.	6.7	n.a.
El Salvador	490	1.5	8.5	0.7
Guatemala	630	1.2	11.1	1.0
Honduras	390	1.7	8.1	0.8
Panama	1,310	2.3	9.6	2.8
Peru	800	1.0	4.1	1.0

GDP per capita from *1978 World Population Data Sheet*, Population Reference Bureau, Inc., Washington, D.C.

All percentages refer to 1978, except Guatemala's which refer to 1975. Data from country reports.

*In Chile and Costa Rica, social security revenues are included in Ministry of Health budget.

n.a. = Not shown in country report.

They seemed to agree that the failure to attain coordination among these two systems in the other countries is a major obstacle to their efforts to expand coverage. In those countries, ministries of health alone are expected to improve quality and expand coverage with budgetary allocations that grow only slowly and are subject to economic and political uncertainties. Social security systems, whose share of total institutional health financing has increased rapidly in several countries, have been reluctant to accept any redistribution of their funds by including noncontributing segments of society in their coverage. Even where integration has been achieved, the government has to contribute general revenue for the expansion of social security coverage to the indigent population. The advantage of coordinating the two systems appears to be primarily the more efficient use of facilities and medical personnel, rather than any net increase in funding. It is noteworthy, moreover, that the three countries that have achieved integration also have the highest per capita incomes.

Integration of public health care itself may be a necessary precondition for the eventual coordination of the public and semiautonomous subsectors. In Ecuador and Peru the ministries of health are still in the process of unifying the public subsector. In other countries with strong ministries of health, however, such as Colombia, Bolivia, and Guatemala, strong social security systems have developed as well and it has been very difficult to find a mutually acceptable basis on which to build an integrated national health system. Countries that have not been able to unify their two health care systems are attempting instead to finance primary health care expansion in part with new sources of funds. However, they must be concerned about the displacement effects of doing so, as participants pointed out. A national government, for example, may reduce—or fail to increase—the allocation of general tax revenue when state and local taxes or direct community contributions are increased. Alternatively, increases in federal funding may simply displace local sources of support.

The Inter-American Development Bank and USAID have concentrated their loans and technical assistance on the expansion of primary health care and have tried to commit countries through counterpart funding requirements to sustain higher levels of public support in the long run. These agencies are often unrealistic in their expectations, however, and fail to realize that their leverage wanes after loan funds are disbursed. Country participants also reminded the international agencies that they usually fail to coordinate among themselves in carrying out their technical assistance and lending programs, forcing countries to deal with them separately, a shortcoming acknowledged in the USAID presentation. It was also pointed out that none of the aid agencies has brought its influence to bear upon countries to integrate their public and semiautonomous health sectors. Only in the case of Costa Rica has a loan been made to a social security institution in order to facilitate such integration. All other foreign aid loans for health care have been made to ministries of health. PAHO's influence also has been exerted largely through the ministries.

Workshop discussions also brought out the possible inflationary impact of health care financing through foreign aid and social insurance. Especially if a sudden increase in the level of financing occurs, such as a relatively large foreign

aid disbursement, the supply response of drawing additional personnel and materials into the public health system may be too slow to meet the new demand resulting in upward pressures on wages and prices. A large allocation of new funds would thus provide a less than proportional increase in health care in real terms. It was also observed that the public and social security health care systems tend to compete with each other for the available supply of health care practitioners and medical supplies and thus bid up wages and prices. The different levels of per capita financing under the two systems also have quite different effects on the utilization of services they support. Because of the inadequate financial support of public health services, particularly at the lower levels, they frequently are underutilized even by the poorest population segments. The insurance nature of social security financing, on the other hand, gives rise to the so-called "moral hazard" of excessive utilization of its services by its contributors while at the same time excluding noncontributors whom the system would regard as "free riders."

The importance of the topic chosen for the workshop, particularly its focus on sources of financing, was strongly endorsed by most participants. It became clear that the countries could learn from each other's experiences in the coordination of health care systems in terms of their financing and services delivery. The efficient and equitable allocation of available resources, as well as the choice of appropriate, low-cost technologies for primary health care expansion—themes that were stressed by PAHO—received serious attention. The analysis of the overall level of institutional financing, its composition by source, and the question of how to increase aggregate support for health care—themes stressed in the background documents—were found to be equally in need of more specific attention. The information on health care financing in Latin America, as the country reports showed, is incomplete, particularly with respect to direct employer payments, private insurance, and direct household expenditures. The cost and financing of primary health care, however, probably is the subject that most immediately requires further analysis and evaluation, while the integration of public and social security health care systems emerged as the most urgent policy measure required for the more efficient and equitable use of currently available resources.

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