FINANCING HEALTH SERVICES IN DEVELOPING COUNTRIES, WITH SPECIAL REFERENCE TO BRAZIL

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CONTENTS

1. BACKGROUND ON WORLD BANK POLICIES ON FINANCING OF HEALTH SERVICES

The health sectors in Brazil (and most other developing and developed countries) face a formidable array of problems. Many of these have to do with inappropriate institutional arrangements (structural problems), administrative and management shortcomings, and the use of human resources. The focus of the present paper on a particular aspect of the health sector – financing – does not imply that these other problems are less important, or that sound financial policies can be developed without appropriate structural reforms. We strongly endorse Horwitz's plea[1] to not dissociate economic and financial aspects from other components of national health policy.

The current paper draws heavily on a recent World Bank policy study on financing health services[2] (referred to here as "the Policy Paper"). The Policy Paper (and this paper) are built on the belief that the objective is the development of a health system which is equitable and sustainable.

Since its publication, the Policy Paper has been debated widely by many experts, including many in Brazil and other Latin American countries [1,3,4,5]. As is inevitable when attempting a unified treatment of the vast variety of situations existing in "developing countries", some of what was advocated as being "generally" relevant is not of relevance in particular contexts. Accordingly, the purpose of this paper is to translate the general principles of the Policy Paper into terms which deal specifically with reality in Latin America (and, particularly, Brazil).

From the review conducted for the Policy Paper it became evident that, while improvements are possible in the health sectors of most countries, there are no "solutions". Rather, we learned that progress in the health sector is a dialectic process, in which the resolution of certain problems give rise to a new set of problems. For instance, while increasing the availability of health insurance is a necessary step in many developing countries, in those countries where such insurance is already widespread (such as Brazil and other Latin American countries) this widespread availability gives rise to a new set of problems which have to be addressed.

Accordingly, it is our belief that a necessary condition for the development of a sound health sector is the capacity to analyze, to experiment, to innovate and to change as circumstances change and as experience accumulates. As will be detailed in this paper, in a country as big and complex as Brazil, this implies, in the words of the Chinese proverb, "letting a thousand flowers bloom".

2. WHAT SHOULD PUBLIC RESOURCES BE USED FOR?

2.1. In general

Standard economic theory advocates the use of public resources for "public goods". Public goods include goods and services which are subject to externalities (i.e. not all benefits accrue to producers and consumers, so that exclusive reliance of the private market means that too little will be consumed or produced); to exclusivity (i.e. it is difficult to exclude beneficiaries, so that charges for the good cannot be levied);

or are "merit goods" (i.e. are basic human rights which should not be denied to any on the basis of lack of income). The 1988 World Bank World Development Report[6] has described the principles which justifiy the use of public resources:

> Governments can promote economic growth and equity by supplying the physical infrastructure needed for productive private investment and (the) social services to meet the basic needs and improve the productivity of the population. But the high cost of raising revenue means that it is vital to set priorities and attain quality in public spending. Priorities can be set by considering what governments do best and what markets do best. Governments must (supply) "public goods' that benefit all citizens and which individuals cannot provide (such as law and order and national defense). They should also be involved in (supplying) goods and services with large external benefits to society, such as primary education and some health services (such as immunizations against infectious diseases). Direct investment or regulation is needed to control monopolies caused by a single source of supply or large returns to scale relative to the size of the market – water supply, sanitation and power, for instance. Finally, government subsidies on goods and services consumed by the poor are sometimes justified, but to contain the cost, they should be accurately targeted.

2.2. In the health sector

The Policy Paper, and subsequent elaborations[7] have argued that the generally accepted notion that all health programs and services are "public goods" needs to be reconsidered. Some health programs are, indeed, almost pure public goods, for example spraying to protect all residents from a vector-borne disease, to which the exclusivity principle applies. Others, however, are almost completely "private" goods, for example, an aspirin taken for a headache. However, most health programs and services are neither wholly public nor wholly private goods, but are of a mixed type. The consumer captures some purelly private benefits, yet others also benefit from that person's consumption of the service. For example, the person who is vaccinated against measles receives a private benefit of protection, but others benefit as well because they are less likely to be exposed to the infectious agent. Similarly the person who receives treatment for tuberculosis captures large private benefits but, because the disease is contagious, others benefit as well.

Although some preventive health activities which are administered (such as vector control and the provision of health information) are classic public goods, the distinction between public and private goods is not synonymous with the distinction between preventive and curative care[7]. The tuberculosis example above shows that curative care can sometimes be in part a public good. Conversely, the benefits of much "preventive" care that is administered to individuals[8] (such as much prenatal care and screening for hypertension) are largely if not entirely captured by those who receive them, and are thus primarily "private goods".

The distinction between largely public and private goods is helpful in understanding the likelihood that consumers will be willing to pay for particular services. Contrary to conventional wisdom, there is ample evidence that people will pay for such preventive services as immunizations, pre-natal care, "well-baby" care and family planning services.

Finally, the distinction between **financing** and **provision** is an important one[7]. The public good criterion for determining whether government should be involved in a particular health service applies to financing of the service; it is irrelevant (with respect to this point) whether the service is provided by the state or private providers. The potential harm of substantial public involvement in costly "private" services occurs as long as government (or the public through taxes) is financing the service, even if it is not itself providing it. Public provision of such services, if they are privately financed, (e.g. through user charges to beneficiaries) need do no harm. Examples of various combinations of public and private participation in financing and provision of services are shown in Table 1, below.

TABLE 1
PUBLIC AND PRIVATE ROLES IN THE FINANCING AND PROVISION OF HEALTH SERVICES

FINANCING	PROVISION	EXAMPLES
1. Public	Public	Rural health posts
2. Private	Private	Private physician services, with patients paying full costs
3. Private (partial or full)	Public	Public hospitals in which some patients pay for private rooms; Public clinics, with some costs (e.g. for drugs) covered in part by user charges.
4. Public (partial or full)	Private	Philanthropic clinics and hospitals that are reimbursed by government for services provided; Contracted physicians with no user charges or co-payments.

In Brazil (as well as in the United States) a large private sector is active in providing health care, with substantial public financing through reimbursement (in Brazil by the National Institute of Medical Assistance and Social Security, INAMPS; in the US by Medicare). This combination (number 4 in Table 1), with considerable public financing of private services, appears to be particularly vulnerable to the problems of inequity and cost escalation.

3. HEALTH FINANCING PROBLEMS IN DEVELOPING COUNTRIES (WITH SPECIAL REFERENCE TO BRAZIL)

Mortality rates in developing countries – including those of Latin America – have declined drastically over the last three or four decades, probably due in substantial part of government-sponsored interventions[6, 7]. But risks lie ahead because of four basic problems:

- The distribution of health subsidies is not equitable.
- In a time of rising demands and tightening financial constraints, many governments cannot financially sustain these rates of improvement;
- Too few resources are devoted to cost-effective activities;
- Many public programs are inefficiently run.

3.1. Too few benefits for the poor

In many countries, investment in expensive modern technologies to serve the few continues to grow while simple low-cost interventions for the masses are underfunded. The better-off in most countries have better access both to nongovernment services, because they can afford them, and to government services, because they live in urban areas and know how to use the system. The rural poor benefit little from tax-funded subsidies to urban hospitals, yet often pay high prices for drugs and traditional care in the non-governmental sector.

In all countries the benefits of health interventions have been unequally distributed. In health as in so many other measures of welfare, Brazil presents an extreme in inequality. While death rates for the middle class in the developed Southeast are similar to those in European countries, in the Northeast infant mortality rates (estimated at 116 per 1,000 live births) exceed those of much poorer African and Asian countries such as Sudan and India[9]. This inequality has meant that the overall health improvement of the Brazilian population has been much slower than that of its Latin American neighbors. Starting from roughly similar infant mortality rates (of about 100 per 1,000 live births) in 1965, by 1985 these rates had fallen to 22 in Chile, 48 in Colombia and only 67 in Brazil[9].

These flagrant inequalities notwithstanding, the non-poor in Brazil (as elsewhere*) continue to benefit substantially from the public resources invested in health care. Although no accurate estimation is available of the benefits of public sector health spending accruing to different income groups in Brazil, it is clear that the poor do not receive even their proportional share of benefits. The middle class is more skilled in use of the system, and public facilities and public spending are concentrated:

- more in the better-off South and South-East parts of the country, and less in the poorer Northeast;
- more in the better-off urban areas and less in the rural areas;
- within urban areas, more in the better-off neighborhoods and less in the **favelas**.

"Free" health services imply that high-cost services are much more subsidized than low-cost ones. The poor in Brazil have little access to those high-cost services, however. To take but one example, the majority of publicly-financed heart bypass operations are performed on patients in the top 1% income group in Brazil[34]. Contrary to proclaimed policy, in Brazil and other countries, the poorest are not only denied a greater share, but have substantially less than their proportionate share.

(*) In the National Health Service in England, for example, a sick person in the top 20% income bracket of the population receives about 50% more publicly-financed health care benefits than a sick person in the bottom 20% income bracket[35].

In addition to these direct benefits, the middle class also benefits because private medical expenses are tax-deductible. In 1981 deductions from personal income for medical purposes amounted to US$ 125 million – about 10% of the public sector health budget – for around 1.8 million taxpayers[14,15].

The primary challenge for the health sector in Brazil, then, is equity, or, in current Brazilian terminology "payment of the social debt". Accordingly, a primary criterion for judging health financing policies in Brazil is whether they will result in substantial transfers of benefits from the rich to the poor.

3.2. Too little spending on cost-effective activities (and too much spending on cost-ineffective activities)

As shown in Table 2, most developing countries have a tendency in both government and non-government sectors to allocate what resources there are to high-cost, relatively ineffective care, and to spend too little on the most cost-effective services (such as immunizations, vector control, simple curative care with referral and effective drugs).

TABLE 2
SPENDING FOR AND COST OF VARIOUS HEALTH SERVICES IN DEVELOPING COUNTRIES[2]

SERVICES	% OF TOTAL EXPENDITURE ON HEALTH (US $)	APPROX. COST PER LIFE SAVED
Direct Services to Patients:		
Curative: Treatment and care of patients; Retail sale of medicines	70-85% ($500-$5,000)	High
Preventive: Maternal and child health care (such as immunizations, promotion of breastfeeding, etc).	10-20% ($100-$600)	Medium
Community Services: Vector control programs; Health and hygiene education; Disease surveillance	5-10% (Less than $250)	Low

In Brazil the proportion of public sector health resources spent on cost-effective preventive and basic curative services has declined continuously in recent decades (from about 87% in 1949 to 15% in 1982). In recent years, as the result of strenuous efforts by health sector planners, this proportion has increased again (reaching an estimated 22% in 1986)[9].

In Brazil the financing of a number of high-cost services to few patients offers a vivid example of the prevailing misallocation of public resources in the health sector. In 1981 the government spent more on high-cost services (including renal dialysis, coronary bypass operations, foreign medical treatment, and intensive care units) on some 12,000 patients than on all basic health and disease control services meant to serve 40 million people[10]. For renal dialysis alone, 4% of public health resources were spent on services to 0.03% of the Brazilian population[34]. Eve in "non high-tech" areas similar distortions are common. For example, Brazil has the highest rate of caesarian section births in the world, with INAMPS spending about $34 million (about 1% of total INAMPS spending) on over 180,000 caesarian births which have been judged unnecessary in 1979[10].

On the other hand, Brazil has made little use of preventive interventions of proven efficacy. For example, although cervical cancer is the second leading cause of cancer among Brazilian women, less than 2% of adult women are screened each year for cervical cancer[11]. Similarly, the national hypertension control program estimates that less than one-half of 1% of hypertensives in Brazil have their hypertension controlled[12]. (By comparision, in the United States over 60% of adult women are screened for cervical cancer each year[39], and over 30% of hypertensives have their hypertension controlled[40].) Another vital area of public action – public education on the dangers of overuse of antibiotics and potentially hazardous drugs, and of the ineffectiveness of many patent medicines – is essentially neglected. Self-prescription is high (30% of all antibiotics, for instance) [10]. The poor spend more (as measured by the proportion of total private expenditure on health) than the rich on patent medicines[10].

3.3. Wasteful use of public resources

As described by the Director-General Emeritus of the Pan American Health Organization[1]:

> (Throughout Latin America) funds exist but are poorly invested and administered, and waste is the rule rather than the exception... There are many opportunities within the health sector to... reduce waste and duplication of services.

In Brazil, evidence of such waste abounds. The use of diagnostic tests and manpower provide but two of many possible examples. With regard to diagnostic tests, private hospitals contracted by INAMPS perform five times the international standard number of complementary examinations[10]. In Sao Paulo the State Secretariat of Health estimates that over 30% of X-rays ordered by physicians are never even picked up from the radiologist.

The use of health manpower, too, is highly inefficient. Since the initiation of social security funded health care in the late 1960s the rapid growth in the supply of physicians (the number doubled between 1970 and 1980) was not accompanied by expansion in the number of nurses and other middle-level personnel. Progress has been made since the late 1970s, when hierarchical public health services began to be introduced, with the proportion of middle-level staff increasing from 18% in 1978 to 27% in 1984[13]. However, the health labor force remains heavily concentrated at the

upper and lower levels, a structure which is likely to continue given subsidized medical education and a projected increase in the number of physicians from 100,000 in 1980 to 260,000 in 2000[10].

Despite the rapid expansion in the medical labor force, it remains standard practice for physicians to have multiple jobs (an average of 3.5 jobs in Sao Paulo, for instance). In part because physicians provide services in widely separated locations, they typically are in attendance at their public sector jobs for less than half of the time they are nominally providing public health care services. The effect of this and other labor market problems on the quality of services provided through the public health system is devastating.

Despite these problems, there is some evidence that the Brazilian health system has responded well to the fiscal crisis of the 1980s. The changes represented by the AIS (Integrated Health Actions) and its successor the SUDS (the Unified and Decentralized Health System), and the impetus for change exhibited by many different groups at the 1986 National Health Conference are probably in part a response to the fiscal crisis faced by the health system at the Federal and State levels. The increase in the proportion of spending on basic services from 15% to 22% between 1982 and 1986 is one sign of this positive response, as are the various efforts (discussed below) by INAMPS to cut costs in the 1980s. In most developing countries the response to the fiscal crisis has been less creative. The reaction has generally been to maintain spending on personnel and to cut spending on non-personnel operating costs (including drugs, fuel and maintenance). Because the non-personnel inputs typically account for less than 20% of total costs, they must be cut drastically to reduce total spending significantly. The price of a small financial saving is a large drop in the effectiveness of the system as a whole[7]. The overall creative response in Brazil notwithstanding, it appears likely that this problem – of allocating too little to non-personnel operating costs – has occurred in Brazil, too. During the peak years of the fiscal crisis (1980 to 1983), for instance, public employment in the health sector grew at an annual rate of 18% [13].

3.4. Escalating demands and limited resources

The early 1980s marked a turning point for public finance in developing countries. For decades the proportion of GDP spent by central governments had risen. Since the early 1980s, however, this trend has been reversed in most developing countries. For a sample of 15 developing countries (including Brazil and 8 other Latin America countries) spending declined by about 12% in the early 1980s[6]. In all developing countries tightening financial constraints make it impossible to maintain large subsidies across a wide range of public services and still provide adequately for priority needs and target groups.

In Brazil, the proportion of GDP used of health services rose from 1% in 1950 to 4% in 1980. About one half of this total comes from public resources, with most of this coming from social security funds.

It is unlikely that increased health funds will be forthcoming from social security contributions. Aggregate contributions to social security by its affiliates were about the same in 1985 as they were in 1980. This is in marked contrast to the dynamism of the 1970s when contributions grew by 13% per annum[10]. Because the demands on the social security system for pensions will continue to rise, the proportion of the total "social contribution" available for health will decline[14].

Thus, although the proportion of GDP devoted to health in Brazil (about 4%) remains substantially lower than the median proportion in industrialized countries (about 8%), it is unlikely that this proportion will grow substantially in the medium term. It is evident that the "goal" set by the National Health Conference (of 10% of GNP) is totally unrealistic[15].

In industrialized and developing countries alike, costs of health care have risen rapidly in the past several decades. In industrialized countries per capita health care costs have risen at an annual average rate of over 5%*, and now account for an average of about 8% of GNP[22]. In Brazil, although the proportion of GNP spent on health remains lower – about 4% – than is most industrialized countries, the growth in expenditures on health has been even more explosive. In Brazil real per capita expenditures on health have risen an average of almost 10% per year in recent decades**. .

In Brazil this explosive increase in health care costs will be exacerbated in the coming decades by fundamental demographic and epidemiologic changes. Like many other developing countries, in Brazil death from infectious diseases in childhood is becoming less important, and sickness and disability from chronic and degenerative diseases among adults are becoming more important.

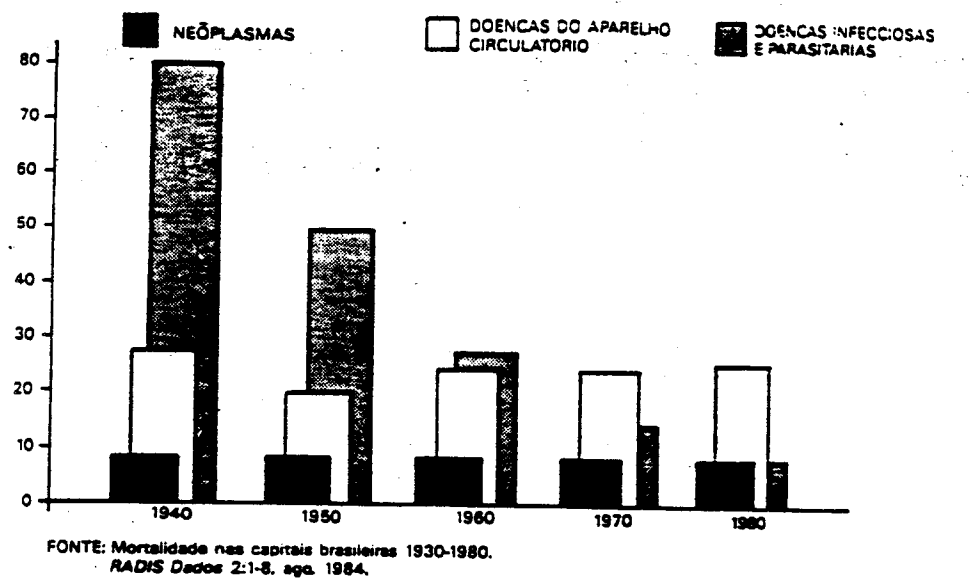
A partial perspective on this change can be gleaned from an examination of causes of mortality over time[16]. In 1940 infectious and parasitic diseases accounted for 80% of deaths; in 1980 these diseases accounted for just 8% of deaths[16]. Concurrently, the relative importance of deaths in adults due to chronic diseases has increased substantially (Figure 1, overleaf), particularly among the older age groups (Figure 2, overleaf).

It is generally, and falsely, assumed that problems of chronic diseases are problems of the privileged. However, in Latin American countries, it is often the poor who suffer most from the "post-transitional" problems of chronic diseases, mental health, violence and accidents[3]. In Porto Alegre, for instance, the prevalence of risk factors for chronic diseases (including hypertension, leisure time inactivity, excessive alcohol consumption, smoking and obesity) is substantially higher in lower – than in middle-class families[17]. In Latin America as a whole and in Brazil in particular, age-adjusted death rates are higher for some chronic diseases (heart disease, lung cancer, breast cancer and colon cancer) in more developed areas, while rates for other chronic diseases (stroke, stomach cancer, cancer of the cervix, diabetes, and liver disease) higher in less developed areas[18]. The aggregate effects is that adults in more and less-developed areas of Brazil alike are seriously affected by chronic diseases. The poor get cancer as well as schistosomiasis.

(*) Between 1963 and 1983 average GNP/capita growth in industrialized countries was about 2.3% per annum [6]. Over the same period the proportion of GNP spent on health grew at an average annual rate of about 3% [22].

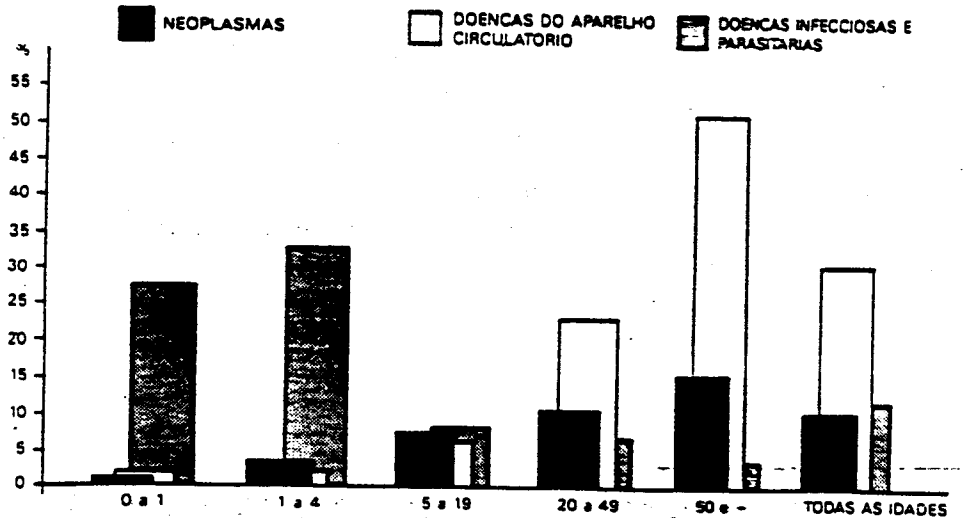
(**) Between 1960 and 1980, average GNP/capita growth in Brazil was nearly 5% per annum. Between 1950 and 1980, the proportion of GNP spent on health grew at about 4.8% per annum.

Figure 1: **Mortality Rates in Brazilian Capitals**[16]



FONTE: Mortalidade nas capitais brasileiras 1930-1980. *RADIS Dados* 2:1-8. ago. 1984.

Figure 2: **Proportional mortality by Cause and Age**[16]



* EXCLUÍDAS AS CAUSAS MAL DEFINIDAS
** EXCLUÍDAS AS IDADES IGNORADAS
FONTE: Divisão Nacional de Epidemiologia DNE – Ministério da Saúde

Concurrently with (and partly as a result of) this changing mortality pattern, the population of Brazil is aging. Between 1980 and 2020 the proportion of the population over 60 years of age will more than double (from the 1980 level of 6%). Between 1980 and 2000 the number of elderly Brazilians will double (from 7 to 14 million)[19].

This transition has profound implications for the financing of health care in Brazil. By 1980 treatment of patients for heart disease already accounted for over 25% of all in-patient costs. Because the number of individuals over 60 years old will double over the next twenty years, and because the per capita health care expenditures of this group are much higher (3.5 times in the US [20]) than the average for the population, the bill for chronic disease care will rise rapidly.

Exacerbating the situation still further is the emergence of AIDS in Brazil. It is estimated that there are currently between 200,00 and 400,00 Brazilians infected with the AIDS virus[23]. The cost of treating AIDS patients in Brazil is currently about US$20,000 per year[24].

For most chronic diseases, while primary prevention (aimed at reducing exposure to risk factors such as smoking and lack of exercise) will generally reduce health care costs, secondary prevention (such as hypertension and cervical cancer screening) will generally result increase the demand for and cost of treatment[21].

In summary, then, the demand for medical care will continue to rise rapidly in Brazil as demographic and epidemiologic conditions change, as screening programs become more common, and as services are extended to underserved populations.

4. OPTIONS FOR REFORM

Under the present structural and financial arrangements, the prognosis for the health sector in Brazil (and many other developing countries) is thus bleak. To undertake the priority tasks of serving the poor and preventing disease, it will be necessary to reduce spending on less cost-effective activities, to reduce wastage and duplication, and to mobilize new resources. In this section we discuss some of the financing-related options which face Brazilian planners in making these changes.

The central themes linking the suggested options are simple. They are:

- increase public spending for basic health services for the poor, and reduce subsidies on services to the rich;
- increase public spending on services that provide many benefits to society as a whole, and reduce public spending on services whose benefits accrue primarily to the direct users of the service;
- improve accountability to the public by assuring good use of non-government resources and by delegating the responsibility for use of public resources from the central to the state and municipal level;
- introduce incentives to prevent unreasonable increases in costs of health services delivered by government and non-governmental providers.

4.1. Decentralizing government health services

Decentralization in the delivery of public services can increase public accountability and responsiveness to local preferences.

After decades of centralized control, central and state governments in Brazil are now committed to the decentralization of health services through the SUDS ("unified and decentralized health care system"). This decentralization means the transfer of resources and responsibility from the central to the state level and on to the municipal level*.

Through unification of the formerly divided health system (divided between the largely hospital sector financed by INAMPS and the largely "basic" or preventive health care system administered by the Ministry of Health and the state health secretariats), the SUDS allows for a major reorganization of the health care system in at least the following three ways[9]:

The delegation of control to the local level in Brazil involves significant risks. There is a long history of corruption and favoritism at the local level in large parts of Brazil, and the country is only starting to emerge from decades of authoritarian, central, rule. The fitful process of democratization is evident in recent public opinion polls taken in the context of upcoming municipal elections. A survey by the Brazilian Institute of Public Opinion (IBOPE) in the five biggest state capitals showed that almost two-thirds of respondents lacked confidence in existing parties and their leaders[32]. In such settings, central government officials and others rightly fear that funds provided to local governments might be used for local political purposes rather than for long-term social investments[7]. Prior experience in Northeast Brazil (where large proportions of health units built under state-run programs function unsatisfactorily, while centrally-controlled units function relatively well[14]) provides a salutary reminder that the problems of decentralization of health services in Brazil are formidable.

The worst response to these very real risks, however, is to conclude that responsibility for personal health services cannot be assumed at the local level. Such devolution is a **sine qua non** for developing an equitable and sustainable health care system and has been shown to have significant advantages in Mexico[3] and other countries[2].

A central task of decentralization involves defining what central and state governments should and should not do, and in equipping these levels of government to carry out their appropriate tasks. In Brazil, as in many other countries, central government has both done too much and too little. Too much in the sense that it has had for too much responsibility for administering and managing the delivery of local services. Too little in that it has neglected its vital and irreplaceable function as educator, motivator, monitor and overseer.

(*) In addition to the benefits of decentralization, there should be substantial efficiency gains from the SUDS as a result of unification. Specifically:

Improved internal efficiency: The SUDS permits development of a referral system in which clients can (and should) enter the system at the nearest health post or health clinic and have most of their medical problems resolved at that level, thus avoiding the use of currently over loaded hospitals, where costs are high. In addition, because the unification is taking place at a decentralized level, the health system should become more responsive to local needs an more accountable.

Improved allocation of resources: The SUDS should encourage a gradual reallocation of now-unified resources in favour of more cost-effective preventive services and simple curative services at the non-hospital level.

Greater equity: With reorganization, the health care system should become open to all persons, irrespective of whether they are affiliates of the health system.

Finally, there is an integral relationship between decentralization and mechanisms for financing local services. A sure way to achieve decentralization is to limit the extent to which local health authorities must seek financial support at higher levels of government. This means improving the capacity of local governments to raise and control their own tax revenues (as it likely to happen with the planned tax reform in Brazil) and allowing local governments to charge users for services rendered at the local level. This second reform option is discussed in the following section.

4.2. Charging users of services

User charges are a controversial issue in health care financing[5,25,26]. The basic case for user charges is that these provide a link between financial responsibility and the provision of services. As pointed out by the World Health Organization, this link has generally enhanced wilingness to contribute to the cost of health programs and has encouraged both consumers and providers to be cost conscious[36]. Unlike taxes, user charges can raise revenue to finance the expansion of priority services, while increasing rather than decreasing efficiency. User charges lead to a double efficiency gain: they allocate the supply of services more efficiently, and their use avoids the need for distortionary taxes[6].

The basic case **against** user charges is that many health services are public goods (see Section 2.1 above), and, particularly, that such charges may lead to underutilization of health services by poor people[5,25].

In an attempt to contain burgeoning health care costs, most developed country health care systems (including those which are financed from taxes and social security) have instituted some form of user charge. Every country in Western Europe now applies some form of user charges[36]. For example, in Sweden patients have to pay US$8.50 for each visit to the doctor or non-life-saving drug prescription, while in France user charges meet up to a quarter of the costs of consultations, with average user charges being about US$15 for a visit to a general practitioner[29]. In the specific case of Brazil (and many other countries) the growing gap between available public resources and needs for health services make it financially imperative to explore user charges and other non-traditional sources of non-public financing[14].

In its policy paper the World Bank has argued that by charging the non-poor for using publicly-funded health facilities, several objectives would be enhanced[2]. Equity would be improved (since a subsidy to the non-poor would be reduced), services could be extended and the quality of services could be improved. It would appear[2] that in most settings governments could recover between 15% and 20% of operating costs. Although this is not a major proportion of total costs, it is a substantial part of non-salary costs, which tend to be underfunded. For these reasons user charges for curative services and drugs are becoming common features of World Bank-funded health projects[27].

Introduction of user charges is not a simple matter. In the following paragraphs the following questions are addressed:

- What has the experience with user charges been in other parts of Latin America?
- Has there been any experience with user charges in Brazil?
- How would the poor be protected?

- What specific mechanisms could be tried?
- What structural reforms are necessary for user charges to be effective?

Experience with user charges in other Latin American countries: There is a long and well-documented experience with user charges in Chile, where all users of the public health system pay the full costs of drugs, and where white collar workers pay between 50% and 75% of the cost of personal health services (while blue collar workers get such services free). This and other features of the Chilean health system mean both a broader financial base and a more equitable distribution of benefits of public subsidies (the bottom 40% of the Chilean population receive over 60% of all public sector health subsidies[28], whereas in Brazil the bottom 40% receive substantially less than 40% of health-related subsidies).

In other Latin American countries, too, public agencies are experimenting with user charges in an attempt to supplement scarce public funds. In the Dominican Republic, for example, although the government has not actually promoted user fees, virtually all public hospitals are now charging users for sercives. Despite the fact that, on the basis of means tests administered by hospital social workers, half of all patients pay nothing or only some portion of the established charges, user charges account for a substantial (20% on the average) and rising proportion of hospital operating expenses[30].

Experience with user charges in Brazil: User charges do not officially exist in the public sector health system in Brazil. However, in recent years, as the real levels of reimbursement paid to private providers by INAMPS have declined, co-payments have become **de facto** practice for much privately-provided publicly-financed health care[15]. Although documentation is lacking it appears that these "co-payments" are adjusted according to the economic status of the client.

What specific mechanisms could be tried? An obvious and appropriate place to start instituting user charges in Brazil would be to charge users the full prices for drugs. Since full costs are already paid for a substantial proportion of drugs (which are bought directly from pharmacists[10]), consumer resistance would probably be relatively low.

In many Latin American countries, including Brazil, a substantial proportion of the population is insured through social security-based health systems. In insured populations feasible mechanisms for instituting user charges are annual deductibles (a minimum amount – US$130 in Sweden, for example[29] – paid by the patient before any reimbursement is possible), copayments (a percentage – between 50% and 75% for white-collar Chilean workers, for instance[28] – paid by the patient on all costs) and "bypass fees" (whereby payments are waived for patients referred to hospitals through a government health post).

As discussed earlier in this paper, to some extent cofinancing already takes place (private expenditures on health are approximately equal to public expenditures). This is especially so for the rich, who typically use private doctors rather than public facilities. However, even the rich resort to INAMPS facilities for many costly procedures. A system of deductibles and copayments for those above a certain income would reduce subsidies to higher-income groups, and discourage overuse of certain procedures that may not be medically warranted[7].

How would the poor be protected? In principle it is simple to state how the poor should be protected. Differential charges can be based on type of facility (lower charges at basic level, higher charges at higher level facilities), location (lower in rural

areas and slums, higher in other areas), type of service received (lower for "mostly-public" type services; higher charges for "mostly-private" typer services), and socio-economic status of patient (lower for the poor, higher for the non-poor). While never wholly successful, many countries have devised special arrangements to exclude the poor from charges[37] and to implement differential charges. Private practitioners in many countries (probably including Brazil) have conducted informal "means tests" for years. In the Dominican Republic example mentioned earlier hospital social workers administer means tests and set fees accordingly[30]. The great difficulty arises when attempts are made to set standard, centralized procedures for differential charging. In Chile, for example, it was recently decided to move away from the old, "blue-collar/white-collar" dichotomy and to assess, on a national level, the "means" of each family. In the first round, over 90% of social service beneficiaries were classified as unable to make any payments for services![33] The lesson for a country like Brazil would appear to be that a centrally-controlled and administered means testing program is infeasible, but that locally-controlled formal and informal means testing may be feasible.

What structural reforms are necessary for user charges to be effective in Brazil? An equitable and viable system of user charges can only be introduced in a decentralized health care system, in which clinics and other services facilities exercise substantial financial control. If revenues generated by user charges are retained at the local level then there is an incentive for classifying some patients as "non-poor" and for collection of user fees. Where such decentralized financial responsibility is allowed to develop, user fees can be equitable and can make a substantial contribution to the operating budget, thus improving the efficiency and quality of services.

Both state and central government have vital roles to play in helping local systems devise, experiment with, and adapt user fee systems. Specifically regarding user fees, state and central governments could:

- unequivocally assign to the local level the authority to set user charges, and to collect and use the revenues;
- assist local authorities in deciding on how to set and implement user charges;
- encourage innovation and experimentation at the state and local level;
- monitor performance, principally so that experience of successes and failures can be shared, but also to ensure that financial accountability is maintained.

4.3. Insuring users against very high costs

The potential benefits for health insurance arise from the fact that in-patient care is expensive but is needed by only a small portion of the population. Recovering reasonable levels of the high in-patient costs incurred by those who require hospitalization can be achieved only when large proportions of the population participate in some form of risk sharing. Risk sharing is necessary to protect individuals from potentially catastrophic hospital bills. For these reasons the World Bank Policy Paper suggests that governments make efforts to expand health insurance coverage, by making such coverage (provided by the state or privately) compulsory for those working in the formal sector.

In many ways Brazil has made substantial achievement in this regard, since health insurance is compulsory for those in the formal sector, and coverage is high.

Aside from concerns about the diminishing proportion of social secutiry deductions which are earmarked for health care, the principal health insurance issues in Brazil relate to cost containment and competition.

It is instructive to recognize that there is a fundamental difference between classical hazard insurance and medical insurance[38]. The former is based on the assumption that losses due to fire, flood, theft or collision are caused "by an act of God" and that the cost of repair can be determined objectively. In the case of medical care the model is quite different: the judgement and choice of the insured underlie a decision whether to seek care, and the amount of care to seek; the judgement of the provider affects the content and cost of the care given.

Health insurance can lead to rising costs if both providers and patients view consultations and procedures as "free' or close to free, and thus see no constraint on profligate use. This arises when health insurance covers routine expenses, elective procedures etc. This is exacerbated when health insurance is publicly financed but many of the providers are private, as shown in Table 1.

One mechanism for containing but the costs of health insurance schemes is to stimulate competition (and thus reduce costs and improving service quality) by allowing private insurance schemes to compete with public schemes. This gives an incentive to people to carefully examine premiums and benefits, and has worked well in several countries (including Chile[28] and West Germany[29].

4.4. Making good use of non-government resources

The World Bank Policy Paper[2] advocates use of non-government services, including private for-profit and nonprofit services, to reduce the administrative burden of the government, to broaden consumers' options and to encourage competition and thus efficiency.

Brazil offers and interesting example of the incorporation of private providers into a publicly-financed health system. Before the initiation of the social security system in the late 1960s, most health services were privately financed and privately provided. Subsequently, public financing has come to play an important role: about half of total expenditures on health in Brazil are financed with public funds[9]. Private providers, however, have continued to play a dominant role, even for services paid for with public funds. During the 1970s over 70% of public funds were used to purchase services from private physicians[13]. During the 1980s this level has been reduced substantially to about 40% in 1986[13] and about 33%[33] in 1988.

These reductions notwithstanding, the private sector remains the dominant provider of health care in Brazil. (Because about half of all health services are privately funded and privately supplied, approximately two-thirds of all (publicly- and privately-funded) health services are provided by the private sector in Brazil).

The Brazilian experience shows that while use of private sector providers solves some problems – the INAMPS system could not have provided services without contracts with the private sector – it gives rise to others. Until the early 1980s the public sector (and INAMPS in particular) exerted little regulation of private sector providers. Abuses became rampant, with many private sector providers viewing unregulated public sector funding as a bountiful source of private profit through the practice of medicine. The distortions have been well documented[10,34] and include:

Private physicians using the public system to recruit patients; collusion between equipment manufacturers and physicians; the existence of large bills for "ghost" patients; fee-for-service reimbursement systems meant that large expenditures of public funds on unnecessary surgical and diagnostic procedures. With certain exceptions (such as "ghost patients") these distortions were just as common in the nonprofit ("philanthropic") hospitals as in private hospitals.

Over the past four years, major efforts have been undertaken within INAMPS to correct some of these distortions. These efforts have correctly brought the primary public sector tasks – of creating the right incentives, and of regulation – to the fore. An example of the changes in incentives include the change from fee-for-service payment plan to a prospective payment plan (the Atestado de Internação Hospitalar). An example of the effects of regulation of suppliers includes reducing the cost of pacemakers – virtually all of which are paid for by public funds – by 50%. These examples illustrate the great potential for improvement when the essential role of government – improving the incentive structure and regulation – is given priority.

The great strides made by INAMPS over the last several years notwithstanding, the general impression is that these changes only scratch the surface of the distortions built up over 20 years in a publicly-financed privately-provided medical care system. Resistance from the private sector remains strong, and, despite some successes, regulation remains spotty and often ineffective.

The Brazilian health system thus faces a dilemma: The private sector is rife with distortions: the quality of care provided by the public sector is abysmal. As has been the approach taken by INAMPS over the past several years, progress depends on both improving the quality of publicly-provided services, and on using the private sector more effectively by giving more appropriate incentives and by regulating more thoroughly.

The Chilean health care system offers a model, in Latin America, of how a carefully regulated private sector can, when given the right incentives, play a fundamental role in the development of an equitable and efficient medical care system. Since 1981 health services to white-collar workers (about 25% of the population) and some blue-collar workers are provided through the Preferred Provider System. Private sector providers participating in the system choose (over a government-specified range) the price they charge for services. The level of public sector funding per procedure is fixed, with users thus making higher co-payments if they choose to use an expensive provider. The incentive system thus induces some price competition among providers, induces high-quality providers to enter the system and makes consumers pay more if they use high-cost providers.

Just as important as the incentive system is the regulatory role of the Ministry of Health. The Ministry closely monitors both charges made by private physicians and the medical services received by patients[31].

There is no doubt that the problem of cost containment, already the major health sector problem is most industrialized countries, will soon become the dominant issue in Brazil's health sector. All of the mechanisms which can be used to provide incentives for reducing costs – such as prepayment systems, health maintenance organizations – require stringent and vigilant control of the financial and medical care practices of private providers. Accordingly, defining and strengthening the capacity of public sector health agencies in Brazil to perform this role is a vital task.

4.5. The reform options and the health sector in Brazil

The World Bank policy study on financing of health care in developing countries recommends four policy reforms: (1) charge users of government health facilities; (2) provide insurance; (3) use non-government resources more effectively (4) decentralize government health services. Three of these approaches are, in some respect, in place or taking place in Brazil. With respect to (2), services financed and provided through INAMPS largely respond to the need for risk insurance; with respect to (3) INAMPS has been reforming its system of reimbursement to private providers of contracted services; and with respect to (4) the SUDS ("decentralized and unified health system") process initiates the process of decentralization in administration, budgeting and delivery of health services.

In this paper we have suggested ways in which these fundamental improvements in the Brazilian health care system could be strengthened, and indicated why we believe the introduction of charges for health services to be important in developing an equitable and sustainable health system.

5. HOW CAN THE WORLD BANK HELP IN BRAZIL?

The World Bank began to support stand-alone health projects in Brazil only in 1982 and remains a small actor in the health sector in Brazil. Annual disbursements from World Bank loans for the health sector in Brazil amount to less than 2% of public sector spending on health in Brazil and less that 1% of all health sector spending in Brazil. The principal task for the World Bank in this sector, then, is to decide how best to use its limited resources to help Brazil develop a more equitable, efficient and sustainable health system.

Over the first five years of involvement in the health sector in Brazil, the projects funded by the World Bank addressed two principal concerns: increasing resources for disease control programs (e.g. malaria control in Rondonia; combat of schistosomiasis, Chaga's disease and leishmaniasis in the Northeast; and a national AIDS control program), and directing resources towards the health needs of the poor (basic health services programs in the North East and low-income areas of metroplitan Sao Paulo).

On an institution-wide basis, however, the World Bank has come to realize, that fundamental national problems are too broad and too complex to be addressed only through well-targeted investments. This is particularly true when, as in the case of the health sector in Brazil, the volume of Bank resources is so much smaller than national resources. Accordingly the Bank is not only concerned that the 1% of health sector expenditures which are funded by the Bank are well spent, it is more concerned still that improvements be made in the way in which the other 99% of health sector resources in Brazil are spent.

The Bank has three tools to use in this process: sector work, project lending and sector lending.

The first tool is sector work, which involves policy-related analysis of critical issues at the sectoral or sub-sectoral level. The objective of this sector work is to identify the fundamental characteristics, and constraints to improvement, of the health sector. Sector work is thus designed to establish the intellectual basis for subsequent

investment activities by the Bank. Recently the Bank has completed two related sector reports on "Policies for Reform of Health Care, Nutrition and Social Security in Brazil"[10], and "Public Spending on Social Programs: Issues and Options"[9]. These reports examine why relatively high levels of social sector expenditure have not been effective in generating correspondingly large improvements in social welfare.

In the immediate future health sector work will focus, first, on the prevention of chronic diseases and AIDS and the implications of these diseases for the financing of health services in Brazil and, second, on issues of the supply of, demand for manpower in the health sector, and the content and financing of education and training of health sector personnel.

A fundamental principle in carrying out this work is that it will be effective not only if it is convincing to the World Bank, but, more important, if it changes the way in which these problems are understood in Brazil. Accordingly this work relies heavily on the work of Brazilian experts, and is addressed primarily to a Brazilian audience.

The second tool is traditional project loans. Here the World Bank will continue to emphasize the areas funded in the past. It is expected that over the next few years the Bank will fund an Amazon-wide malaria project, and follow-up projects in basic health services to poor populations in the North East and in metropolitan areas.

The third and final tool which the Bank can use in the health sector is that of the sectoral loan. To date there has been no health sector loan in Brazil. This type of loan is different in several respects from the traditional project loan. The objectives are changes in sector-wide performance (in the health sector, for instance, in the equity, efficiency and sustainability of health services). The loan involves agreement on sector-wide policies, may disperse more rapidly that a project loan and may cover a time slice of investments in the sector rather than specific items.

In conclusion, a word on the perspective of the World Bank on the health sector in Brazil may be appropriate. The World Bank is deeply concerned that public sector investments in the health sector in Brazil are inequitable and inefficient. The problems in the health sector in Brazil are daunting. However, the achievements of the last few years have shown that progress is possible. It is also clear that there are many Brazilians both in and out of government who are determined to continue with this progress. It is the intention of the World Bank to support, through debate and through investment, this change. It is our hope that we can contribute to the development of a more equitable, efficient and sustainable health system in Brazil.

6. REFERENCES

1. Horwitz, A. (1988) "Comentario", *Boletin de OPAS*, 103, 6, 710-718.

2. World Bank (1987) *Financing Health Services in Developing Countries: An Agenda for Reform*, World Bank, Washington DC.

3. Frenk, J. (1988) "Comentario", *Boletin de OPAS*, 103, 6, 719-725.

4. Tejada de Rivero, D. (1988) "Comentario", *Boletin de OPAS*, 103, 6, 725-733.

5. Abel-Smith, B. (1987) "Book review of: Financing health services in developing countries: An agenda for Reform" *Health Policy and Planning:* 2(4) 355-58.

6. World Bank (1988) *World Development Report: Public Finance in Development,* World Bank, Washington DC.

7. Birdsall, N. (1988) "Throughts on good health and good government", draft document for the Rockefeller Foundation, New York, and the World Bank, Washington DC.

8. de Ferranti, D. (1985) "Paying for health services in developing countries: An overview", World Bank Staff Working Papers, No. 721, Washington DC.

9. World Bank (1988) *Brazil: Public Spending on Social Programs; Issues and Options,* World Bank, Washington DC.

10. World Bank (1988) *Policies for Reform of Health Care, Nutrition and Social Security in Brazil,* World Bank, Washington DC.

11. de Aquino, EML, AI de Carvalho, E Faerstein, DCS Ribeiro (1986) "Situação atual da detecção precoce do câncer cérvico uterino no Brasil", *Cadernos de Saúde Pública* 2(1):53-65.

12. Personal communication, Nelson de Souza e Silva, Universidade Federal de Rio de Janeiro.

13. Medici, AC. (1986) "Emprego em saúde na conjuntura recente: Lições para a reforma sanitária", *Cadernos de Saúde Pública* 2(4), 409-422.

14. Viana, SM and SF Piola (1986) "Os desafios da reforma sanitária", IPEA, Brasília.

15. Medici, AC. (1987) Financiamento das políticas de saúde no Brasil, *Boletin de la Oficina Sanitaria Panamericana,* 103(6), 571-598.

16. Ministério da Saúde (1988) *Doenças crônico-degenerativas: Evolução e Tendências Atuais,* Divisão Nacional de Doenças Crônico-Degenerativas, Brasília.

17. Personal communication, Bruce Duncan and Maria Ines Schmidt, Universidade Federal do Rio Grande do Sul.

18. Unpublished World Bank analysis of data from PAHO and Ministry of Health, Brazil.

19. Ramos, LR, RP Veras and A Kalanche (1987) "Envelhecimento populacional: Uma realidade Brasileira", *Revista de Saúde Pública* 21(3), 211-24.

20. Rice DP and JJ Feldman (1982) "Living longer in the United States", *Milbank Memorial Fund Quarterly,* p387.

21. Russel, LB (1984) "The economics of prevention", *Health Policy* 4:85-100.

22. Davis, CK and DJ Rhodes (1988) "The impact of DRGs on the cost and quality of health care in the United States", *Health Policy*, 9; 117-131.

23. Rodrigues, LG de M. (1987) "Public health organization in Brazil", Ministry of Health, Brasilia.

24. Cordeiro, Hesio (1987) "Medical costs of HIV and AIDS in Brazil", INAMPS, Rio de Janeiro.

25. Gertler, P. L. Locay and W Sanderson (1987) "Are user fees regressive? The welfare implication of health care financing proposals in Peru", *Journal of Econometrics*, 36, 6788.

26. Akin, J. (1988) "Are user fees regressive? A comment", draft manuscript, University of North Carolina, Chapel Hill, NC.

27. World Bank (1986) *Review of PHN Sector Work and Lending in Health, 1980-85*, World Bank, Washington DC.

28. Castaneda, T. (1985) "El sistema de salud Chileno: Organización, funcionamento y financiamiento", Boletin de OPAS, 103, 6, 544-569.

29. Anonymous (1988) "Sick health services – Europeans seek the right treatment", *Economist*, July 16, 19-22.

30. Lewis, M. (1987) "A study of hospital user fees in the Dominican Republic", Urban Institute, Washington DC.

31. Castaneda, T. (1988) "Chile: The reforms to the health system", draft manuscript, World Bank Washington DC.

32. Anonymous (1988) "Parties fear waves of 'mosquito' votes municipal elections face widespread scepticism", *Latin American Weekly Report*, July 14.

33. Personal communication, J. Saraiva, SIPLAN, Brasília.

34. Landmann, J. (1982) *Evitando a Saúde e Promovendo a Doença: O Sistema de Saúde no Brasil*, Achiame, Rio de Janeiro.

35. Goodin, R and J LeGrand (1987) *Not Only the Poor*, Allen and Unwin, London.

36. World Health Organization (1987) *Economic Support for National Health for All Strategies*, A40, Technical Discussions/2, World Health Assembly, Geneva.

37. Abel-Smith, B. (1981) "Sharing the costs of health care: Conclusions of an international seminar", *World Health Forum*, 2(1) 79-89.

38. Sommer, JH. (1985) "Health care costs out of control: the experience of Switzerland", *World Health Forum* 6: 3-19.

39. US Public Health Service (1988) *Disease Promotion/Health Prevention: The Facts*, Bull Publishing Co., Palo Alto.

40. Lenfant, C. and EJ Roccella (1984) "Trends in hypertension control in the United States", *Chest*, 86 (3), 459-462.