Strengthening Health Services in Developing Countries through the Private Sector

Charles C. Griffin
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ABSTRACT

This paper discusses the nature of private sector involvement in health service delivery in developing countries. It is often argued that private sector provision leads to inequities, attaches a profit incentive to healing, and raises costs, while government provision is assumed to eliminate these problems. On the other hand, it can be argued that private provision widens choices for consumers, results in more efficient use of inputs, and improves technology.

This paper takes the wide and rarely occupied middle ground between the extreme pro-public and pro-private approaches to health care delivery. Judging from both economic theory and the available information on health systems, there is unlikely to be -- and appears almost never to exist -- a pure public or a pure private health care system. Private is defined to include charitable, nonprofit, and for-profit operations.

With some major exceptions, the industrialized countries have developed mixtures of public and private systems that are financed largely by third party payment mechanisms. Industrialized country governments play a major role in the provision of care for specific groups of people, and they are central to the third party financing arrangements that pay for health care. In developing countries, government health systems tend to be direct delivery operations, but about half of expenditures are out-of-pocket payments for private services and drugs. Health insurance systems are poorly developed except in Latin America.

The area of greatest potential for private sector involvement in developing countries is in hospital care. It would require, however, the development of third party payment systems and a re-evaluation of the government's role in exactly the area where governments are most heavily involved. Governments willing to move some curative activities into the private sector could retreat to the simpler and more appropriate tasks of financing and regulating health service delivery. Third party payment mechanisms can provide benefits not only for patients and providers, but also can ease the government's regulatory burden and make its quality control activities more effective.

Governments probably cannot extract themselves completely from direct provision of curative care, especially in rural areas. Greater reliance on the private sector to supply remaining government facilities, however, can stimulate the development of more diversified private markets and supply lines in rural areas. Governments can create pecuniary incentives for the private sector to improve quality standards by increasing their use of private markets.

Examples dot the presentation because we have little systematic data to support arguments on any side of the issue. A great degree of uncertainty is characteristic of any social experiment, and that fact argues for a restrained approach to privatization. It does not argue for inaction. The advantages of greater private involvement in some areas are absolutely clear.
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INTRODUCTION

This essay directs attention to activities in health care where increased private sector involvement can augment the supply of health services, remove unnecessary burdens from governments, and increase the economic efficiency of developing country health systems. A simple distinction between the private and public sectors is applied -- anything not done by the government itself is treated as part of the private sector, which includes for-profit, not-for-profit, and charitable activities. A realignment of public/private responsibilities in delivering personal health services can reduce supply constraints in health, rationalize unwieldy systems, save governments money, and improve outcomes for patients.

The World Bank’s Financing Health Services in Developing Countries (World Bank 1987) outlines the main constraints in the health sector in developing countries: inadequate, slowly growing, and in some cases declining public health budgets; public delivery systems that are too heavy and inefficient; inequitable distribution of public subsidies; inadequate risk-sharing arrangements; and a concentration of spending on personal health services (often to the detriment of public health interventions). A principal reason for these problems is the preoccupation of governments with the direct delivery of personal health services rather than directing their activities to financing public goods provision, assisting the poor financially, regulating quality in the private sector, and acting as insurer of last resort.

Like it or not, in the supply-constrained public systems of the poorer countries sick people have not waited for the government to find a way to provide more health services. They have historically sought care from traditional healers and midwives, medicine sellers, private physicians, and government physicians in after-hours practice (Akin et al. 1985). They continue to bypass inadequate government facilities to seek care in the private sector, which is flourishing in almost every developing country.

Can the private sector survive in medical markets and repay its loans, or are subsidies inevitable? On the face of it, it should be virtually impossible to lose money in the medical care market, where demand is price inelastic, with fierce customer loyalty to providers. Expenditures on health services are income elastic, so that increases in income tend to result in even larger increases in health care spending. Yet the institutions delivering inpatient and emergency care often lose money because sick people can accumulate large medical bills that they cannot pay. The main problem for patients is also the main problem for private providers and lenders -- how to reduce to manageable proportions the risk of catastrophic expenses.

This paper discusses the theory of public and private goods provision as it applies to personal health services. With broad strokes, the financing of medical services in industrialized and developing countries is described. Both the theory and evidence point to a rich mixture of public and private activity in health care that is at odds with the polar ideological debate over the public versus private issue (see, for example, Roemer 1994). These sections are followed by a practical guide to points of intervention in developing country health systems where privatization could improve efficiency.
or equity or both. Experiences of China, Chile, and Zimbabwe are briefly presented at the end.

**THEORY**

Whether health care should be delivered through government or private systems is a normative question of welfare economics. The distinctive economic characteristic of health care, as already mentioned, is the over-archingly presence of the risk of catastrophic losses (Arrow 1963). Although health sector policy discussions are dominated by ideas of fairness and equity, the underlying objective is to reduce the financial risk attached to medical service use and provision. The distinction between fairness and protection from risk may be an artificial one to some readers, but it is crucial because risk creates problems of economic efficiency, not necessarily problems of equity. Once the risk problem is taken care of, equity problems may still require attention, but they will be more narrowly defined and manageable. In this section efficiency and equity are discussed separately.

**Table 1. Efficiency Criteria for Government Intervention in Health Markets**

<table>
<thead>
<tr>
<th>Market Failure</th>
<th>Example in Health</th>
<th>Government Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Public Goods Merit Goods</td>
<td>Public health activities</td>
<td>Tax financing (epidemiology, health education)</td>
</tr>
<tr>
<td>2. Externalities</td>
<td>Water/air borne and infectious diseases</td>
<td>Tax financing, regulation, property rights</td>
</tr>
<tr>
<td>3. Declining marginal cost</td>
<td>Research and development (pharmaceuticals?)</td>
<td>Patents, price regulation, subsidies</td>
</tr>
<tr>
<td>5. Inadequate information for consumers</td>
<td>Patient/physician information gap, quality of services and supplies</td>
<td>Regulation? Direct delivery?</td>
</tr>
</tbody>
</table>
Efficiency

There are several well-defined conditions of market failure that could justify government financing, if not necessarily government provision, of health services. They are listed in Table 1. The first two categories under "Market Failure" -- public health problems, communicable diseases, and so on -- are commonplace and clearly require government intervention. The third category, declining marginal cost, is not a concern here. The fourth and fifth categories are the focus of our attention.

Obviously the best protection against illness-related catastrophic losses would be health insurance, which certainly could be provided by the private sector (see page 46 for an introduction to those insurance concepts). But private insurance may be infeasible due to two basic problems:

1. **Prohibitively high administrative costs.** Insurance adds the administrative cost of running the insurance plan to the cost of getting medical care. That added expense may outweigh the value of the risk protection provided.

2. **Inadequate institutional arrangements to contend with adverse selection and moral hazard:**
   a. Adverse selection -- those who expect a loss are most likely to buy insurance.
   b. Moral hazard -- people become more prone to a loss once they are insured.

The high administrative cost of insurance in developing countries, caused by dispersed populations engaged in economic activities that take place outside of formal economic institutions, is probably the main deterrent to widespread private health insurance in developing countries. Of course, that statement is less true of urban areas, but there are serious problems in providing insurance even in cities. Adverse selection can be reduced by insuring groups organized for a purpose other than insurance, such as farmer cooperatives or groups of employees. If such groups are costly to identify, health insurance will be difficult if not impossible to provide. Administrative costs sour as the costs of identifying bad risks go up. Moral hazard can be counteracted by forcing patients to pay part of their medical bills through deductibles and co-payments.

Category 5 in Table 1 refers to the fact that physicians are patients' agents in purchasing medical care. That characteristic has two aspects:

1. **Quality.** The patient's well-being is entrusted to an agent, so the quality of the agent's services is a critical factor.

2. **Cost Control.** The provider or agent has little incentive to minimize the cost or amount of care.
delivered, especially if a third party is paying.

Medical practice is consequently regulated in an attempt to guarantee a minimum acceptable level of quality and to contain costs.

In summary, personal health services are private goods, just like bread and wine, that people willingly pay for and private suppliers willingly deliver. So is insurance. The government is likely to be heavily involved in both markets, however, because of problems with insurance and the need for some regulation of medical care. Conversely, the private aspects of health care cannot be eliminated; if governments attempt to bring all health care into the public sector, possibly as a means to ration care in order to control costs, at best it will drive the private sector underground.

Dispersed populations in rural areas are least likely to be covered by insurance or to remunerate adequately local private providers of high quality modern medicine. Lower quality (although not necessarily lower priced) substitutes will be available, such as traditional healers, traditional midwives, private paramedics, and drug store clerks. Health ministries may find the low quality of the available care objectionable, requiring either government subsidies to providers or direct delivery of services. The justification for government intervention on efficiency grounds is much weaker in cities.

Equity

The more reliably sick a person is, the more uninsurable he or she becomes, yet the greater is the need for assistance. Governments or charitable institutions will intervene to finance care in such cases; if they do not, even private physicians are likely to cross-subsidize the sickest rather than deny care. The permanently sick and disabled are completely uninsurable and require direct assistance under any system.

Insurance is a service that, like other goods and services, may require a subsidy for the poor in order to guarantee minimum access to health services. Because of the problematic characteristics of insurance, it may be less expensive to provide health care directly to the poor than to subsidize insurance for them, but that decision depends on local conditions. Even in industrialized countries a combination of charity hospitals and financial subsidies have historically been necessary to deliver services to the poor, however inadequately.

Nevertheless, the list of equity considerations is short. Once risk is understood as the basic problem, the equity aspects of health care are the same as for any other good -- how to guarantee minimum consumption by the poor. It makes good economic and budgetary sense to target health subsidies carefully while encouraging insurance for the rest of the population. Subsidization can be a matter of just writing checks; there is no inherent justification on equity grounds for direct delivery of services except when public provision is less costly than subsidies to the private sector.
Summary

The distinctive characteristics of personal medical care lead naturally to a combination of publicly and privately financed and delivered services. If private insurance is available, it can take care of the risk problem. But because of adverse selection, moral hazard, and under some circumstances prohibitively high administrative costs, universal insurance coverage requires government action.

Even so, there is no obvious reason that all medical care should be brought into the governmental sector. If public provision becomes needlessly bureaucratic and costly, there is a strong reason not to bring private care into the public sector.

It is equally clear that governments will play a role in financing and regulating health care even if it is provided primarily by private agents. That would be true on efficiency grounds alone, regardless of equity considerations.

The justification for government intervention in the provision of personal (as opposed to public) health services is strongest in rural areas of developing countries, not in cities. So in looking at priorities for enhancing private health care delivery, cities are the place to search first. LDC governments currently spend most of their health budgets in cities, so relieving them of some of that burden will allow them to put the money and the direct services where they would serve a more effective, economically efficient, and equitable purpose -- in the countryside.

Evidence

Introduction

This section paints a general picture of health financing and service delivery separately for industrialized countries and developing countries. Then differences between the two are pointed out. The expectation from the theory is that all systems will have mixed public/private institutions, which turns out to be the case.

Industrialized Countries

Taxonomy. In the industrial countries there are three basic models of health care delivery: the national health service approach (United Kingdom and New Zealand), the social insurance approach (France and Germany), and the private insurance approach (United States). Canada and Australia have hybrid systems with national insurance systems but private provision. Yet there is so much diversity within and across countries that the lines between categories are blurred; in fact the three systems coexist in most countries (Schieber 1987). For example, private insurance and private ownership of health capital are increasingly found in the United Kingdom despite its nationalized health service. In the United States general tax revenues pay for health insurance for the poor, a federal payroll tax finances health care for the elderly, the Veteran's Administration and the Defense Department
operate two of the largest socialized medical systems in the world, many local
governments finance and administer charity hospitals, and most of the best
hospitals are owned by state universities. In the Soviet Union, where the
principle of free medical care has prevailed for decades, some private clinics
and experimental fee-for-service, self-financing hospitals are being set up
(Roxburgh 1988).

**Spending for health care and the degree of public financing.** The OECD
countries spent slightly over 7 percent of GDP on health care in 1984, ranging
from 5.5 percent or $275 per capita in Portugal to 10.7 percent or $1,637 per
capita in the U.S. How a system is organized and financed has no clear impact
on spending. The top 3 countries in terms of per capita spending in 1984 are
a study in contrasts: the U.S., the top spender, is the market-oriented
outlier; Sweden, the second most lavish, has one of the most socialized
systems; and Canada, number three, has a heavily regulated, price-controlled,
tax-financed system. Although the U.S. had above-average growth in per capita
spending between 1970 and 1984, 7 of 19 OECD countries, all with substantially
greater direct involvement of government in the provision of health care,
exceeded its growth rate. Growth in health spending exceeded per capita GDP
growth in all countries but Iceland (Schieber 1987).

In all OECD countries except the U.S. and Australia, the public sector
financed well over 70 percent health care costs in 1984. For inpatient care,
public spending accounted for over 80 percent of the total. Most countries
finance their health services through payroll taxes, except for Great Britain
and Italy, which use general tax revenues. In the U.S., Japan, and
Switzerland, employer-based health insurance operates for all practical
purposes exactly like a selective payroll tax (Schieber 1987).

**Public ownership.** The bulk of inpatient care is not only financed by
governments, it is also delivered by them through publicly owned hospitals.
However, the public/non-profit/for-profit mix at the hospital level varies
widely, and hospitals tend to operate as independent entities even if some
level of government owns them. Ambulatory or outpatient services are
typically supplied through the private sector, although that mix varies as
well. Even when physicians are public employees, they are allowed to accept
fees for some services or to operate after-hours private practices. In
several Western countries the fastest growing part of the health sector is
for-profit private hospitals. In all countries the systems are in flux as
governments experiment with deductibles, co-payments, fees for drugs, and
institutional reforms in an attempt to control costs (Poullier 1986).

**Developing Countries**

**Taxonomy.** Every developing country has a system of public hospitals and
clinics, often administered by the centralized bureaucracies left over from
colonial days. Many countries are influenced by the British and French
approaches to health services, with different mixes of public provision,
private provision, and compulsory workplace provision. The U.S./Japanese
model of private provision and insurance is shared by Korea and the
Philippines. Most Latin American countries operate direct-delivery Ministry
of Health systems side-by-side with large social security systems that deliver
care either directly or by purchasing services in private markets. China has a public system of hospitals that are mostly self-supporting through user fees and insurance collections.

There is obviously no single system used in developing countries, although there are many similarities among groups of countries. The private sector in every country has expanded enormously in the 1980s. Two of the developing countries that have been most successful in delivering free public health services, Jamaica and Sri Lanka, now allow private practice by government physicians and have freed up many other aspects of their systems to increase private practice (usually as a means to pay physicians enough to keep them as civil servants).

**Spending for health care and the degree of public financing.** For a sample of 13 low-income and 14 middle-income countries for which public and private expenditures could be estimated, average per capita health expenditures were about $10 and $37, respectively, in the early 1980s. Government spending accounted for roughly 50 percent of that amount. Compare those figures to per capita health spending during the same years of $766 in 20 industrialized countries, 75 percent of which was accounted for by governments (World Bank 1987).

**Public ownership.** For a sample of 18 low-income countries in the mid 1970s, about 75 percent of all hospitals were owned by governments. In 40 middle-income countries, slightly less than 60 percent were owned by governments (Colladay 1980). Those numbers are over a decade old, but more recent figures are available for only a few countries. In Sri Lanka, investment in public sector hospital beds stagnated during the 1980s while the number of private sector beds appears to have at least doubled. In Thailand in 1985, 35 percent of 1,045 hospitals were in the private sector. Thailand's 7,800 public health centers in 1985 were more than matched by 12,000 private clinics and 9,000 private drug stores. In Malaysia, the proportion of physicians in private practice rose from 43.2 percent of all physicians in 1975 to 52 percent in 1983 and 55 percent in 1985. By 1990 the government estimates that nearly 70 percent of physicians will work in the private sector. In Indonesia, about half of all hospitals and 30 percent of beds are private; 17 percent of the country's physicians and 15 percent of its nursing and paramedical staff were employees of private hospitals in 1985 (all figures from Asian Development Bank 1987). In Bangladesh, one of the world's poorest countries, about 60 percent of the qualified allopathic physicians were in the private sector in 1986. Although the government owns most of the hospital beds in the country, a 1986 survey of health expenditure patterns found that only about 15 percent of the sick who sought outpatient services did so from government facilities. The remainder used practitioners in the private sector (Griffin 1989a). The experience in Africa varies widely, with substantial non-government organization involvement in many countries.
Comparison and Trends

There are four major differences between developed and developing countries in health care financing and delivery:

1. **Health expenditure and income.** Health spending is about 3 percent of GDP in low-income countries and 5.5 percent of GDP in middle-income countries, compared to over 7 percent in industrialized countries. Aggregate health expenditures thus appear to be income elastic in a macro sense, but some of the apparent difference may be caused not so much by income per se as the greater use of third party payment mechanisms in industrialized countries and the older age structure of their populations (World Bank 1987). As per capita incomes grow in developing countries and their populations age, demand for personal health services will grow dramatically. Developing country health ministries are already hampered by inadequate budgets, and spending is skewed toward inpatient care. Increases in per capita incomes and growing cohorts of aging citizens will cause even more strain. How will countries be able to devote more resources to inpatient care without reducing further their expenditures in rural areas and on public health interventions? Without growth in private provision of curative care and third party payment mechanisms, public policy choices will become impossibly constrained by inadequate budgets.

2. **Government spending.** Spending by central governments on health in developing countries fell as a percent of total government expenditure between 1972 and 1983, it rose in the industrialized countries. In many developing countries real public spending on health dropped substantially owing to slower growth rates and adjustment policies in the 1980s (Cornia et al. 1987). The reduction in spending pressures governments to increase the effectiveness of what is left and to better target subsidies where they are most needed. The crimp in public budgets has caused increased reliance on the private sector and greater emphasis on fees in the public sector.

3. **Government versus private spending.** Spending by developing country governments for health care accounts for less than half of total health spending, compared to at least 70 percent in the industrialized countries. The other half comes from private sources (World Bank 1987). Much of the private spending represents catastrophic losses caused by inpatient care; that burden on individuals could be reduced by
greater availability of health insurance.

4. Government revenues, health care spending, and equity. Spending by LDC governments on personal health services is financed principally through general tax revenues. The burden of those taxes falls heavily on agriculture and the poor (World Bank 1988), while the spending tends to benefit urban areas and the better off segments of society. Spending by industrial country governments is financed by social insurance premiums, or earmarked payroll taxes, that are proportional to income and are paid by those who benefit from health care. There are major exceptions to both generalizations, but equity can be improved in developing countries by pushing better-off citizens out of the government system, making them pay for their own care, and reallocating government subsidies to rural areas and to the urban poor.

Conclusion

These facts and figures illustrate the varied mix of publicly and privately delivered health care in the world. Given that both the theory and evidence identify important roles for the public and private sectors in providing personal health services, the problem is not one of justifying one or the other but of identifying the most efficient and sensible points of intervention.

It is important to contrast this approach with the usual ideological debate that dominates the question of public and private provision. For example, per capita spending on health care in United States was about 2.5 times that of the United Kingdom in 1984 despite similar life expectancy statistics. The difference in spending is commonly attributed by critics of private provision to differences in the public/private mix despite only this evidence to support the assertion. Surely part of the difference is attributable to differences in income, as per capita GNP in the U.S. is twice that of Britain. By the same token we could argue that Greece has the best system of all because it achieves the same life expectancy as the United Kingdom at less than half its cost per capita. But of course Greece's per capita GNP is half that of the United Kingdom.

Similarly, the international health community has always cited Cuba as a developing country where great improvements in health were coincidental with the elimination of private practice, the socialization of medicine, and a commitment to equal access to health care. Enthusiastic statements about the Cuban health system such as the following are common:

"The people also exerted pressure in favor of highly developed tertiary care. The expectations of treatment modalities and diagnostic procedures such as sonograms, prenatal screenings, and CAT 'scans' have been encouraged by the system itself. They are a direct result of the regular and explicit reaffirmation by the
leadership of the commitment to free and complete access to the best treatment. "The country’s aspiration to become a 'medical power' also nurtures the expectations of the population."
(Santana 1987, p. 121)

Almost the exact same statement has been made repeatedly in criticism of other developing country systems as being driven by self-interested physicians.

Life expectancy at birth for women in Cuba was 69 in 1965 and 77 in 1985, a 12 percent gain. For its neighbor, Jamaica, the numbers are 67 and 76, a 13 percent gain. The infant mortality rate fell in Cuba by 58 percent, from 38 in 1965 to 16 in 1985. In Jamaica it fell by 59 percent, from 49 to 20. Yet the population per physician in Jamaica actually rose by 36 percent, while the population per physician in Cuba fell by 37 percent over the period. Real public spending on health care in Jamaica has declined continuously for most of the last decade. Cuba, with a similar age structure and health problems, would appear to have invested heavily in the health sector with lower returns in terms of mortality decline than Jamaica, whose government has been withdrawing from the health sector for several years and has been encouraging the private sector (figures from World Bank 1988).

This information does not prove or disprove that the private or public sector is better, but it is the usual method of debate over this issue. Other island countries could be compared with Cuba that would make its achievements look relatively more impressive. But the character of the debate in general is misguided. A pure system like the one we are led to believe exists in Cuba is a rarity indeed. It should be clear by now that the typical health system in developing countries is pluralistic. If economic theory tells us anything, it would be that differences across countries in health outcomes are probably more related to differences in public goods provision rather than to differences in how personal health services are provided.

However, if the private sector provides so much of the care available in developing countries in the first place, what can be done to make the systems work any better? The scope for improvement is actually substantial. Economic efficiency can be improved by rationalizing third party financing in developing countries and reducing the burden on government budgets of activities that governments perform poorly. Equity can be improved by targeting public subsidies to the poor rather than using the general price subsidy approach of free care for all.

**SCOPE FOR PRIVATE SECTOR DEVELOPMENT**

**Introduction**

The rest of the paper makes general points primarily by example because there are few statistics available to rigorously defend any strategy in the social sectors. In some cases the evidence is much more convincing than others, and they will be clear to the reader. Under any circumstances, weak evidence is not a reason to do nothing, only to move slowly and experimentally in order to gather more information and test alternative approaches.
Several questions determine the areas identified for inclusion in this paper. First, are there parts of a public health system in which private provision could solve problems that are recognized even by those who oppose greater private sector involvement? In other words, would privatization be consistent with the conventional wisdom on health sector policy reform? Second, what are the areas where large amounts of capital and technical assistance would be required? Third, the complementarity of insurance and private sector provision of services is kept firmly in mind. Table 2 contains a list of major interventions rated against criteria that seem important for judging the worth and feasibility of private sector involvement.

**Privatization of Public Hospitals**

**Problems in hospital finance.** One striking area of agreement in health policy is that developing country governments spend an inappropriately large percentage of their health budgets on hospitals. Hospitals are an expensive and essential part of modern health systems. Technologically, they are as inseparable to modern medicine as drugs. However, they are inappropriate to most of the health problems that plague poor rural populations. A typical pattern in the 1980s has been for Ministries of Health to spend 60 to 80 percent of their health budgets on urban hospitals despite the fact that up to 80 percent of the population lives in rural areas and suffers from diseases that need not be treated in hospitals.

**Examples.** Bangladesh demonstrates the basic problem. Hospitals in 1986 consumed 73 percent of total spending and about 87 percent of recurrent spending by the Health Wing of the Ministry of Health and Family Planning. Almost none of that spending was subsidized by donors, but over half the spending for rural clinics was financed by foreign aid. In the absence of support from foreign donors, administrators would face impossible choices. Some planners have argued that parts of the hospital system should be closed down and the savings redistributed to rural clinics. Yet the patients in the top hospitals cost on average only about $3 to treat, compared to $0.60 in the least expensive rural outpatient clinics. Given the relatively heavy use, high quality, and low unit costs of hospitals (given the types of patients cared for), a decision to close them down appears to be economically and medically questionable. Moreover, hospital resources are already meager. An average Upazilla (county) of 225,000 people in Bangladesh is served by a small hospital containing 31 beds (of which half might be functioning), with no x-ray machine or blood bank and a minimal supply of drugs. Larger and better operating district hospitals are located in larger cities, but each of them serves nearly 2 million people (Griffin 1989a). Even though the system appears to be ill-designed relative to health needs, the physical infrastructure as a whole is so small that closing down hospitals could very well be more damaging than closing down rural clinics.

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1 There are many areas where financial and technical assistance are not required to enhance private sector involvement: they simply require changes in government policy. Under the assumption that small scale projects would not be cost effective activities for large donor and banking institutions to undertake, this discussion is limited to large scale interventions.
<table>
<thead>
<tr>
<th>Activity</th>
<th>Potential to Meet Costs, Without Subsidies</th>
<th>Capital Requirement</th>
<th>Requirement for Technical Assistance</th>
<th>Value to Health Policy Objectives</th>
</tr>
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<tbody>
<tr>
<td><strong>HOSPITAL PRIVATIZATION</strong></td>
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<tr>
<td>privatizing public hospital assets without better insurance coverage</td>
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<tr>
<td>development of private hospitals</td>
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<td><strong>PRIVATE OR PUBLIC HEALTH INSURANCE</strong></td>
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<td><strong>CONTRACTING OUT SERVICES</strong></td>
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<tr>
<td>Laundry</td>
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<td>Drugs</td>
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<td>Whole Clinics</td>
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<td>Laboratory work</td>
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<td>Shared private use of government facilities</td>
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Note: - means low, 0 neutral, + high. Readers may have different rankings. ? means not relevant to some health sector goals, such as public health, safe water, etc.

Some countries have tried to solve this problem by physically limiting hospital construction and increasing investment devoted to lower level facilities. Tanzania's strategy in the health sector from 1972-1980 was to freeze the number of hospital beds per capita while rapidly expanding construction of rural clinics. Despite an aggressive and successful implementation of the policy, hospital construction has accounted for at least a third of capital spending since 1971; in 1984, it accounted for nearly half
of investment. There was some success in reducing the proportion of recurrent
costs spent on hospitals, but they still accounted for 60 percent of the
budget in 1983, down from 82 percent in 1971 (Jonsson 1986).

Ethiopia plans a 700 percent expansion of community health services over
the next decade. Nevertheless, 65 percent of capital expenditures in the
health plan will be devoted to hospitals. Fully 93 percent of the Ministry of
Health contribution to capital costs and 40 percent of its contribution to
recurrent expenditures will go to hospitals (Ethiopia 1984).

The Ministry of Health in Malawi in 1980-81 spent about 2 percent of its
budget on communicable disease control. Other ministries and local
governments spent an amount equal to 9 percent of the Ministry of Health
budget -- or about a fourth of the cost of the two main hospitals -- on water
and sanitation investments. All but 15 percent of the health ministry’s
expenditures were absorbed by hospitals. Even within rural districts in
Malawi, hospitals accounted for over 60 percent of public spending on health
services (Republic of Malawi 1984).

An economic restatement of the problem. The high capital and recurrent
costs of hospitals dictate that if curative services are directly delivered by
governments, their health budgets will be skewed toward hospital services no
matter what the priorities. If we superimpose on this subsidy pattern typical
residential and income distribution patterns in developing countries, an
equity problem unfolds. Urban residents capture a disproportionate share of
the government’s health subsidy because they live near the hospitals and use
them. If a health system offers completely free care, the subsidy itself
creates these rural/urban, high income/low income, curative/preventive
inequalities as a consequence of the public ownership and financing of
hospitals. As developing country populations age, these distortions will only
increase. Hospitals could be scaled back and physicians redeployed, but that
strategy would eliminate many of the services of modern medicine along with
the inequities.

Privatization as an alternative. Governments can reduce the problem by
charging user fees for hospital services (Griffin 1989), but progress on that
front will be slow and politically difficult in many countries. An
alternative that in many cases may be a more feasible and permanent solution
is to remove hospitals legally and financially from government budgets.

The World Bank has encouraged a number of African countries to turn
national hospitals into parastatals that will have reduced access to
government budgets. But judging by the typical performance of state-owned
enterprises, this approach will be only partially successful (World Bank
1988). In Kenya, for example, the government has agreed to turn Kenyatta
National Hospital into a state corporation that will set its own fees and keep
its revenues\textsuperscript{2}. Yet the government will continue to subsidize the operation, has received no compensation for the capital it has turned over to the hospital, and currently retains the hospital on its investment budget. The Ministry of Health, donors, and hospital administrators seem to agree that the hospital will require large infusions of capital to provide high quality services that people will be willing to pay for, so in the short term this single hospital promises to absorb even more health resources than were available to it when it was a government agency. The same approach is being contemplated for lower level hospitals: large investments, then user fees and possibly parastatal status.

Consider a privatization alternative. The hospital is purchased by a private nonprofit corporation that is governed by an independent board of directors, with representation from the Ministry of Health, providers, users, and other interested parties. The Ministry of Health may retain some ownership interest, but it also receives an infusion of capital that can be invested in construction of rural services, water, communicable disease control, or mother-and-child health services. Health planners accomplish what they could never do before -- convert one piece of physical capital to new uses that are more appropriate to the government's responsibilities in the health sector.

Other changes would also come about. The hospital will begin to make cost- and demand-determined allocations rather than allocations that reflect planners' tastes and bureaucratic incentives. An example of the difference, again using the Kenyatta National Hospital, is a decision to close down its outpatient department just as it was being turned into a parastatal. Health planners decided that a heavy load of outpatient services was an inappropriate service for this tertiary hospital despite the hundreds of users a day who clearly felt it was quite an appropriate service. A revenue-sensitive hospital administrator would close down the outpatient department only if it was losing too much money, quite a different approach from the "appropriateness" criterion. If patients were charged the actual cost of serving them in the outpatient clinic, and they continued to come, why should administrators be concerned about the "appropriateness" of the service? In fact, the department was never able to close down: people began to redefine their illnesses as emergencies, and a market for letters of referral to the hospital developed. Queues formed again within days of the closing, so in practice patients were simply presented with another hurdle to clear in seeking health care. Forcing a hospital to recover its costs would mean that it must pay attention to what people want and are willing to pay for. Planners would be forced to balance their tastes against those of the clients (or at least sell their ideas to clients rather than impose them).

A second benefit of privatization is that it brings private practice above the table. A problem in all public hospitals in developing countries, especially in the top ones, is the use of publicly provided capital and inputs

\textsuperscript{2} This discussion of Kenyatta National Hospital is based on personal observation. There are no published documents other than newspaper accounts in Kenya of the activities described here.

\textbf{14}
for private practice. In every country one hears anecdotes about use of public facilities for private gain. Typical behavior is for patients seeing a consultant privately to get inpatient care, x-rays, lab tests, and other free services from government facilities. Private patients and physicians thus receive a government subsidy for use of expensive machines and services, something that would be heavily policed in hospitals that were required to pay their own bills. This type of behavior is so institutionalized in Sri Lanka, for example, that the government-owned insurance company pays patients an honorarium if they use government hospitals instead of private hospitals because the cost of government care is zero for the insurance company.

**Problems.** Several problems must be overcome in order to achieve successful privatization. The first is insurance. The privatized hospital, whether nonprofit or for-profit, would fail unless a third party payment system could be relied upon to pay inpatient bills. So the insurance and hospital privatization problems would have to be resolved simultaneously. To use the Kenya example again, the insurance issue could be resolved by expanding a small social insurance system that already exists (discussed in more detail on page 24). Alternatively firms could be required to guarantee the bills of their employees, hospital services could be marketed to modern sector employers, or private insurance plans could be organized.

The second problem is administrative. A freshly privatized hospital will lose money owing to the adjustment from a government organization that faces incentives to increase costs to one that minimizes costs. Accounting and budgeting procedures will have to be improved. The Kenyatta National Hospital required a $400,000 management study simply to discover its costs and attach priorities to its operational problems. This problem should not be over emphasized, however, because most developing countries contain mission and private charitable hospitals that could provide management services or benchmarks for operation. Part of the reason for privatization would be to force these very changes.

Cost problems can also be over emphasized. Hospitals in many countries (the Dominican Republic, Honduras, Jamaica, Mali, Senegal, and the Sudan to name a few that are documented) have discovered that they can raise substantial amounts of revenue by instituting relatively small fees where none previously existed, so attention to the revenue side at the outset can buy time for resolution of cost-side management problems.

Third, the government will continue to subsidize some patients. It is unavoidable. Ideally it would subsidize needy patients directly rather than subsidize the hospital to serve needy patients, but an arrangement would have to be worked out. Alternatively, the hospital could be forced to cross subsidize the poor and uninsured.

Fourth, the hospital will continue to provide external benefits to the country, which the government must subsidize. These might include training facilities, epidemiological services, administrative support for public health interventions such as immunization campaigns or the national blood supply, supervision of environmental health services, and so on.
Fifth, laws might have to be changed. The legal environment for private medical practice is often quite limiting.

Clearly privatization of large public institutions may have substantial fixed costs because the elements of the package -- setting up the policy environment, providing capital and feasibility studies, and training personnel -- must be assembled simultaneously. But solving these problems is an undertaking with payoffs to greater efficiency and equity in developing country health systems.

In most countries the top hospital doubles as a university teaching hospital; in principle, there is no reason to treat such hospitals differently. An excellent example of such an institution is the hospital of the University of the West Indies in Jamaica, which is Jamaica's top hospital but is an international institution that operates as an independent entity. The government of Jamaica negotiates a subsidy for the hospital in recognition of the services it performs for Jamaica, but the Ministry has little say in the hospital's operation. The strategy of privatizing hospitals can proceed from the top institution down to provincial and district hospitals as developing countries and donors learn better how to do it and exactly how wide is the scope for privatization.

Private Hospitals

An alternative and supplement to privatizing public hospitals is to add to the private stock of hospitals. One of the main impediments to growth in the private sector is restrictions placed on it because health planners usually assume that the private sector serves only the richest people. It is often argued that assisting the construction of private sector hospitals only reinforces inequities in health care delivery. There are at least four problems with that view, which are caused mainly by a misunderstanding of the relative roles of who provides medical care and how it is financed. A well designed financing system can solve most access problems that are erroneously identified as connected to the method of provision.

1. Does the private sector price discriminate? In believing that the private sector serves only the rich, planners assume that physicians do not serve poorer patients and charge them less. On the face of it, only the busiest private doctors and facilities would not have an incentive to serve poorer people by giving them price breaks. In fact price discrimination techniques are widespread. For example, a physician survey in the rural Philippines showed that many physicians could not respond to questions on prices without knowledge of the patient's income. Perceived income affected not only the price charged, but also prescription practices and length of treatment. The price schedules of private hospitals in developing countries, which are more easily observed than fees for private visits, often contain a wide range of choices of prices and amenities. In
Table 3 charges for pay beds in two government hospitals are compared to charges in the best private hospital in Sri Lanka to illustrate the choices available in the private sector. The variety of accommodations and services in the private hospital is impressive, and this is the most expensive one in the country.

2. **Insurance can solve access problems.** Health planners often do not realize that the wide availability of insurance can solve so-called access problems in the private sector. In the Philippines, the social security system and the Development Bank of the Philippines in the mid-seventies provided loans to private hospitals in rural areas so that members of the social insurance system would have ready access to hospital services. Moreover, by law in the Philippines, private hospitals must retain a certain percentage of beds for charity patients, and there is a budget allocation to subsidize services in those beds in areas where public hospital are not available. In reference to the example of charges in Table 3, the problem of access is not whether people can pay the charges out of pocket but whether insurance is feasible to cover the charges if a catastrophic occurs.

In Sri Lanka in 1986, there were two insurance companies, both government-owned, that sold group health insurance. The most expensive plan covered surgical and hospital expenses up to US$ 1,419 per year and cost a family of four US$ 135. The least expensive plan covered surgical and hospital expenses up to US$ 160 per year at a rate of US$ 13 per year for a family of four. The most expensive policy paid up to US$ 14 per day for room and board; the least expensive, US$ 1.24. The least expensive policy would have cost less than one percent of average income for a family of four in 1986 and would have covered all costs in the independent government hospital except part of room and board. The annual cost of the least expensive insurance policy in 1986 was a third of per capita health spending (government plus private). There is so little health insurance in Sri Lanka that the costs of providing this coverage would probably fall as coverage widened because of the high fixed costs to administer even a small plan. Catastrophic health insurance on a much larger scale may be feasible if these figures are accurate.

3. **Private does not mean for-profit.** Whether for-profit private hospitals are allowed is a local decision, but the absence of that option does not eliminate privatization as an alternative. Mission hospitals
### Table 3. Hospital Fees in Three Types of Hospitals, Colombo, Sri Lanka.

<table>
<thead>
<tr>
<th></th>
<th>Top Private Hospital</th>
<th>Top Government Hospital</th>
<th>Independent Government-owned Hospital</th>
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<tbody>
<tr>
<td>Private room with meals</td>
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<td></td>
<td></td>
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<tr>
<td>Luxury (toilet, television, air conditioning)</td>
<td>35/day</td>
<td></td>
<td>21/day</td>
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<tr>
<td>Semi-luxury:</td>
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<tr>
<td>1</td>
<td>28/day</td>
<td>10/day</td>
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<tr>
<td>2</td>
<td>27/day</td>
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<tr>
<td>3</td>
<td>21/day</td>
<td></td>
<td></td>
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<tr>
<td>Ordinary private</td>
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<td></td>
<td></td>
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<tr>
<td>1 (Air conditioned)</td>
<td>15/day</td>
<td></td>
<td>11/day</td>
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<tr>
<td>2</td>
<td>12/day</td>
<td>7/day</td>
<td>9/day</td>
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<tr>
<td>Ward (3 6 beds)</td>
<td>7/day</td>
<td>2/day</td>
<td>5/day</td>
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<tr>
<td>Other costs</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Drugs/dressings</td>
<td>market rate</td>
<td>0.44/day</td>
<td>at cost</td>
</tr>
<tr>
<td>Consultant fees</td>
<td>negotiate</td>
<td>0</td>
<td>negotiate</td>
</tr>
<tr>
<td>Surgery (theater fee, anesthesiologist, surgeon)</td>
<td>varies</td>
<td>4-11</td>
<td>4-53</td>
</tr>
<tr>
<td>Diagnostic tests (X-ray, lab tests, etc.)</td>
<td>market rate</td>
<td>nominal</td>
<td>at cost</td>
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</table>

**Note:** The comparability of accommodations implied by the table are the author's guesses. The private hospital is the best and most expensive in the country. The general public hospital has 2,336 beds, mostly free, with less than 50 in the pay wards included in this table. The third hospital had 400 functioning beds in 1986 out of over a 1,000 planned. It is a government hospital but operates autonomously. The hospital has the aspect of a group practice with subsidies for charity patients. It has a sliding fee scale based on patient income.

**Source:** Data collected by the author. All figures are in US dollars at 1986 prices and exchange rate.

already provide a large share of the services available in rural areas of many countries, especially in Africa. Those hospitals recover a much higher percentage of their costs than do hospitals in the
public sector. Other nonsectarian charitable hospitals operate in many countries.

4. Does the public sector distribute investment better than the private sector? One study in the Philippines used data on location of all registered public and private hospitals, matched with census information, to compare performance of the two sectors between 1972 and 1983. Over that period, the number of private hospitals increased by 167 percent, compared to 81 percent for the public sector. The number of beds increased by 104 percent in the private sector, compared to 29 percent in the public sector. Private hospitals, with an average of 25 beds, were half the average size of public hospitals in 1983. In the ten most poorly served provinces in 1972, the number of private hospitals increased by 555 percent and private beds increased by 465 percent over the decade, compared to 167 percent for public hospitals and 141 percent for public beds. Within provinces, the private sector hospitals were more centrally located than the public sector hospitals, but the differences were small. The findings of the study suggest that the growth in supply between 1972 and 1983 was led by the private sector, and the private sector was actually more successful than the public sector in targeting investment to those provinces that most needed it. By any available measures of distribution -- urban location, largest city location, and area covered -- private sector hospitals performed as well or better than the public sector. The private sector results appear to have been driven partially by a loan program by the Development Bank of the Philippines in support of private hospitals. The conventional wisdom on public/private location is not well supported by these findings. Nonetheless, with a little reflection it seems obvious that returns to private sector investment would be highest where coverage (hence competition) is lowest, given that a payment system is available to ensure revenues (Griffin and Pague 1989). A related study of membership of and payments made by the Philippine national health insurance program found that members were widely distributed throughout the country and that over 90 percent of payments went to private sector hospitals. The insurance program, begun in the early 1970s, probably played a large role in the private sector supply response. It precipitated the loan program for private sector expansion but also had a demand-side effect because it augmented purchasing power outside Manila, where such a payment system had not
Although privatization of government hospitals -- especially the most expensive ones -- would make possible some of the reallocations required in developing country health budgets, a program to invest in private sector hospitals can also have positive effects. The litmus test for governments or donors in deciding whether to support loans for private hospitals is whether the state is able and willing to provide the same services that would otherwise be provided privately and can do so at a lower cost. If they cannot, and private providers are willing to take the risk, only on ideological grounds could the project be opposed. Governments may attach conditions to a hospital license (charity patients, location, minimum size, minimum staffing) but that is consistent with the exercise of its regulatory powers in health markets.

Insurance

The single most important factor determining the feasibility of greater private sector involvement in health services provision is the potential for insurance coverage. Successful financing of any private (or parastatal) hospital scheme requires that catastrophic health insurance be available. If health insurance cannot be organized, then the feasibility of private sector involvement beyond the private practice of individual physicians is probably nil. It is certainly not feasible for inpatient care.

Even if broad insurance coverage is not attainable everywhere, limited health insurance is not beyond the reach of most countries today, and experience in Mexico and Brazil demonstrates that over a 15 to 20 year period coverage of health insurance can be extended from a third or less of the population to nearly 100 percent. Social insurance and mutual aid societies in South America date from early in the 20th century, as early as such plans began in western Europe.

Many of the poorest countries, even the young countries of Africa, have small social insurance plans that have functioned successfully for decades (U.S. Department of Health and Human Services 1985). The development of banking institutions, availability of computers, and improved understanding of how to generate insurance premiums from rural areas should accommodate broader coverage of insurance than was feasible in the industrialized countries during the first half of the 20th century. Under any circumstances, there has been tremendous interest in health insurance in the developing world during the last decade, especially among middle income countries.

In Malaysia, the Asian Development Bank has assisted in financing studies over the past 5 years that have prepared the groundwork for a national health insurance plan. Since 1984, Singapore has had a forced savings plan

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3 Many of these private hospitals went bankrupt, but neither the numbers nor the causes are available. Presumably one contributing factor was the fact that the national health insurance system was allowed to deteriorate significantly over the period.
for health care that recognizes the need for assistance with catastrophic expenses but has the peculiar characteristic of forcing people to self insure (there is no pooling of risks -- the distinction is explained in the insurance primer on page 46). India has had two small (small for India) health insurance plans since 1952 that cover about 4 percent of the population, including government employees and formal private sector workers. Coverage of these plans has hardly changed since 1952, but the national health insurance company has begun to sell individual private policies. In Sri Lanka, the government is beginning to allow competition in the insurance market to foster greater development of private insurance (Asian Development Bank 1987).

Starting in the early 1970s, Korea began to experiment with expanded coverage for its national insurance plan. It even ran pilot insurance projects in rural areas. In the past year Korea began implementing an extension for the whole population. The Philippines instituted a national health insurance program in 1972 that now covers about half the population. As mentioned earlier, over the years its benefits have deteriorated, and a second phase to extend coverage to the entire population has never been carried out. However, proposals have been advanced in the last two years to raise benefits and extend coverage to more households. The Department of Health in the Philippines has moved aggressively and creatively to develop alternative institutional and financing schemes for medical care provision under the insurance plan, including capitation systems. Both the Korean and Philippine systems are based on reimbursement for private sector visits, although they can be used for bills in public hospitals.

In Jamaica, the private sector has grown steadily during the 1980s, with concomitant growth in private insurance. Social insurance programs in most of Latin America have continued to expand coverage. Indonesia and Thailand have experimented with small scale rural insurance programs, and private companies have expanded their coverage of employees. The necessity of imposing user fees in rural hospitals in Zaire has led to hospital-sponsored insurance plans to collect a greater share of their billings. As public hospitals in other countries become self-supporting they also will begin pushing for greater insurance coverage.

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4 "Capitation systems" is a generic term that includes all prepaid insurance plans, such as Health Maintenance Organizations, in which providers contract to deliver all necessary care to an individual for a prepaid fee. These plans have the advantage, from the third party payer's perspective, of giving the provider of medical care the incentive to minimize costs because the provider gets no additional revenue by increasing the amount of care delivered. That is the opposite incentive that providers face under a regular third party cost-plus payment system.
Nationalized insurance. Must insurance be provided through a nationalized governmental plan? Nationalization completely eliminates adverse selection because people are not allowed to self-select into and out of the plan. If there are economies of scale in the administration of insurance, a national plan can also capture them. However, nationalized insurance takes on all the attributes of an earmarked tax for health care, which tends to eliminate the insurance element in all but name.

Occasionally nationalized health insurance is promoted as a replacement for private insurance because, it is argued, private insurers have no incentive to provide insurance to people who are sure to have a loss. As stated earlier, there are certain classes of people who are simply uninsurable. The list includes the handicapped, the mentally impaired, the permanently disabled, and possibly even predictable hospitalizations at the end of a long natural life. Covering those types of risks through insurance rather than covering them through general taxes is an option. But forcing them into an insurance plan simply imposes a cross-subsidization requirement. In other words, insurance premiums are being taxed to support health care for the uninsurable because there is no element of insurance involved if the loss is expected and unavoidable. It is an odd taxing scheme indeed to tax only health insurance to provide care to the neediest. Nationalization is simply not necessary to solve this problem; it should probably be solved outside the health insurance system.

Nationalization reduces choices available to firms and individuals, and it reduces competitive incentives for administrators to minimize costs. Insurance may require substantial regulation, and in rural areas the high administrative costs per beneficiary may be conducive to natural monopolies that require special attention. In fact, the argument for direct government involvement in providing insurance is strongest (as we have seen for other financing problems) in rural areas. Before governments monopolize rural plans, however, other approaches deserve study. For example, if farmers' cooperatives, savings and loan organizations, irrigation cooperatives, or even church groups could be organized to finance insurance, the government's role might be reduced even in rural areas to one of regulation and subsidization. In Asia, population density in rural communities is so high that they might easily support competing insurance systems. One could imagine building on China's approach (discussed below) in which rural insurance is supported by local taxes. Firms could bid for contracts to supply prepaid services to local governments, possibly with a subsidy from the central government. There is no reason in general to presume that a national insurance program requires direct provision by the government, although there is also no question that it will have a role.

Insurance externalities. There are probably strong positive externalities to insurance, although empirical evidence is difficult to find. Governments have often failed to exploit the potential of insurance-based payment systems to stimulate expansion of the private sector. We are well acquainted with the argument that the private sector responds to insurance (many argue perversely) by "oversupplying" covered services. That is a peculiar argument against greater insurance coverage in developing countries, where governments are usually trying to increase the supply of medical care.
The next level of the same argument is that insurance causes the "wrong" services to be delivered. But that is very much like arguing against automobiles because they kill people. No one maintains that insurance is a perfect financing mechanism, only that it solves the most important financial problem in health care -- risk. By reducing the risk of losses, it makes medical care provision more attractive for the private sector and more accessible to patients. It does create known problems, but they are simply not on the same scale as the one it solves. The trick to gaining some of the benefits of insurance must therefore be to cover the "right" services so that they will be adequately supplied; or alternatively, to let insurance cover the "wrong" services so that governments can reallocate their funds to supply the "right" services.

A proposal for national health insurance in Nigeria was greeted with recommendations by health planners that it was a good idea but would not be feasible until the government built many more hospitals, performed a complete census of disease patterns in the country, trained many more health professionals, and created a complex administrative structure to plan for and operate the scheme. Similar arguments were advanced in Korea. Placing such enormous burdens on an insurance proposal is the faintest of support for the concept and a basic misunderstanding of the incentive effects it creates. Many of the required physical elements of an insurance-financed system will fall into place as a result of the new financing mechanism; they are not prerequisites. The changes will unquestionably take time, but governments and outside agencies can speed them up with judiciously placed loans for schools and facilities.

Thirty years ago extreme shortages of human and physical capital severely constrained health sector development. But governments have had great success in increasing the supply (and even in some cases, the distribution) of physicians and paramedics in all countries. There are still some shortages of human resources, but in many countries that constraint has been substantially relieved. The stock of human capital, if complemented with adequate financial incentives, can be relied upon to take some of the risks of further expanding the physical infrastructure necessary to provide larger quantities of health services.

Insurance plans can thus be a substitute for direct government involvement in providing health care. The lag between starting an insurance program and achieving increased supply (in response to the financial incentives) is probably no longer than it would take a government to physically increase the supply of inputs on its own. Certainly the experience in the Philippines already described -- a doubling of private sector capacity in one decade after its Medicare plan was put in place -- is consistent with this notion. It is interesting to note that the private sector response in building hospitals was strongest in some of the worst served provinces of Mindanao, where there was a relatively large supply of human capital in the form of private doctors before insurance became available, but little governmental infrastructure (Griffin and Paqueo 1989).

In Brazil, the social security system is the fifth largest public corporation in the country. It operates its own health facilities, but less
than 2 percent of inpatient visits and only about 20 percent of the outpatient visits it financed took place in those facilities in the mid-1980s. Thus it is a gigantic financial intermediary. Beginning in 1961 it allowed firms to retain their social security contributions as long as they bought medical coverage for their workers that was equivalent to the coverage mandated by the social security system. Many firms opted out of the system because they could purchase private plans that provided either the same or enhanced benefits for no more than the cost of coverage through the social security system. Between 1961 and 1980, more than 200 health maintenance organizations, including one that is now the largest in the world, were formed to meet the demand for these private services. The experiment was successful, but now conversions from public to private provision were stopped in 1981 to protect the flow of revenues into the social security system (Group Health Association of America, 1985; World Bank 1987).

In Uruguay, a similar pattern of private provision of medical care for social security recipients has led to the use of health maintenance organizations to serve nearly half the population (Group Health Association 1985). In Chile, until 1979 white collar workers' contributions to the social security system simply paid for medical care from private sector physicians. Since 1978 the premiums have been paid directly to a private health insurance fund of the patient's choosing, and clients can pay for more benefits if they desire. While there was virtually no private system of coverage in 1980, 7 years later about ten percent of the population was covered by private sector plans that had developed in response to this change in financing. Most of these plans are groups of physicians offering comprehensive care on a capitation or contract basis.

In Kenya, the National Health Insurance Fund collects payroll taxes of about US$ 1.00 a month that are paid by anyone earning over 1,000 Kenya shillings per month (US$ 54.50). The plan provides a "rebate" to patients ranging from US$ 3.27 to US$ 8.17 per inpatient day, depending on the facility. There are about 400,000 active members, about 7 percent of the workforce (spouse and children are also covered for each of these primary beneficiaries). Although the patient-day benefits were more than pay for beds in government hospitals' amenity wards, insurance payments are rarely made to the public sector. As in the Philippines, most benefits payments go to non-profit and proprietary hospitals. There has been rapid growth of private inpatient facilities in Nairobi over the last decade, partially in response to the financial incentives created by the pattern of insurance payments (Stevens 1984).

These examples prove little, but they are designed to open the door to creative thought on how a focus on solving financing and insurance coverage problems could help governments achieve their goals in the health sector. Ministries of Health and donors usually take the hard-working approach to improving the health sector in which they develop elaborate plans to train personnel, build facilities, and develop lines of supply. Because financial feasibility is rarely considered until the bills of the functioning system must be paid, the beautifully planned and well-justified services tend to be unsustainable with available resources. In practice, the program often turns out to function as a poor imitation of what was on paper. The alternative
proposed here is to pay little attention to the supply-side problems but figure out what level of services could be financed by an insurance system, how it could be run, and let the private sector figure out how to supply everything. That is not an easy task, but it is infinitely easier and more sensible than the job governments usually assign to themselves.

**Importance of the size of risk pools.** One of the principle economic efficiency problems in developing country insurance plans is the common requirement that firms provide health services directly for their employees or that they pay for their employees' medical bills even when risk pools are no more available to firms than they are to individuals. For plantations, mines, and large industrial firms, this requirement for self insurance probably presents little problem. But for smaller firms it is a tremendous burden. In Zaire, firms of any size are responsible for their employees' health care costs. A firm with 5 employees is hardly in a better position than its employees to pay catastrophic bills, but generally there is little or no private insurance available through which the firms could pool their risks.

In Zaire the government pays as much to provide health care to its own employees and employees of state enterprise (and their families) under this law as it pays to provide health services for the rest of the population. In private firms, it has been estimated that nearly half of personnel costs are to pay for health care. Larger firms operate their own clinics or hospitals, but for small firms, catastrophic bills that cannot be paid simply are not paid. In one rural mission hospital for which data are available, over half of its bad debt (US$ 10,000, or about half its annual budget) was owed by firms. The hospital, which is nearly self-supporting, is always strapped for funds, but both it and the indebted firms know that it will not refuse treatment to patients even if their firms do not pay their bills. As long as the firms pay enough to keep the hospital limping along, they have solved their problem.

If a single firm is generally too small to absorb catastrophic risks, so is a single hospital. The U.S. Agency for International Development assisted a new hospital opening in Kinshasa, Zaire, to develop an insurance package to try to solve some of its financing problems. The most feasible plan was one that basically sold outpatient services on contract to firms. The hospital could not develop its own catastrophic insurance plan (which are actually the easiest risks to insure against, and the greatest source of losses for a hospital, as noted several times already) because it was too small to absorb the potential risk of catastrophic bills at a price that firms would pay.

The extraordinary element of the Zaire situation is that virtually everything is in place for insurance: a requirement that firms cover their employees; a system of public, private, and charitable hospitals that attempt to cover their costs through fees; and a tradition of charging for services. Several other African countries are in similar positions. Assistance in developing private or public insurance (or reinsurance) plans in these countries would convert a disastrous situation to one in which the system could work reliably and without the constant specter of imminent disaster. Insurance markets are one of two missing elements; the second is government support for public health interventions. Zaire is simply one example of
problems that are common in many of the poorer countries.

**Benefit packages.** A low-cost insurance plan can cover only catastrophic losses. Additional types of coverage can rapidly raise insurance costs while reducing the pure insurance component of the plan. New insurance plans in developing countries are sure to fail if they are designed from the outset to cover a full range of services. Developing countries cannot afford to emulate the comprehensive design of insurance programs in industrialized countries unless they are able to adapt prepaid or capitation systems to their needs. Benefits can be added incrementally, as has been done in South America, as insurance administrators learn what additional features people are willing to pay for. A menu of possible plans is appropriate so that people who are highly risk averse and enjoy spending money on health care are able to purchase as much coverage as they want, but poorer people or those who are willing to absorb some risk and prefer to avoid doctors are able to purchase the minimal package.

**Regulation.** It should be noted that the main objective of regulation of curative care and drug-prescribing practices -- presumably to maintain quality standards -- is also an objective of health insurance companies. Insurance companies have no interest in paying for services from unqualified or substandard facilities and practitioners. Thus regulatory and insurance issues are in certain respects complementary. The difference is that regulators must police and punish, whereas with insurance, practitioners seek approval in order to qualify for payments. Most insurance systems require licensing of facilities in order to qualify for payment, and they have the means through their accounting systems to monitor the practices of firms and physicians requesting payment.

That is a valuable feature in developing countries, where governments have few tools with which to enforce their regulatory activities. Without insurance, providers have every incentive to evade the authorities; with insurance, the pecuniary motive is strong to conform to the required minimum standards.

**Conclusion.** To reiterate, the feasibility of private hospitals or privatization of public hospitals is intertwined with the feasibility of insurance. Insurance systems will require infusions of technical assistance and capital to expand or to get into operation, as the case may be. They must be actuarially sound and offered at a price that clients are willing to pay (rather than with a benefit package that health planners believe is appropriate). Complementary inputs in the planning process from financial experts, the private sector, health project officers, Ministry of Health officials, and Ministry of Finance officials are essential. The result of greater use of insurance will be the solution of the most serious financial problems faced by both providers and patients, and, realistically, the creation of some new problems. The new problems have been experienced by industrialized countries and most Latin American countries, so there is wide scope for the transfer of technology to ameliorate them from the outset.
Contracting Out/Logistics

To some thinkers, even the most traditional of government activities are candidates for contracting out to the private sector, including prisons, leprosy hospitals, and mental institutions. Until recent times governments have been fairly agnostic about using the private sector. Even the most public of public goods, the military, has been contracted out to mercenaries, pirates, and client armies for payment of wages or plunder. In the health sector a precedent can be discovered for the private undertaking of any activity now viewed as completely public. Assuming, however, that the world is not going to completely privatize all such operations, a sensible assumption is that the government will continue to operate many services. Indeed, as urban curative services become privatized and supported by third party financing, government resources will be freed up for greater involvement in rural areas, where contracting out will be the most important privatization issue.

Privatization and development externalities. When the government is involved in the delivery of final goods and services, we call the idea of purchasing inputs from other producers "privatization," but private firms face the same problem. The firm's decision is how much to integrate supply and production activities into the firm instead of purchasing from outside sources. In the public sector, the idea is wrapped up in the public/private ideology when it can more profitably be viewed as a question of how to minimize costs (as it is in the private sector).

But in poorer countries there is an added development dimension to "contracting out" or "out-sourcing," as it is called, because government use of the private sector creates a positive externality. Its commitment to private provision creates market structures and supply lines that become available for others to use. In contrast, if the government takes care of its own needs, there is little spill-over effect because the private use of government supply services is generally treated as a violation of the law. In the rural locales where government health facilities operate, it would be a large purchaser if it used private markets and could have a strong impact in building market institutions. However, governments generally integrate their health services from top to bottom, providing all inputs directly.

In Bangladesh, for example, virtually all activities in health and population are provided directly by the government. All employees are educated and trained at government expense in government institutions. All workers in government facilities are directly employed by the government. Drugs and supplies are physically shipped from government warehouses to clinics and hospitals in predetermined proportions at predetermined intervals rather than providing budgets to purchase those inputs in local markets as needed. If government clinics and hospitals run out of inputs that cannot be
centrally supplied, the inputs are not provided at all. Bangladesh is by no means exceptional in these practices.

**The private sector fills in where the government fails.** The main logistics problem in developing country health systems is that governments have in fact been unable to adequately supply drugs and other medical inputs to public facilities, both because of inadequate budgets and failing supply systems. In Zaire, it is common knowledge that patients must provide even the most basic equipment for surgery, such as surgical blades, which they purchase in private markets before entering a public hospital. A 1981 survey of providers and households in 38 villages in southwestern Mali found that an average of only 3 of 11 commonly prescribed drugs were in stock in the medical facility closest to each village (Birdsall et al. 1983). The public hospital in Kita had only 2 drugs of any kind in stock. A discussion by another investigator with the director of that same hospital in 1987 found that the unreliability and high cost of drug supplies was still the hospital's major problem, caused principally by a parastatal monopoly that had the sole license to import drugs for Mali and distribute them to government facilities (Vogel 1987).

The failure of governments to deliver essential inputs, such as drugs, has resulted in the development of private markets for medications, medical supplies, lab tests, and x-rays. But the efficiency for patients is low because they must first wait at a government clinic to find out what they need; then they make trips possibly to several locations to get drugs, supplies, and tests; and they return to the government clinic for further treatment. Moreover, the private market is a secondary market that fills gaps in the public supply system and therefore tends to buy small stocks (presumably at relatively high prices) of the necessary supplies. If governments would recognize that they cannot deliver the promised services and cooperate instead with the private sector, the development of local markets to supply the needs of government facilities could reduce costs for patients and foster the development of a primary market rather than a secondary market.

**Quality, price gouging, and regulation.** Government health planners often justify the use of their own supply systems because of supposed price gouging and the sale of potentially dangerous drugs in the private sector, which they attempt to control by police action or by trying to drive the private sector out of business. An obvious alternative is to use the purchasing power of the state to elicit a quid pro quo from local private contractors to train their sales personnel and to limit sales to generic versions of drugs on the World Health Organization's Essential Drugs List. If nothing else, by limiting purchases from private pharmacies to essential, generic drugs, or by providing vouchers to patients for only those drugs, the government can strongly influence private market practices.

The government's power to influence prices and the mix of products in

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5 Currently a small fraction of a facility's budget can be used to purchase inputs locally, but of course the facilities depend on central allocations for their budgets. They have no funds of their own.
the private sector through its purchasing policies is rarely tested; instead, regulatory mechanisms that are insubstantial in developing countries are used. Yet, especially in rural areas, the government could exploit its monopolistic power to influence quality and prices in the private sector if it would only use the private sector.

The lack of supplies also contributes to the low efficiency and low quality of public systems in developing countries. In the Mali example, the staff at the health facilities treated less than one person per person hour in 1981 (Birdsall 1983). New facilities in Bangladesh serve less than half the number of patients they were designed for, but experimental programs have found that use of the facilities rises substantially when supplies of drugs are adequate. One public hospital in Western Africa recognized its inability to provide drugs and allowed a neighboring mission hospital to establish a drug vending operation in the hospital (Vogel 1987).

A regional health office in the Sudan allows after hours private clinics to operate in its public facilities. The clinics are run by government workers. In essence the government contracts out a portion of its health services, not just the supply operation. That approach formalizes private sector practice in public facilities (clearly differentiating and charging for private practice), gives patients a wider choice of amenities, and improves the quality of the physical environment because the clinics are partially maintained for private practice by the private practitioners (Bekele and Lewis 1986, also summarized in Griffin 1983b).

Cost reduction and contracting out. The use of private suppliers is viewed as a cost-cutting move, and it seems to be. In Jamaica, the Ogle Committee was created by the Prime Minister to recommend options for increasing resources in the health sector. Reports in 1985 and 1987 provided a broad range of recommendations on options for privatization, some of which are being implemented. Housekeeping services in three Kingston hospitals were contracted out to a private firm in October 1987 through a competitive bidding process. After five months, the quality of the environment in the hospitals was significantly improved at half the previous cost. The bidding process on the food service operation began in February of 1988, when four bids were received. The bidding process for laundry services was slated to begin in mid-1988. Apparently the privatization initiatives involve some refurbishment of facilities by the government and donors before being let to private companies. Even more ambitious plans for privatizing hospitals are envisioned (Lewis 1986a).

The U.S. federal government allows an activity to be contracted out if the private sector bid, plus the government’s contract supervision costs and severance pay for laid off employees, is at least 10 percent less than the direct salary, materials, and overhead costs of doing the work in-house. In-house costs are calculated not under the current method of providing the service but assuming the most efficient possible government provision of the service. Even if the decision is against contracting out, this process provides a unit cost benchmark that the department is expected to achieve.

Based on experience in the 1980s, the U.S. Congressional Budget Office
estimates that 55 percent of the positions up for review each year in just the U.S. Department of Defense meet these stringent requirements for cost savings and are contracted out. If lifetime savings due to contracting out (e.g., not having to pay retirement benefits) are counted, annual savings are estimated at about 35 percent ($70 million) in the affected programs. If only current cash savings are taken into account, about half of that amount is saved each year. In the health sector, the Defense Department’s military hospitals contract out ambulance services, nutritional care, medical supply services, and outpatient care. This evidence indicates great potential for savings (Congressional Budget Office 1987). There is little doubt that health systems in developing countries, where centralized government operations are hampered by poor communication and transport systems, could benefit from similar practices.

MAJOR CONCERNS ABOUT THE PRIVATE SECTOR IN HEALTH

Two problems that are identified with greater dependence on private sector provision of health services (coupled with third party payment mechanisms) are the following:

- Overall expenditures on health care rise as a percent of GNP with little commensurate increase in output (where output is measured by life expectancy, infant mortality, etc.). Some argue that the mix of medical outputs in the health sector also change in a way that has little relation to health needs.6

6 The controversy over the effects of private sector provision on costs is primarily based on comparisons between the U.S. experience, which is assumed to exemplify free market provision, and the European experience (particularly the U.K. experience), which is assumed to exemplify systems dominated by the public sector. Neither fits the characterization perfectly, of course. The following discussion is locked into this body of evidence and thus reads in places like an apology for the U.S. approach. That is not the goal. The intent is to show how little we really know about these issues. We need a much broader base of knowledge on these issues in order to make good policy. Even within the U.S., there has been a long experience with "socialized" systems, the Veterans Administration and Department of Defense health services, that would provide comparative data with the private sector within the same country. In developing countries, there are large private and public systems that have long coexisted and would provide more detailed information on differences in costs, output, and quality. Many South American countries have three types of systems: government, social security, and private, that operate in the same environment with quite different characteristics. Across developing countries, there are several similarly situated countries that have taken substantially different routes. Malaysia, for example, currently depends heavily on public expenditures while Korea is private sector oriented. Costa Rica and Chile have recently taken divergent approaches, with Chile attempting to move strongly toward private provision.
The poor will be excluded from the system.

These two concerns are discussed below, although both issues have been alluded to in different parts of the paper already.

Overall Expenditures

The first question, about overall expenditures, is an area in which there is tremendous debate but there really is no accumulation of data adequate to provide the needed answers. In one of the best efforts to disentangle the determinants of expenditure levels, Schieber (1987) estimated several statistical models using data for the OECD countries. His results are explained below.

In Schieber's simplest model, he regressed per capita health spending in OECD countries against GDP per capita in 1984 and found that GDP per capita alone explained 77 percent of the variance in health expenditures. It had a strong positive effect: a 1 percent increase in GDP per capita predicted a 1.4 percent increase in per capita health spending (in purchasing power parity equivalents).

In a more complex model, and using national-level data for OECD countries from 1970, 1976, and 1982, Schieber regressed per capita health spending against GDP per capita, the public share of health expenditures, hospital beds per capita, physicians per capita, and percent of the population over age 65. The inclusion of these other variables did not affect the simple relationship described above between per capita GDP and health spending; in fact, none of the other variables had an effect on health spending that was statistically significant.7

When the data for the three time periods were pooled (rather than used separately for each of the three years), the importance of GDP per capita was maintained, but a higher public share in health spending also had a negative and statistically significant effect on spending. In the pooled regression, the elasticity of GDP per capita fell slightly to about 1.3, and the elasticity of health spending with respect to the public share was approximately -0.4 (meaning that a 1 percent increase in public share would result in a .4 percent decline in spending).

A more useful approach is to regress changes in health spending against changes in the independent variables to rid the analysis of the spurious impact of the initial level of spending on currently observed levels. When Schieber corrected for this problem, the explanatory power of his model dropped by about half. However, the elasticity of health spending with respect to GDP remained fairly stable, dropping only to about 1.2. The public share of spending was statistically significant only for the 1976-1982 period, with a negative but negligible effect (an elasticity of -0.06). None of the other variables was statistically significant.

7 In other words, the observed relationship could be due to chance with a probability higher than scientists are willing to accept.
At the very least, this analysis suggests that care must be exercised in comparing health expenditures per capita across countries at differing levels of income. GDP per capita is clearly the major causal factor; institutional differences may have little effect at the margin. Although a higher public share of expenditures could be shown in some cases to have a negative effect on health spending, the relationship was unstable and imprecisely estimated.

It is interesting to note that Schieber's results are roughly comparable to results obtained from a larger sample of countries for the mid 1970s under the International Comparison Project (ICP, Kravis et al. 1982). ICP estimates of price and income elasticities for medical care across countries were -0.5 and 1.4, respectively. ICP estimates also show that the price of medical services relative to other goods varies considerably across countries, with price variations in medical care closely approximating those for other goods and services. For example, except for a few outliers in Europe, the price of physicians' services closely tracked the price of other professional services in the same country in the mid 1970s. Similarly, the price of medical services and medical goods (e.g., drugs) closely followed those for other goods in the same country.

Schieber and Pouliker (1988) provide updated comparative data for OECD countries showing that U.S. health expenditures per capita exceeded those of all other countries by a minimum of 41 percent in 1986. There is no questioning the large difference, and many observers suggest that it is largely due to reimbursement methods coupled with private practice in the U.S. But by now it should be clear that such a comparison has many possible components other than just a greater dependence on the private sector: differences in income (as explained above), supply and demand conditions, treatment of capital, accounting for expenditures on long-term care, quality of care, and initial conditions.

Physician incomes are a related concern. Again, Schieber (1987, p. 76) provides data for OECD countries in 1981. It is reproduced in figure 1. U.S. physicians' earnings in purchasing power parity equivalents were double the average. Can the difference be attributed to private practice? Possibly, but a cursory glance at the data suggests a strong positive correlation with per capita GDP (except for specific countries). Some of the exceptions are striking and highlight the partial nature of such comparisons. Sweden and

\footnote{See Kravis et al. 1982, pages 140-153, for a detailed discussion of their efforts to construct purchasing power parity comparisons in the medical sector.}

\footnote{The negative price elasticity means that across the sample of countries, a 1 percent increase in the price of medical care causes a half percent drop in medical care purchases. The income elasticity is interpreted the same way as it was discussed earlier.}

\footnote{See Gumper 1984, pages 79-87 for a useful discussion of relative prices, using purchasing power parity equivalents.}
Norway, for example, tend to have high per capita spending on health care but have relatively inexpensive physicians. They achieve their high expenditures through other means.

While these earnings comparisons are instructive, they do not account for differences in hours worked, experience mix, specialty mix, physician supply relative to demand, use of low-cost expatriate physicians, or other economic determinants of earnings differentials. The relevant question, of course, is not how much total incomes vary but how much the implicit hourly wage varies for similar types of physicians. Moreover, at the margin, how much of the difference is due to private practice alone? Given the prevalence of private practice in many OECD countries, it is doubtful that it alone would explain a large portion of whatever difference there might be in wages. As stated earlier, physician salaries in most countries seem to reflect general salary levels for professional services.

Other evidence clouds these cost comparisons further and suggest that relative prices play a major role in the expenditure patterns we observe. Relative to other OECD countries, the U.S. is slightly above the mean for inpatient admissions per thousand population, near the mean for expenditures per capita on drugs, and below the mean for both number of inpatient days and outpatient visits per capita. Length of stay in U.S. hospitals in the 1980s was half the average. In a comparison of lengths of stay by cause of hospitalization for 11 OECD countries, elderly U.S. patients had the shortest stay for every one of 12 categories in 1985 (Schieber and Poullier 1988), which suggests relatively efficient use of medical inputs.¹¹

In sum, one could argue on the same evidence that while U.S. physicians are well compensated, they seem to economize in other areas. Relative to the

¹¹ This comparison is between the elderly in the U.S. and whole populations in the other countries, which would presumably overstate lengths of stay in the U.S.
experience in other similar countries, U.S. physicians tend to prescribe fewer drugs, reduce the number of outpatient visits, reduce the number of hospital stays, and shorten the hospital stays that are necessary. Alternatively, one could argue that Americans use fewer medical inputs because the prices are so high.12

The central question is, once again, what is the marginal effect on costs of high dependence on private practice? Until other factors are adequately taken into account, answers to that question are speculative. Although the evidence is uncertain, it seems implausible that private practice alone could account for the huge variations in spending and prices that are observed.

Poor Excluded/Clients Victimized by High Prices

The argument in this paper has been that special arrangements will have to be made to guarantee services to the poor under any system. It has been argued, in fact, that this is the primary responsibility of the government in curative care provision. It can be accomplished through direct service delivery, subsidies to the private sector, or insurance subsidies. A direct delivery public system is not sufficient to guarantee that the poor be protected, as has been explained in other forums (Griffin 1989b, Griffin 1988c, Pfaffmann and Griffin 1989, World Bank 1987). But neither should direct services be dismissed out of hand; in rural areas especially they may be the most cost effective method of assuring a minimal presence of public health activities, modern curative care, and risk reduction.

Many argue that if the rich are not forced into the same medical system that serves the poor, the system will produce inadequate care. That argument may or may not be true, but it is irrelevant in developing countries. Many developing countries have taken the direct service route for 20-30 years only to witness increasing use of the private sector by both the poor and the rich while large parts of the free government systems are underutilized. Moreover, there is evidence that in the U.K., Eastern Europe, and the Soviet Union, the goal of equal quality and equal access for all has not been achieved by purely nationalized systems. There is some question in the U.K. whether the National Health Service has improved or reduced equity (see Culyer and Jonsson 1986).

12 If that argument is put forward, however, it should be realized that it is inconsistent with another argument that is often used, that U.S. expenditures are so high because insurance insulates patients from the cost of their consumption patterns. If prices are deterring use of hospital and drug inputs, then people must be sensitive to them, or physicians are performing a fiduciary function in reducing use of those inputs relative to the experience elsewhere.
Summary

This paper has argued that economic efficiency gains are likely to occur if developing country governments begin to cooperate more with the private health care sector and nurture third party payment mechanisms to finance the mix of services their citizens currently use. There is a high likelihood that these changes can be accomplished coincidentally with improved targeting of government subsidies. However, that would require a carefully considered package of policies and some knowledge by governments of the distributional impact of their existing efforts.

There is no question that third party payment mechanisms contain strong incentives for cost escalation and greater use of services. If anyone needs proof, Brazil’s experience should suffice. But the argument in this paper has been that the costs and benefits of risk-sharing arrangements must be weighed. No industrialized country has given up third party payment systems because of the cost escalation problem, but all have sought institutional modifications to better control costs. A constructive response to the problem would be to assist developing countries to avoid the same health care financing mistakes that have already been made by the industrial economies. Unfortunately, many developing countries during the last decade have begun to repeat those mistakes as they have tried to cope with the financing needs of their mixed systems.

Despite the intensity of the debate on the causes of these problems, the OECD systems appear to be moving toward a consensus on what to do: greater use of fixed reimbursement rates by illness, based on historical averages (Diagnostically Related Groups); greater use of capitated payment mechanisms; increased co-payments and deductibles (or cost sharing); overall limits on spending; limits on physicians’ fees; and limits on capital purchases.

It is worth keeping in mind that costs and expenditures on health will rise as developing countries increase their per capita incomes. We have yet to see a nation spend less on health care as its population has become healthier (and richer).

EXAMPLES OF RECENT CHANGES IN PUBLIC(PRIVATE PROVISION

Chile

Chile’s National Health Service was created in 1952 to administer a patchwork of more than 50 government health programs that had developed over the years. By 1980 the National Health Service owned over 9 percent of the nation’s hospital beds and accounted for 70 percent of total health expenditures. Between 1973 and 1980, the Chilean government returned all but 23 of 460 state-owned enterprises to the private sector, but in the health sector, privatization has been pursued slowly.

The monopoly of the Central Supply Warehouse over pharmaceutical sales to the National Health Service was ended in 1974. By 1983 it accounted for only 40 percent of government health service purchases, with the remainder coming from the private sector. In the late 1970s National Health Service
facilities were decentralized and turned into 26 public corporations with operational autonomy (except for supervisory and regulatory control of the Ministry of Health). Central government support to these corporations comes from general tax revenues and social security contributions. Beginning in 1979, a portion of central government support to the health corporations was tied to services actually delivered in the previous year. In the first year of this program, 64 percent of the budget was financed directly in the old way, 16 percent was tied to the previous year's performance, and 20 percent came from fees. In addition, there has been a complex reorganization of health care financing under the social security system.

Up to 1979 the National Health Service provided services to people who were not covered by social security and to blue collar workers who were covered by social security, a total of about 70 percent of the population. A separate social security system for white collar workers, established in 1968, collected payroll taxes but allowed beneficiaries to choose either the public system or private providers from a list of physicians who were willing to negotiate fees with the social security agency. The insurance system paid 50 to 80 percent of private sector fees through vouchers. The agency provided loans for catastrophic expenses that were not otherwise covered. In addition, the fee-for-service private sector provided care not accounted for by these two systems, estimated at 10 percent of inpatient services and a third of outpatient services.

Workers currently pay 6 percent of their salaries to the social security system for health care, and privatization in the health system revolves principally around the disposition of this money. In 1979, with the "parasaternalization" of the National Health Service, health care was reorganized into three tiers of progressively more expensive care. Each level of care is meant to be clinically equivalent but differs in amenities and the degree of choice available to the patient. User fees are intended to reflect the actual cost of delivering the services. Blue collar workers and patients not covered by social insurance continue to receive free care through the public corporations. However, blue collar workers are no longer forced into this system. They have the right to use their social security contribution to get the free (first-level) care, to purchase vouchers for the enhanced government services, or to buy private insurance. In practice, most appear to have remained in the public system.

White collar workers pay their payroll taxes into a fund that allows them to buy vouchers that can be used for care from the public system. There are 3 levels of vouchers, costing the patient 250, 500, and 750 pesos, respectively, with the social security system contributing 250 pesos per voucher (a subsidy of 50, 33, and 25 percent). The three levels are keyed to the three levels of care now available in the public system. In addition, social security beneficiaries may opt out of the public system completely by putting their 6 percent contribution into a private insurance fund. These workers may stop off their 6 percent contribution with additional out-of-pocket payments, but they are completely disengaged from the government system. This private insurance system is expected to eventually cover 10-15 percent of the population. After 7 years of operation it served 2-3 percent of the population, but by 1987, 10 percent of the population was estimated to be
enrolled.

Public expenditure on health care in Chile has actually fallen in real terms since 1969. The private sector accounted for 53 percent of spending in 1969 and 66 percent in 1980. There has also been a redistribution of personnel in the public system. Total employment in the National Health Service rose by 24 percent between 1970 and 1980, but the number of physicians employed fell by 6 percent. In 1977, the National Health Service hired 72 percent of all graduating medical school students (379 positions), while in 1982 it hired only 24 percent (166 positions). In contrast, the number of nurses rose by 51 percent, midwives increased by 67 percent, and medical technologists increased by 143 percent. Clearly the public system is substituting less expensive personnel for physicians and pushing physician-delivered care into the private sector, where it is financed by insurance rather than direct government spending. Between 1975 and 1982 the number of private physicians advertising in the Santiago telephone directory increased by 52 percent.

While overall government subsidies have been reduced, the remaining subsidies have also been better targeted. As the total number of government physicians fell, the number of obstetricians and gynecologists actually rose. Primary health services have been expanded at the expense of hospital services.

Clearly public subsidies have been removed from those who can pay for their care, and the remaining subsidies in the public system have been targeted more in line with need. In addition, structural changes in the public system have been designed to increase incentives for greater internal efficiency and to use a less expensive mix of providers (adapted from Group Health Association of America 1985, Scarpaci 1985 and Viveros-Long 1986)

China

China’s paradigm of health service delivery has had at least as strong an impact as Cuba’s in the international health literature. The barefoot doctor concept pioneered there has been the model for 20 years of what a primary health program in a developing country should look like. Health professionals admired the simple technology used, the preventive aspects of the approach, and the idea of community organization implicit in the approach, but they paid little attention to how it was financed or to its top-down features. The barefoot doctor concept was translated around the world into a slightly trained paraprofessional who worked part time, usually with little or no compensation, to heal his or her neighbors. In China the barefoot doctor was indeed a slightly trained paraprofessional but was a paid member of a brigade. Moreover, the same rural/urban inequities that plague developing countries in health expenditures exist in China and are caused by similar financing problems.

China has also had the experience, with the dissolution of the rural communes, of the transformation of the public curative system in rural areas into a largely private system. To provide an illustration, the brigade health clinic in one village on Xiamen Island had (up to 1984) 3 rural doctors. The
head doctor, who had less than an elementary school education, was paid more than any other brigade official and about a third more than an average worker. These doctors were assisted by 10 part-time paramedics, also remunerated, who helped with public health activities but not curative care. The clinic was financed out of brigade funds, receiving virtually no support from the national or provincial governments except for a free immunization program.

From 1973 to 1984 patients were charged about US$ 0.05 for health clinic visits. The county referral hospital covered most of its expenses through fees, but the brigade paid 80 percent of hospital bills for its members. This health program cost the brigade about US$ 2,000 per year in subsidies, plus salaries for the 3 doctors. This system was similar to a social insurance system with deductibles and co-payments, with contributions from the central government for public health inputs and training of personnel.

After the commune/brigade system was eliminated in 1984, the paramedics were laid off and the brigade doctors went into private practice in 3 separate clinics. Private practice prices are controlled. Physician fees were set in 1984 at the same real level as in 1973 (US$ 0.05), but the doctors were allowed to sell medicines and injections with a 15 percent markup over the wholesale price. Both services previously were included in the outpatient fee under the brigade health system.

The brigade still pays 80 percent of hospitalization costs from public funds derived from leased out collective properties. For all practical purposes that is a property tax. The same level of public health activities is maintained as before, but the now-private doctors are paid fees to distribute vaccines and to purify well water with chlorine after rains. There was a lapse in these public health activities briefly in 1984 until procedures were worked out to sustain them under the new system.

The village experience described here may or may not be typical. The important point is to realize that the previous socialized system could be transformed into a private system (still using social insurance for inpatient care) with few modifications. The two approaches are not that far apart if each one is financed in an economically efficient manner. Under both systems, because of the local nature of the financing, there would be substantial differences across communities in the level of care available, but equity across political boundaries is determined in either system by transfers from higher levels of government, not by the delivery system itself (Huang 1988).

However, a macro view of health financing in China is a bit more disturbing. Overall, user fees accounted for 32 percent of all health expenditures in 1981, with another 30 percent from the state, 31 percent from insurance, and 7 percent from cooperative health insurance and the brigade subsidies to rural and barefoot doctors. About 30 percent of the population was completely uninsured, with most of the uninsured living in the poorest rural areas. Urban/rural differences in health expenditures were striking. In 1981, total per capita expenditures in urban areas were, at US$ 16, over three times those in rural areas. Per capita state subsidies were about US$ 13 in cities compared to US$ 1.50 in rural areas. Private out-of-pocket expenditures were US$ 1.50 per capita in cities but US$ 2.50 in the
countryside. Thus most of the central government's subsidy went to cities because of the financing system (Jamison 1985).

Except for these global inequities, the Chinese system appears to emulate a typical industrial country's system, with the government attending to public goods provision and risk problems but leaving the provision of services to the private sector or to autonomous public hospitals. At least in rural areas, adverse selection is reduced because the whole village is covered, and steep inpatient co-payments reduce moral hazard. Government support for industrial insurance for urban workers, however, skews central government subsidies to cities.

Zimbabwe

Zimbabwe has tried to socialize its health sector by reducing private practice and reallocating health budgets to rural areas. The Ministry of Health's budget increased by nearly 50 percent in real terms between 1980 and 1982, but it has held steady at about that level since then. In 1980 health care was made free for all households earning less than Z$ 150 per month. Even mission facilities were required to eliminate fees, which were replaced by a government allocation. Outpatient visits rose by 200 to 300 percent after this change.

The ceiling for free care has never been changed despite inflation. In 1982, for example, about 42 percent of industrial workers qualified for free care, but in 1986 none did because the minimum wage had risen to Z$ 158 per month. The real value of subsidies to missions in 1985 stood at about the same level as in 1980. Thus the free care subsidy has been allowed to deteriorate significantly since 1980. Coupled with the huge increase in use, the change in policy resulted in a one-time increase in utilization that led to overcrowding and deterioration in quality of care.

This change has been complemented with a large construction program, with 297 of 316 new rural health centers completed by 1987. A strong Expanded Immunization Program, the Zimbabwean equivalent of a barefoot doctor program, and other programs aimed at diarrheal disease control, child spacing, and nutrition have also been implemented. Existing rural clinics (450) and district hospitals have been or are being refurbished.

Private sector services continue to exist with large subsidies from the state. Five voluntary insurance funds cover about two-thirds of the more affluent population. The government subsidizes these funds by providing tax rebates for insurance premiums, and most inpatient services for the insured are provided through highly subsidized public facilities. The government estimated in 1984 that its overall subsidies to insured patients were around Z$ 19 million, more than half the value of the services purchased by those patients and equivalent to almost 20 percent of the total health budget in the early 1980s.

This problem of public subsidies for segments of the population who can and do pay for their care is widespread in developing countries. Zimbabwe's approach is to put a ceiling on private practice and to threaten higher
charges in public hospitals, neither of which has been implemented.

In 1981, 69 percent of Ministry of Health expenditures were for hospital services, and 60 percent of those expenditures were absorbed by the four hospitals in Harare. Only 10 percent of the budget went to 28 district hospitals, and 3 percent went to 46 rural hospitals. It is difficult to imagine how any significant reallocation of expenditures between urban and rural areas or between curative and preventive services will be accomplished under the current system, given the curative-oriented plant and equipment that was inherited and is being expanded, and the heavy burden on the government for formal sector employers.

When the expanded and refurbished rural system comes into production, it will either require large increases in public spending or significant reallocations. Yet public allocations have been allowed to diminish in value during the 1980s, and any reallocation is heavily dependent on removing central hospitals from the budget. In such a situation, governments often choose the only other alternative, to let the system deteriorate by inaction.

Although Zimbabwe’s racial history plays a prominent role in the organization of the health system and the political reaction to it in the early 1980s, the country’s experience shows the great difficulty of eliminating the private sector and redirecting established government spending priorities. Instead of recognizing its mixed system and widening access to it through insurance and carefully targeted subsidies, the country chose to superimpose on the existing system a costly direct service structure with almost no targeting that will be difficult to finance using existing methods (adapted from Sanders and Davies 1988, Manga 1988, World Bank 1987).

CONCLUSION

Health systems in developing countries face some well documented problems:

- A heavy burden of high cost curative care
- Inadequate financing of public health activities
- Insufficient budgets relative to the physical needs of the population and relative to the large package of services governments hope to deliver
- Inability to supply their public facilities with adequate levels and quality of inputs
- Poor targeting of subsidies
- Poorly developed institutions that would facilitate the sharing of health risks
- Rapidly expanding incidence of chronic diseases among older people
in cities, but with persisting poverty-related health needs concentrated in rural areas

* Ministry of Health expenditure patterns that are skewed toward cities

Reliance on the private sector to tackle several of these problems can relieve governments of responsibilities that they have unnecessarily assumed and are poorly equipped to carry out. A governmental presence is essential in the health sector, but many of its duties can be accomplished through financial and regulatory activities rather than attempting to do everything itself. Development of third party payment mechanisms is an essential step in increasing the efficiency and equity of developing country health systems, and that development alone will create many of the incentives necessary for greater private activity, assuming that governments do not stand in the way.

Finally, a word of caution is in order. There is always a tendency to pursue ideas like privatization or, for that matter, socialization, to the limit. In international health policy, new or resurrected ideas are often embraced as if they were the single answer to all problems -- medical, social, and otherwise -- with little experimentation to discover their true costs and benefits. While there is broad scope for private action in the health sector, it has well known limits. The point of enhancing private sector activity in the health sector is not to remove the government from providing either curative services or essential public health inputs but to better focus its efforts. The private sector is the main provider of health services in virtually all developing countries (in terms of expenditures or quantities), and enhancing it often will mean simply improving the financing of existing consumer behavior.
BIBLIOGRAPHY


ANNEX 1: AN INSURANCE PRIMER

Suppose everyone from age 10 to age 60 has a 1 in 10,000 chance of experiencing a $5,000 hospital bill in any given year. That person's expected loss in 1989 is \((0.0001) \times ($5,000) = $0.50\). A risk-averse individual would be willing to pay more than $0.50 for insurance that prevents the loss, which would transform the low-probability but immense loss into a certain but minuscule loss.

If an insurance company could assemble 10,000 people with this loss probability and collect $0.50 from each of them, it could expect to incur one $5,000 loss a year and would just break even if it had no administrative costs. If each person would pay $1.00 per year to avoid the loss, which seems likely, the insurance company could probably make a tidy profit, assuming it could assemble the risk pool at low cost. This is the definition of a catastrophic loss: a low probability, catastrophic event. Clearly such a loss is fairly easy to insure against. In fact, the attractiveness of insurance is that the more horrendous the loss, the more likely it is that a person can protect himself or herself from it as long as it is a low-probability loss (if such losses are not low-probability events, humans will soon join the dinosaurs).

Compare to this scenario a small but high probability loss, such as dental checkups. Suppose a person has a 95 percent chance of spending $100 a year on dental care. A risk-averse person might be willing to spend over $95 for dental insurance (but not more than $100). Unless the insurance company could provide dental insurance with an administrative cost below $5, dental checkups would be an uninsurable loss. To the insurance company, there is little chance of a profit; to the purchaser, the insurance component is nil. It is for all practical purposes a forced savings plan. Similarly, if an individual at age 35 has an 80 percent chance of a $5,000 hospital bill, the insurance premium would be punitive and unlikely to be preferred to the loss. Thus even a catastrophic loss can become an uninsurable event; it all depends on the probability of the loss.

"Saving for a rainy day" is not an economically efficient substitute for insurance. A person with a low-probability expected loss of $5,000 could put $100 a year for 50 years under the mattress and finally achieve (at the end of life) the protection that would otherwise have been available every year by buying our insurance plan for $1.00 a year for a total lifetime premium of only $50.00. The efficiency gains due to insurance are obvious. There is no alternative to the pooling of risks that provides the same level of protection.

Adverse selection intrudes when people with a high probability of a loss systematically join the plan while those with a low probability of a loss do not join. In our example, suppose the insurance pool is comprised of people with a 1/100 chance of a loss. If the insurance company calculates the premium on the assumption that the pool has a 1/10,000 probability of a loss, it will lose $490,000 if the premium is $1.00 a year. The least expensive correction is to use the police power of the state to force groups randomly selected on health status, such as workers, to participate in the insurance
plan. The most expensive correction would be for the state to do nothing, because then the insurance company would be forced (at the limit) to physically examine all potential beneficiaries to ascertain independently their riskiness. Insurance companies have other less costly methods at their disposal, but every alternative is costly.

Moral hazard means that the probability of a loss rises as a result of joining the insurance scheme. A 1/10,000 probability of a loss may become a 1/9,000 chance after joining the insurance plan because people are no longer so fearful of the loss. If that happens, our insurance plan will have expected losses of $8,556 instead of $5,000. The extra $356 is caused by behavior changes precipitated by insurance coverage. Moral hazard can be reduced by forcing clients to pay part of the costs of their care before insurance takes over.

Physicians can cause trouble because they increase both the probability and the cost of a loss. A 100 percent increase in the cost will only raise the premium in this example to $2.00, so insurance companies will find little support among their clients for their efforts to control the cost of physicians’ healing behavior.

Insurance has gotten a bit of a bad name in developing countries because donors have supported rural insurance plans that cover all problems (including a large share of uninsurable losses), that depend on voluntary membership (no protection against adverse selection), that have no co-payments or deductibles (encouraging moral hazard), and that contain no clear mechanism for collecting premiums regularly. Even the famous health card system in Thailand contains most of these problems [see Asian Development Bank 1987 for a description of the Thai plan].

The main lesson of this primer is that catastrophic losses are the easiest and cheapest to insure against. That is the place to start in creating insurance plans in developing countries. This idea fits well with the private hospital issue because hospitals are where catastrophic losses take place, which is hard on patients and destroys the financial viability of hospitals.