"... ... ... Targeting state subsidies is again bound to affect the nutrition levels of poor. ... The Bank is emerging as the single largest source of health-care finance in developing countries and its advocacy of a prominent role for private and voluntary sectors for contracting out services and levying user charges for health care is also under attack. Although a World Bank document has stated that the poor will be exempt from user charges, Rao contends they will be the first ones to be further marginalized in practice. About 88% of health services in India are provided by the private sector, and the prescription for further impetus to privatization of health services is being seen by many as a dilution of the state's responsibility to make welfare provisions for the people [Kumar, 1997].

Privatization as a political term has emerged in the late 1970s, a decade, which witnessed the rise of conservative governments in Great Britain, the United States, and France. These governments, focused on privatization as a political tool to manage budget imbalances and attain economic growth. Privatization, at these time, had denoted either shifting of activities or function from the state to the private sector; and shifting of the production of goods and services from public to private. The first included all reductions in the regulatory and spending activity of the state and the second excluded deregulation and spending cuts except when they result in a shift from public to private in the production of goods and services. The new orientation of the western governments towards privatization was reflected on the proposals of the World Bank for restructuring Third World economies. Since then, privatization has been promoted for both the productive as well as the social sectors.

In the course of health sector reforms under structural adjustment policies, there has been a pressure on governments to increase reliance on the private sector in
health care provision. This process has been referred to as privatization of health sector, which denotes similarities with the privatization process of the productive sector. Privatization has triggered one of the most controversial debates on health system reforms under adjustment. Proponents of privatization claimed that the public sector is inherently inefficient and inequitable and that the market dynamics would conserve limited public funds, improve efficiency and quality of health care delivery, and distribute health care in an equitable manner. Opponents, on the other hand, claimed that these promises are more ideological than empirical. It is argued that the public sector in developing countries, to give an example, has made historical successes, in terms of reductions in mortality and morbidity rates. Furthermore, reliance on the private sector entails equity problems because of their reliance on ability to pay as a rationing factor. Between these two extremes, there are several positions suggesting various forms of public/private mix as optimal formulas for health care delivery in developing countries.

In this section, the theoretical underpinnings of and the experience of developing countries with privatization are discussed and critically analyzed. The review looks at two domains, which are in the heart of this debate. These encompass the impact of privatization on the efficiency and the quality of health care delivery in developing countries. However, the section starts with an introductory part to define what is meant by the private sector and private provider in health care.

PRIVATE HEALTH CARE IN DEVELOPING COUNTRIES

The lack of consistent use and interpretation of the terminology public and private has been acknowledged by economists, particularly in developing countries. The public sector is traditionally understood to include those providers or facilities that are not public [Bennett 1992]. The public sector refers, in turn, to health care institutions belonging to the state. It is generally understood that the public health sector should be supported by public money and protected by a series of privileges regulated by law, while the private sector should operate on private funding, obtained usually through fees, donations or other means in the arena of a market oriented provision of service and of competition. When the service is rendered without lucrative purposes, the specification “not-for-profit” is added. The term “non-governmental” is used to indicate organizations offering services without profit-making purposes, and whose ownership and/or administrative guardianship is not the state [De Jong, 1991].

Such a definition has been criticized for assuming that the private sector is homogenous and financially self-sustaining, whereas in reality, a remarkable heterogeneity exists in the private/non-government sector. Furthermore, distinguishing between public and private based on the institutional or administrative identity is believed to be inadequate in dealing properly with the
diversity of the existing situation in developing countries. For example, there are several non-governmental organizations operating for outright or hidden lucrative purposes. At the same time, there are public services which operate, to varying degrees, on a lucrative basis. [Giusti, 1997].

The overlapping issues of ownership, financing, management, behavior and institutional structure have been areas for confusion. For example, whether health services owned by public enterprises or parastatals, such as social security institutions, national petroleum companies or airlines, are public or private has been described to depend on the precise nature of their management and financing structures. For instance, services provided in hospitals that are operated directly by social security funds, an organizational structure which is common in Latin America, are usually considered to be publicly-provided because, like taxation, the source of funding is involuntary. In some countries, NGOs receive substantial operating subsidies from government; however, who owns the provider is often considered to be the key characteristic implying behavioral differences. Thus, NGOs would typically belong to the private sector, while ‘private’ wards in public hospitals are considered to be essentially public in character/behavior.

The difficulties in drawing a clear cut-line between what is private and what is public in health care provision originated from the varying forms through which the private sector has been emerging and growing in developing countries. This is true for the pre- and post-privatization eras. Different patterns of governmental behavior affected directly or indirectly the emergence and development of the private sector and its size relative to the private sector.

First, in several developing countries and for several reasons, there has been a cessation of public health programs and disengagement of government from specific kinds of health services. The restriction of public health services in volume, availability, or quality led to a shift by consumers toward private substitutes. Increased demand on private providers increased the size of the private sector. In this pattern, government may continue to own or finance but not to operate health facilities. As a result, government control and accountability are diluted without eliminating them. Alternatively, government may pay for private providers from the taxes it collects. This diminishes the operational but not the fiscal or functional sphere of government action.

Second, an explicit form of transfers of public assets to private ownership occurred, through sale or lease of public land, infrastructure, and enterprises. This pattern of asset sales not-uncommonly involved only the transfer of a partial interest. For example, government may partially sell a health facility but refuse to surrender control. This usually results in no change in management or behavior of the health facility.
Creating private providers through these forms of privatization does not create competition. It has been indicated that two related processes, privatization and liberalization, need to be carefully distinguished. Liberalization generally means a reduction of government control and in many developing countries privatization has occurred without liberalization. Conversely, it is also possible to liberalize without privatizing --that is, to introduce competition into the public health sector without transferring ownership. For example, governments of several Sub-Saharan African countries allowed medical officers to develop private practice in public hospitals, while being employed by the government. In Egypt, to attract medical officers to the rural areas, they were permitted to work privately in the public primary health care facilities afternoons.

Figure 147. Private supply of physicians and hospital beds by region

![Private Physicians' Supply as a percentage of total supply in developing countries](image)

![Private Beds' Supply as a percentage of total Beds in Developing Countries](image)
Using physician and bed number per million population, Hanson and Berman [1998] estimated the relative size of the private sector in health care delivery in developing countries. They indicated that there was a considerable variation in the levels of private provision and composition of the physician and hospital bed components of the private sector. For example, the number of private physicians per million population ranged from 2 (in Burundi) to 657 (in Chile). The numbers of both private and total physicians was lower in Africa than in other regions. The regional variation in the private sector share of all physicians was less marked, with a sample average of 55% of all physicians working in the private sector.

With respect to the supply of beds, a similar pattern of variability was reported among countries and among regions in the absolute level of private beds. Both African and Latin American countries were shown to have substantial numbers of beds in non-profit institutions, which can be seen from the large gap between the numbers of for-profit beds and the total number of private beds. Regionally, sub-Saharan Africa and Asia were indicated to have the lowest supply of beds, whether public or private. Latin American countries appeared to be well-supplied with hospital beds compared with the other three regions.

Private physicians' supply and private beds supply were indicated to be highly income elastic, with a rate of increase significantly exceeding that of income. Furthermore, the public-private mix of physicians and beds was only weakly associated with income and unrelated to the public-private mix in financing health care.

**Privatization and Efficiency**

**THEORITICAL EVIDENCE**

Privatization has been justified by several economic theories, each pointed out to the problems of the public sector, provided an interpretation for the causes behind these problems and proposed privatization as a solution. Nevertheless, the most influential vision has been the one grounded in laissez-faire individualism and free-market economics that promises greater efficiency only if the domain of property rights and market forces is expanded.

The property rights determine the behavior of health facilities in the market and the use of their scarce resources. This includes not only the benefits that private providers are seeking to attain but also the limitation in accessibility to the service as determined by the ability and willingness to pay. Actions of health providers are conceived by the "property right approach" as purely individualistic and as profit-seeking. If health providers are completely entitled to the ownership of health assets, the more efficient they work.
Ownership of the health facilities provides the incentive to more efficient behavior and the freedom to take the proper decisions to attain this efficiency. Therefore, a right of ownership comprises, in this view, several rights, including determining the type, quality and costs of health service provided as well as the transferring, selling and changing the form of the health facility itself. State's control, management or restriction attenuates these rights.

Thus the key issues for the theory are, first, to whom are property rights of health services assigned? and second, how, if at all, are they attenuated? It suggests that the more individuals stand to gain from tending to their property, the better will it be tended. Conversely, the more attenuated and diluted their property rights, the less motivated individuals will be to use property under their control efficiently. Private ownership concentrates rights and rewards; public ownership dilutes them.

The property rights approach holds that the form of ownership is the predominant explanation for the varying performance of different organizations and gives no importance whatsoever to organizational characteristics such as size, centralization, hierarchy, or leadership. The approach believes, therefore, that the public sector is inefficient by nature and that transferring the ownership (property rights) to the private sector is the only way to improve efficiency.

The public choice approach points out, like the theory of property rights, to public ownership as a cause of inefficiency, however, it goes beyond the later to indict patterns of policy-making and management in the public sector. The public choice theory states that the public sector is inefficient and attributes this inefficiency to the political behavior of those entitled to the decision making power. According to the theory, interest groups, bureaucrats and politicians seeking special advantage from the state join together to get favorable legislation enacted.

Rather than being particularly needy, these groups are likely to be those whose big stake in a benefit arouses them to more effective action than is taken by the taxpayers at large over whom the costs are spread. This behavior has been translated in historical bias of health services to the rich and the urban elite, while the poor and the rural areas have been denied access to high quality health care. Similarly, the managers of the public health sectors and ministries of health seek to maximize budgets, and thereby to obtain greater power, larger salaries, and other perquisites. Budget maximization results in higher government spending overall, inefficient allocation among government agencies, and inefficient production within them.

In other terms, different interest groups have different trade-offs with respect to health and well-being and politicians who survive to make policy are those who assess these trade-offs correctly and give influential groups what they want on issues that are most salient to them. Birsall and James [1991] defined four reasons, why
allocation of resources resulting from public choice politics are inefficient: veil of ignorance, fiscal illusion, high costs of service provision and rent-seeking.

**Veil of ignorance.** In a context of imperfect information, people may not know the degree and direction of redistribution going on. If well-defined groups know they are "losers" they are more likely to mobilize and foment opposition to existing policies; therefore the "gainers" benefit from perpetuating a "veil of ignorance." Suppose that the most efficient form of transfers is also more obvious (e.g. transfers in cash are more transparent than those in kind). In that case, efficiency imposes cost to the "gainers" by reducing the amount they will be potentially able to extract; they are therefore likely to choose inefficient transfer mechanisms. Most commonly, some private goods may be publicly provided and oversupplied because they benefit a politically influential group of people in a non-obvious way [Becker, 1983; and Borcherding et al., 1983].

**Fiscal illusion.** The second point is closely related to the first one: Imperfect information and uncertainty also surround the relationship between the tax structure and the bundle of public services provided. While these may be interdependent components of a long run political equilibrium (e.g. if the benefits of a group rise, its tax burden may also rise), taxes and services may appear to be independent of each other in the short run -- a kind of "fiscal illusion." In that case, some public or quasi-public goods may be undersupplied because their benefits accrue to dispersed, less influential individuals, and it is not clear (to the influential "loser") that the tax share of the gainers can be adjusted upward commensurately with their benefits. Similarly, some goods may be oversupplied because their chief beneficiaries are politically powerful, and these groups expect to avoid much of the tax burden.

**High costs of public sector provision.** The real costs of publicly-produced private goods may be above minimal levels, because government imposes bureaucratic rules and red tape (in part as a substitute for the profit motive) and often lacks competitive pressures for internal efficiency (perhaps because politicians reap a surplus from monopolistic provision). Heads of bureaucratic agencies who wish to maximize their prestige and perks, and have greater information than the politicians and citizens they supposedly serve, are often able to argue successfully for larger budgets than are needed for least-cost production. In addition, distortionary tax financing also raises the non-program costs of publicly-produced private goods [Niscanen, 1971; Romer and Rosenthal, 1978; Borcherding, Pörehne and Schneider, 1983].

**Rent-seeking.** The diversion of entrepreneurial energies toward extracting a surplus from public agencies rather than toward productivity-enhancing market activities also impedes private sector efficiency and growth. Rent-seeking activities thus misallocate private as well as public resources [Krueger, 1974; Buchanan,
Tollison and Tullock, 1980]. The resulting distribution of real income is likely to depend upon political power as well as market power. Political power, of course, will vary across societies and through time depending on the size of different producer and consumer groups, the coalitions among them, and the long run "rules of the game" that have been set up (e.g. through constitutions) for allocating voting rights. Given that the distribution of voting rights is ordinarily more equal than the distribution of income, one might expect political decision-making to be relatively egalitarian.

However, low income people often do not vote and economic power can also buy political power, as through campaign, contributions and purchases of media influence that shape other people's votes. Since producer groups are likely to be more concentrated and better organized than consumer groups, since upper and middle income groups are generally more articulate and politically active than poorer groups, and since lines of communications and mobility often are strong between government agencies, their bureaucratic chiefs, and the private industries or professions they supposedly regulate, public choice theory predicts that producer and upper income groups will benefit disproportionately from implemented government policies [Stigler, 1970; Peltzman, 1976, 1980; Fiorina and Noll, 1978].

How could these divergent forces be expected to sort themselves out in the developing country context? On the one hand, the gulf between rich and poor and the relative number of poor people are much greater there, so under "one man, one vote" it is expected to find the poor gaining from politically induced redistributions. Indeed, in a few countries (e.g., Malaysia) an economically disadvantaged group has effectively used its political advantage. Thus, Meltzer and Richard [1978 and 1981] have argued that redistribution is likely to flow to the median voter whose income is generally less than average, and Demsetz [1982] ties this tendency to the extension of the franchise to increase its share of the national income. However, differences in education, hence in organizational and communication skills, are also much greater in developing countries, and democratic institutions are often primitive, limiting the power of the poor. We would expect the latter tendency to dominate in most cases.

This is not to say that there will be no redistribution to the poorer classes. In fact, even when the rich are in control we would expect to find some such redistribution of income. For example, people voluntarily donate to beggars and use the government as an efficient mechanism for donating to disadvantaged groups, in part because the extremes of poverty and socioeconomic immobility raise fears of crime or revolution which will ultimately hurt the rich. In developed countries, historically, the provision of certain merit goods to the poor (e.g., basic health and education services, social insurance) has been viewed as an effective way to combat these problems.
In addition, in developing countries, where there are many more poor people than rich, the desire to constrain the popularity of opposition groups encourages some distribution to lower income groups on grounds of expediency. Out-of-power groups must be appeased by giving them "Just enough" to prevent opposition parties from gaining strong support (a "contestable market" view of political equilibrium). But "Just enough" may not be very much. For example, it may imply that the poor are given large amounts of low cost services or are given very limited access to high cost services from which the rich are the main beneficiaries. Governmental expenditures on high quantity, low quality primary level school systems and on selective high cost universities are common illustrations of these two phenomena.

In short, in many situations, perverse distributional rather than efficiency or equity criteria determine the allocation of government funds, and these criteria imply large benefits to powerful upper income groups, combined with small redistributions to the poor. It is believed that these pessimistic predictions of public choice theory are consistent with the observed actions of developing countries in health today.

**Empirical Evidence**

On measuring inefficiency, a distinction is usually made between technical inefficiency (failing to produce maximum possible output from a given bundle of inputs) and allocative inefficiency (employing inputs in the wrong proportions given their prices and productivity at the margin). While both types of inefficiency have been reported in the public sector, it is not known whether the privatization process has corrected these inefficiencies in the private sector. Whether private sector is indeed more efficient than public sector in developing countries is to be established through empirical research. With respect to the public sector, allocative issues of health expenditure gained prominence as policymakers recognized the demand externalities associated with basic health provision. This emphasis on increasing inputs to the health system served to obscure issues of technical inefficiency. The assumption that public monopolies would efficiently provide health sector outputs remained largely unquestioned.

The debate over allocative efficiency in developing countries goes around how much is being spent on promotive and preventive health activities, as opposed to the treatment of illnesses themselves. It has been established that preventive care is more cost-effective than curative care. The World Bank estimated that in developing countries the approximate treatment cost per additional life saved by curative care ranges from US$500 to US$5,000, while the approximate cost per additional life saved by preventive programs such as childhood immunizations, vector control, and sanitation improvements is less than US$250. Therefore, correction of allocative patterns has been an integral part of health sector reform under structural adjustment. Whether or not this has been attained is another area for research.
This section presents a review of selected studies of health provider efficiency in the developing world. The studies reviewed here are Rodríguez and Jiménez [1985], Anderson [1980], Dor [1987], Bitran and Dunlop [1989], Wouters [1990], Lewis et al. [1990], and Shepard et al. [1991]. Barnum and Kutzin [1990] provide an excellent review of some of these and other studies, including Barnum [1990 and 1991]. The section concludes with a summary of the review, from which conclusions are drawn for the phases two and three work.

Rodríguez and Jiménez [1985] conducted a comparative study of productivity between private and decentralized public Chilean hospitals. Their measure of productivity was the inverse of the average length of stay, shorter length of stay being associated with higher productivity. The authors broke length of stay into three components, according to the stages patients follow in a hospital: diagnosis, medical treatment, and recovery. They posited that while treatment must be done within the hospital, diagnosis and recovery can partially be accomplished on an outpatient basis. For a given patient case mix, Rodríguez and Jiménez hypothesized that a series of individual specific variables, such as age and income, can influence diagnosis and recovery. They assumed that a patient's income is a close proxy for the type of health insurance or coverage he or she has. Thus income was assumed to be closely correlated with the out-of-pocket price of the services and therefore to influence diagnosis and recovery. Illness severity and the types and amounts of medical inputs provided to the patients were also assumed to influence diagnosis, treatment, and recovery.

Using a total sample of five hospitals (three private and two public) and 369 patients, the authors used ordinary least squares to regress length of stay on patient age and income, medical inputs (use of pharmacy and laboratory exams), and facility-specific dummy variables. Three separate equations were estimated for obstetrics and gynecology, surgery, and internal medicine.

The authors found that, other things in their model being equal, private hospitals had lower length of stay and thus were more productive than public institutions. They cautioned, however, that their analysis was weakened (rather severely, most likely) by their inability to obtain accurate information about diagnosis, case mix, and severity of the health problem.

Anderson [1980] conducted a statistical study of hospital costs using a sample of 51 Kenyan hospitals with data from the years 1975-76. Using ordinary least square, he estimated an average cost function where the dependent variable was average cost per patient day (ACPD) and the explanatory variables were the capacity (SCALE) (as measured alternatively by available and used beds); the occupancy rate (OCR); the average length of stay (ALS); the number of outpatient visits per inpatient day (TOPPD); the number of satellite ambulatory facilities operating under the hospital...
Anderson estimated four alternative specifications of the model, using alternative dependent and independent variables. He found that the hospitals were operating with increasing returns to scale, as evidenced by negative (decreasing average cost) and statistically significant coefficients associated with the scale variables. He also found that higher occupancy levels resulted in lower average costs, concluding that greater demand should be accommodated within existing hospitals rather than through new ones. Outpatient activity was found to increase average cost, as expected. In contrast, length of stay did not come out statistically significant. Because the costs of a hospital and its satellite facilities were intertwined, the average cost used as a dependent variable included also the cost of the satellite facilities. The regression results showed that a greater level of satellite activity had a positive impact on aggregate average cost. Finally, provincial hospitals were found to have higher average costs than district and sub-district facilities.

Some rather dramatic limitations of the analysis, as pointed out by the author, included the inability to control for differences in quality of care, case mix, and input prices. Some or all of these shortcomings, however, also arise in the other studies described below.

Dor [1987] estimated average cost functions for a sample of 19 Ministry of Health (MOH) and Social Security (IPSS) urban hospitals in Peru. A key explanatory variable was patient flow (F), which is equal to the ratio between the number of hospital admissions (ADMISS) and the number of beds (BEDS). Other dependent variables included case-mix variables (share of admissions that were deliveries; share of admissions that were surgery), an affiliation dummy (IPSS or MOH), and the volume of outpatient visits.

Based on his average cost equation, Dor calculated an analytical expression for the optimal patient flow, i.e., the flow at which hospital average cost is minimum. Using OLS and weighted least squares (WLS), he estimated separate average cost functions for all cost categories combined as well as for each of his three cost categories separately (the categories were labor, goods, and services). He found that hospital average cost decreased with service intensity (although at a decreasing rate). This means that average cost of hospitalizations went down if the number of hospitalizations increased, or the number of beds decreased, or both. He computed an optimal flow value of 4.2 (admissions per bed per month) that was above the sample mean but below the actual flow of several hospitals in the sample. He thus concluded that the average cost curve was U-shaped. He also found that the aggregate number of hospital beds of both institutions should be reduced to move toward a minimum average cost point. Finally, he observed that, other things being equal, IPSS hospitals exhibited higher average costs than MOH institutions.
Bitran and Dunlop [1989] studied the determinants of hospital costs using a sample of 15 government hospitals in Ethiopia, with one to three annual observations for each, for a total of 38 observations. The study involved estimating a total cost function using OLS with a functional form similar to that introduced by Grannemann et al [1986]. Marginal costs of inpatient and outpatient care, average incremental cost, product-specific economies of scale, and economies of scope measures were analytically derived and evaluated from the estimated cost function.

The authors found that the hospitals in the sample were operating under constant returns to scale for patient days, laboratory exams, and deliveries. Economies of scope were found between first outpatient visits and inpatient days, signaling an economic advantage to the joint production of inpatient and outpatient care. The number of hospital beds affected total hospital costs in a statistically significant and economically important way. Input price proxy variables performed poorly in the regressions.

A limitation of this type of analysis is that cost minimization cannot be assumed a priori. The estimated coefficients may be biased estimators of the minimum cost coefficients. As a consequence, the associated measures about technology (e.g., economies of scale and scope), derived from the estimated cost function, may also be biased [Eakin and Kniesner, 1988]. Another limitation of the work of these authors is that they used as an independent variable hospital expenditures, as reported by the Ethiopian government. This figure probably underestimated the actual resources used in production, because it did not include possible donor gifts and the depreciation of capital. An additional possible limitation is that reported expenditures may depart from the actual social cost of the resources used in hospital operations. Finally, the sample of hospitals used by Bitran and Dunlop was bi-modal with respect to hospital size. Estimation of cost from the pooled sample of small and large hospitals could be a shortcoming if the true cost relations differed between the different size facilities. Unfortunately, the small number of observations precluded separate estimation of cost functions for small and large hospitals.

Wouters [1990] studied the costs and efficiency of a sample of 42 private and public health facilities in Ogun State, Nigeria. The sample included a heterogeneous range of facilities, including comprehensive health centers, primary health care clinics, maternities, health clinics, and dispensaries. Wouters analyzed costs and efficiency, estimating a production and a cost function, and deriving associated measures of efficiency.

Technical efficiency was assessed by estimating a production function and deriving measures of the marginal product of health workers. The cost function estimated by Wouters included as independent variables the volume of outpatient visits and inpatient admissions, the proportion of patients obtaining drugs, the wages of both
kinds of health workers, the availability and number of beds, and an efficiency index, where $MP$ denotes marginal product of health worker labor and denotes absolute value. She found that the efficiency variable was insignificant and thus concluded that departures from cost minimization had little effect on expenditures. She also found that marginal costs were less than average costs and thus concluded that the facilities in her sample exhibited increasing returns to scale for both admissions and outpatient visits. With regard to economies of scope, she concluded that there were no apparent advantages to the joint production of inpatient and outpatient care.

Lewis et al. [1990] conducted a study of costs, efficiency, and quality of care at Aybara Hospital, a 271-bed government-run facility in the Dominican Republic. To compute costs, the authors tracked a selected sample of patients as they moved through the hospital, recording and pricing the services provided to them. Where possible, non-labor prices were obtained directly from the supplier. Labor costs were computed by measuring actual staff time devoted to medical procedures and multiplying it by the worker's actual wage (converted to an hourly basis). The total cost of a procedure was computed as the sum of the variable (or direct) and allocated fixed costs. Variable costs were broken into labor, drugs, ancillary services, and consumables. Fixed costs included allocated overhead and the depreciation of buildings, equipment, and other fixed assets. Quality of care was measured in two ways: by assessing the appropriateness of the qualifications of the medical staff involved in care and by comparing actual diagnostic and treatment practices and services delivered with medical norms of care.

By extrapolating labor use from the sample to all services and patients in the hospital, Lewis et al. concluded that only 12% of the medical labor contracted by the hospital could actually be accounted for. Although no allowances were made for down time by the medical staff, this striking result signals a major inefficiency in the operations of Aybara Hospital. With regard to quality of care, major departures were found between the expected cost of meeting diagnostic and treatment norms and the cost of diagnostic and treatment services actually provided; the drugs dispensed and the tests done represented about 10 percent of the costs implied by the norms.

The study by Lewis et al. is one of the few that carefully examines resource use and technical quality of care in a developing-country hospital. The information the study provides is useful for hospital staff as well as government decision makers. A drawback of the study, however, is its elevated cost, arising from the need to price, and monitor carefully, through time and motion studies, resource use. To retain the method's advantages yet limit its cost, it has to be applied to a narrow set of interventions, and for a small, but statistically significant sample of patients, as was done by Lewis et al. and Pineault et al. [1985].
Shepard et al. [1991] conducted a cost-effectiveness study of surgery in intermediate health units (IHUs) in Cali, Colombia. In an effort to reduce the high costs of hospital care, IHUs were created as intermediary settings between primary care facilities and hospitals. Two facilities were chosen for the comparative study: a 20-bed IHU, which performed about 1,100 operations of all types in 1988, and a 127-bed secondary hospital, which performed 3,500. Inguinal herniorrhaphy was selected as the intervention on which to base the study because of its high frequency, its moderate degree of technical complexity, and the existence of standardized indices of surgical risk in both facilities.

The measures of effectiveness included complication rates, patient satisfaction, and duration of post-operative disability. Complication rates were assessed through the eighth post-operative day by analyzing medical records by trained health professionals. Patient satisfaction was measured through two surveys which assessed the patient's period of convalescence. The first survey took place one week after the intervention, when the patient returned for his or her surgical follow-up visit (if the patient did not return, attempts were made to contact him or her at home). The second patient survey took place in his or her home four to seven months after the surgery.

Costs of care were measured from the patient's admission through the eighth post-operative day, thus excluding the costs of diagnostics tests prior to admission. Both direct and indirect costs of care were accounted for. Direct costs consisted of medical supplies, general supplies, personnel, and depreciation of medical equipment. The latter three direct costs were allocated to a single hernia repair based on the ratio of the intervention's time to the total time of use of the operating room in one year.

The study found that the rates of surgical and anesthesia complications were higher in the hospital (three complications) than in the IHU (none); patient satisfaction was higher in the IHU, as measured by the promptness with which patients were able to return to work after surgery. IHUs were found to use a mix of personnel that was less intensive in high cost professionals. The average cost of herniorrhaphy was $39.12 at the IHU and $148.76 at the hospital. Average out-of-pocket prices to patients were $16.53 at the IHU versus $38.96 at the hospital. When patient drug expenditures were added, average patient payments represented 30 and 48 percent of costs in the IHU and the hospital, respectively. The authors also found that economic efficiency could be improved in both settings with increased utilization, revealing under-utilization of fixed resources at current demand levels. This finding has policy relevance only if there is unsatisfied demand, that is, if there are hernia patients who need surgery but do not get it.
SUMMARY

Despite a large and growing body of literature on the measurement of health facility costs in developing countries, the literature on the measurement of efficiency is scant. While data limitations are undoubtedly the basis for the lack of research in this area, the limited volume of work may be explained largely by the fact that measuring efficiency is intrinsically much harder than measuring costs.

Of the seven studies reviewed, only one [Wouters, 1990] used data that were not from hospitals. In addition, all seven studies included government facilities in their sample, while only one of them [Wouters, 1990] included both private and public providers. The emphasis on hospital efficiency research in developing countries coincides with that in the developed world, because hospitals account for the largest share of health care costs. The emphasis on government hospital efficiency, on the other hand, can be explained because either or both: (1) Governments tend to keep information on utilization and costs—however inaccurate—in a uniform way, whereas private providers generally do not; or (2) The search for health care financing and delivery reform has focused on gauging and improving productive efficiency of the public sector.

The lack of comparative studies of productive efficiency between government and private providers is surprising, in light of the growing—yet empirically unsupported—pressures on the part of experts and donors to promote public divestment of curative care production in favor of a growing private participation. The reasons that lead private providers to behave more efficiently than government institutions in other fields (e.g., agriculture) are likely to prevail in the health sector. Yet, the existing body of research appears to be too weak to support empirically the reforms so strongly promoted.

Privatization and Quality

Quality of care has been in the heart of the debate over privatization, used equally by both opponents and proponents of privatization to support their claims. Proponents argue that a high proportion of patients in many developing countries prefer to seek medical care from private providers, even if they charge higher fees than the public sector. The reason for this pattern of care seeking has been attributed to issues of quality of care. This includes shorter waiting periods, longer consultation times, more sensitive health workers, availability of drugs and confidentiality.

On the other side, opponents of privatization argue that the private providers fail to comply with the quality standards for service provision and that the governmental capacity for quality control is insufficient. They were described as "detrimental" [Roemer, 1984] and criticized for being expensive and motivated by profit rather
than the quality standards of the medical profession [Barros et al., 1986; Berman et al., 1987]. Furthermore, motivated by the profit incentive, private providers tend to concentrate in urban areas, whereas the greatest health care need is in rural locations [Bhat, 1991; Bloom, 1988]; and that they provide only curative services, and ignore prevention in primary care [Naylor, 1988]. It was contended, therefore, that privatization has resulted in a state of chaos within the health care system.

This section aims at resolving the controversy over quality of services in private versus public health facilities.

**Definition of Quality**

The literature on quality of health services in developing countries applies several and sometimes contradictory definitions of quality. However, two perspectives can be identified: the “technocratic” perspective of health care professionals, and the “lay” or “community” Perspective [Wouters, 1991]. The technocratic perspective, which is frequently used in the literature, relies on a normative definition of quality, in which provision of services is evaluated according to defined quality standards [Roemer and Montoya-Aguilar, 1989; Forsberg et al., 1992]. The lay perspective places a greater emphasis on the consumer of the service in defining and assessing of quality. Therefore, quality according to the lay perspective has been evaluated in consumer’s terms such as patient’s satisfaction. [Jain et al. 1992; Donabedian, 1980; Van Campen et al., 1995].

Quality definitions from a technocratic perspective can be exemplified by Donebedian, Roemer and Walton. According to Donebedian, quality of technical care consists in the application of medical science and technology in a way that maximizes its benefits to health without correspondingly increasing its risks. The degree of quality is, therefore, the extent to which care provided is expected to achieve the most favorable balance of risks and benefits” [Donebedian, 1980].

Likewise, Roemer and Aguilar [1988] suggested that quality of health care consists of "proper performance (according to standards) of interventions that are known to be safe, that are affordable to the society in question, and that have the ability to produce an impact on mortality, morbidity, disability, and malnutrition." Total Quality Management emphasizes doing the right thing right away [Walton, 1986].

All of these definitions focus on technical and clinical aspects of care as seen by the provider and on implementation of the known clinical processes. While the lay perspective to quality has been described in some studies, little was done to systematically put a definition for quality and to devise methods for its measurement.

Donebedian proposes three levels of measurement of quality of health care: structure, process, and outcome [Donebedian, 1980]. Structure assesses the quality
of health care through a study of the setting in which the care takes place. This includes adequacy of facilities and equipment, administrative processes, qualifications of medical staff, and organization. This assumes that given proper settings and instrumentalities, good medical care will follow.

Process considers not only that medical technology exists to achieve results, but also whether what is known to be good medical care has been applied: clinical history, physical examination, diagnostic tests, justification of diagnosis and therapy, technical competence, evidence of preventive management, coordination and continuity of care, and acceptability of care to the recipient. This assumes that given the proper procedures, good health outcomes will result.

Outcome measures consider whether a change in a person's current and future health status can be attributed to antecedent health care. It examines recovery, restoration of function, survival, and patient satisfaction. The validity of outcomes as a dimension of quality is seldom questioned. However, there are frequently multiple factors which in addition to the treatment protocol affect health outcomes, such that good health is not always attributable to good procedures. Examples of some other determinants of health might include education, income, environment, and nutrition.

To determine where quality improvements are needed, one needs to understand structural, process, and outcome measures from both provider and patient perspectives for clinical and support services [Wouters, 1991]. For all three levels of measurement, little is known about how to aggregate various components within each [Bitran, 1992]. For example, in process measures how does one account for compliance with critical and less-critical steps. What weights should be given to each component? Quality assurance goes one step further to establish a set of activities to ensure that standards for clinical and non-clinical aspects of the services are maintained and even continually improved.

Appropriate, valid, and reliable methodologies for measuring the structural, process, and outcome aspects of quality are still under major discussion. Structural measures are probably the easiest to collect since they consist mainly of taking an inventory of the physical and administrative setting. A variety of methods exist to assess the process of care including reviews of a sample of clinic records (medical audits) and/or various service statistics; detailed observations of actual tasks, procedures or episodes of treatment; observations of simulated behavior (e.g. role playing); surveys of activities based on patient/staff recall; brainstorming among workers about processes followed; and personal (researcher) observations (formal or informal) about facility activities.

Outcome measures are probably the most challenging to develop. For patient satisfaction, one could conduct informal conversations with patients, prepare a
compilation of complaints, conduct patient satisfaction interviews (upon exit, or follow-up at home), or set up client windows or focus group discussions. Further work is needed to clarify the merits and problems with each method. Even in the U.S., methods for collecting information on patient satisfaction are aggressively being investigated [Rubin, 1990]. Methodologies for measuring health outcome measures are also problematic. Preliminary work in this area had tended to focus on adverse health outcomes, complications, resumption of normal activities, and death.

**Quality of Care in Private and Public Sectors**

Using a strict technocratic approach, the performance of the private providers in the Slums of Karachi was evaluated using defined standards. The evaluation revealed serious technical shortcomings in the quality of practice, but excellent manner in dealing with patients. For example, the mean consultation duration was four minutes. One third of the patients were wrongly diagnosed, a wrong or unnecessary treatment was prescribed for more than two thirds of the patients, and bad or no counseling was made in the majority of cases.

However, the ratings on manners were higher through their greetings (42%), a polite approach (89%), and attention to patients (90%). They were also reported as being interactive (55%), and maintained privacy (28%) for the patients.

The study revealed a pattern of drug over-prescription that was consistent among almost all private providers in the province. Physician admitted this pattern in the in-depth interviews and gave justification for their prescription behavior. Some stated that patients “want more medicine as they want to get well soon”, others considered that doctors could also be blamed, as private practitioners were strengthening this belief to gain patients’ confidence. “Patients value the drugs as much as the consultation”.

Furthermore, they admitted that “half of our medicines are tonics and antacids” which according to them act as placebos. One commented, “this adds to the number of medicines so as to justify the fees charged to the patient”. Besides this, private practitioners compete with unqualified providers and with each other to attract and retain patients. This is done by offering treatments perceived as best by the patients. It was indicated that “some of the cases, initially encountered may ideally not need a specific drug but there are chances that it may become a full-
blown disease (having complication). In addition, since the follow up of a patient is not guaranteed, they tend to give specific drugs, more so as a prophylaxis or therapy for the impending disease. Finally, admitting the low quality of care, more than 80% of the private practitioners agreed that they need to improve their quality of care.

In China, Meng et al [2000] compared private and public rural clinics in terms of the quality of care, their willingness to provide preventive care and the likelihood of providing over-treatment. The study included 109 village clinics in the eastern Chinese province of Shandong, of them 23 were private clinics, 30 private dominant clinics, 32 public dominant clinics and 24 public clinics. The differentiation of public from private clinics was based on ownership. In case of ownership mix, clinics were classified as public dominant, if the private ownership of assets exceeded the half. Four variables were used to assess the quality of services in these four types of health facilities. These included: 1) quality of health workers (measured by quality of training and length of medical education), 2) amount of medical equipment, 3) working conditions and 4) supervisors' evaluation.
Comparing these four indicators among private and public clinics revealed no difference in the quality of care provided. It was asserted that quality of care was low in both private and public clinics and lower in both than required by the government because the health workers were not well trained and continuing education programs were seldom undertaken. There was also a tendency for drug over-prescription in the private clinic, which was significantly different from the private clinics.

Another study by Peabody et al [1994] examined the quality of care provided by Jamaican primary health care clinics by comparing various structural quality indexes derived from a nationwide 1990 survey of 366 public clinics and 189 private clinics. The study pointed up important differences in the quality of care being provided by public versus private and urban versus rural facilities that might not have been anticipated.

Among other things, the study found that the public clinics provided better prenatal diagnosis and counseling and more family planning services than the private clinics. However, the private clinics tended to be better condition, better equipped and supplied, and better able to provide certain laboratory test results in a timely manner. Comparison of urban and rural public clinics indicated that the urban clinics were somewhat better provisioned with equipment, supplies, and pharmaceuticals. However, the rural clinics appeared to be in better repair. Comparison of basic and higher-level public clinics showed the basic clinics to be in better condition and more fully staffed than the higher-level clinics while having similar perinatal diagnostic capabilities.

However, the higher-level public clinics tended to have an overall profile more resembling that of the private clinics, being better equipped and supplied than the basic clinics. While structural measures of quality such as those employed here tend to poorly estimate health outcomes, they do serve as good indicators of access to services where resources are severely constrained. For policy-makers, the results presented here could prove useful in guiding concrete interventions, summarizing the structural elements of health care quality at different types of facilities, and providing a method for less costly evaluation of programs designed to improve services at primary health care clinics.

Taking the patient flow as an indicator for quality, a study [Desai et al, 1989] examined the waiting and consultation times for 465 patients in 44 general medical clinics served by 34 doctors and 25 nurse practitioners, and 167 patients served by dentists in each of 15 clinics in Jamaica.

The study showed that mean contact time of patients with doctors was 7 minutes, with nurse practitioners 11 minutes, and dentists 4 minutes. Medical patients waited an average of 3 hours 53 minutes, whilst dental patients waited an average of 2
hours 23 minutes. Doctors', nurse practitioners' and dentists' median times for starting to see patients were 10:00 a.m., 9:35 a.m. and 9:48 a.m. respectively. They were able to work without experiencing any delays in patient-flow since many patients were waiting at the HC by 8 a.m., and preliminary processing was short.

The study suggested that if health workers started seeing patients earlier, patients' waiting times would be shorter. The shortage of pharmacists to dispense drugs after medical consultations added to patients' waiting time. The results were a natural outcome of the low supply of personnel and high demand for services situation being experienced in the medical and dental services.

Tinajero et al, 1991 compared the costs, quality and financial equity of care among public and private facilities in Ecuador and revealed interesting results. The study included 15 primary health care centers, 8 operated by the MOH and 7 by the rural social security program (RSSP), serving rural and peri-urban populations in the two major geographical regions of Ecuador. With respect to cost of services, MOH average costs were much lower than RSSP costs for several important types of services, especially those provided by physicians.

Little difference was found for dental care. The lower MOH physician service costs appeared to be attributable primarily to lower personnel compensation (only partially offset by lesser productivity) and to greater economies of scope. With respect to quality of care, several measures were applied, with varying results. Based on staff differences and patterns of expenditures on resource inputs, notably drugs, RSSP quality appeared higher, as assumed. However, contrary to expectation, a questionnaire assessment of staff knowledge and procedures favored the MOH for quality. Program equity was judged in terms of per capita budgeted expenditures.

The results support the assumption of greater MOH financial equity, as its program reveals less variation in budgeted expenditures between different population groups covered.

Taking drug prescription as a quality indicator, Massele et al. [1993] evaluated drug prescribing patterns in 720 retrospective and 779 prospective outpatient prescriptions from 20 dispensaries in Dar es Salaam region. The study revealed a mean drug exposure of 2.0 and 2.3, respectively. The percentage of patients leaving the dispensaries with no prescribed drugs was 1.3% and 0.7%, respectively. Prescriptions containing antibiotics were 36.8% (retrospective) and 39.8% (prospective), while injections accounted for 24.6% and 34% of the total encounters, respectively.

Over 70% of prescriptions conformed to the Tanzania essential drug list (EDP) and/or standard treatment guidelines and consisted of 83.9% and 79.1% generic prescriptions, respectively. Interestingly, only 15% of the surveyed dispensaries had
an EDP book and/or calendar. Despite the consulting and dispensing times being short (2.98 min and 77.7 s, respectively), 70% of the patients could remember the dosing instructions. Only 64% of the patients had a minimum physical examination.

Looking at the secondary care level, Massele et al. [1994] assessed the outpatient drug prescription patterns in three district hospitals, four health centers, and ten dispensaries in Dar es Salaam region, Tanzania. The study found that the average number of items (drugs) per prescription in hospitals, health centers, and dispensaries was 2.4 +/- 0.16, 2.1 +/- 0.5, and 1.9 +/- 0.2 (+/- SD) respectively, while injections accounted for 18, 20, and 32 percent of all prescriptions in hospitals, health centers and dispensaries respectively.

On the other hand, antibiotics accounted for 40, 35 and 36 percent of all prescriptions in hospitals, health centers and dispensaries respectively. Generic prescribing was very high in all health facilities and accounted for approximately 80% of all prescriptions. Prescriptions containing fixed drug combinations were not common.

To ascertain whether drug prescription patterns differ in public and private sectors, Massele et al. [1997] evaluated drug prescription patterns in 20 public and 20 private outpatient clinics (dispensaries) in Dar es Salaam. At least 30 prescriptions were collected from each clinic and a total of 1200 were collected for analysis. Prescribing indicators from the WHO/DAP "how to investigate drugs in health facilities" were used. The average number of drugs per prescription in public clinics was 2.2 compared to 2.5 in private ones (p > 0.05).

The percentage generics was 51.7 in public clinics against 47.7 in private (p > 0.05). On the other hand the percentage of antibiotics was 12.3 in public against 19.7 in private (p < 0.05) whereas injections percentage was 9.6 in public against 12.7 in private clinics (p < 0.05). The results indicated that the drug prescription pattern at the private sector was, to a large extent, irrational and suggested a need for intervention to curb the irrational use of antibiotics and injections in private clinics.

The same observation was given by Ahmed et al [1996] for the rural areas in Tanzania, where 80 percent of rural dispensaries are run by the government and 19% by voluntary organizations that charge for some services. Furthermore, private dispensaries were also emerging in villages. Perception of 320 patients in the Coast Region of Tanzania on services delivered by the three health sectors were investigated. Results show that patients were generally satisfied with the services and they would go back to the same dispensaries for treatment.

Poly-drug prescription was common in all sectors, while lack of prescribed drugs was a main complaint among public dispensaries patients. Voluntary dispensaries patients were less satisfied with long waiting time and with staff that did not give
them enough information about the treatment. Currently, health service in public
dispensaries is free but cost-sharing will be introduced soon. Most of voluntary and
private dispensaries patients stated that the fees for service were moderate.

Over-prescription of drugs was also described by Dizwani et a. [1985] in Kenya.
They carried out a prospective study of 1000 patients drawn from 10 Harare
primary care clinics to determine the symptom and disease patterns seen, and the
drugs used in primary care clinics. Children less than four years old comprised 38%
of patients seen. Respiratory infection was the commonest diagnosis. Antibiotics
were prescribed for 54.3% of patients comprising 28% all prescriptions. Patients
received on average 2.4 drugs per visit and only 1.9% of patients received no
medication.

In Ethiopia, a study on rational drug use was undertaken by Desta et al. [1997] in
nine health centers and nine health stations. Prescribing, patient care and facility
specific factors were measured using drug use indicators. Prescribing patterns of
drugs were also assessed. With only few exceptions, the drug use indicators in health
centers and health stations and between retrospective and prospective studies were
similar despite differences in manpower and facilities. The average consultation time
(in minutes) in health stations and health centers was 5.1 +/- 0.8 and 5.8 +/- 1.06,
respectively. The dispensing time (in minutes) was 1.5 +/- 0.7 in health centers and
1.9 +/- 0.6 in health stations.

Both patient care indicators seem to be adequate to influence patient satisfaction to
the overall health service and patient knowledge of important dosage instructions.
Most drugs (more than 89% in HCs and 71% in HSs) were actually dispensed from
the health facilities and labeling was satisfactory. Prescribing by generic names
(average: 75% in health centers and 83% in health stations) was encouraging. While
the availability of key drugs was ensured, essential documents were missing in most
facilities or they were unpopular for use, and those available required revision and
updating. Polypharmacy in which the number of drugs/encounter was < 2.5 was
minimal, but that a large proportion of the prescriptions contained two or more
drugs could result in adverse drug-drug interactions. The most frequently prescribed
drugs were anti-infectives and analgesics accounting for over 76% in health centers
and 82% in health stations and in most cases they are probably prescribed with little
justification.

The exposure of patients to antibiotics (average: 60% in health centers and 65% in
health stations) was unacceptably high to justify epidemiological trends. The high
exposure of patients to injections, especially in the health stations (over 37%),
should be seen from the health and economic points of view. The results revealed
priority areas for intervention. They also provide standard references to compare
drug use situations and their change over time in different settings, area and time in
Ethiopia.
Undue- and Over-prescription of drugs has been also a feature of private and public providers in India. For example, Uppal et al. [1994] described the availability and prescription of modern pharmaceuticals at 2 selected Primary Health Care Centers in Northern India. The main results of this study were: documentation of age/sex of patients on prescriptions was not kept in all cases; prescribing by both generic/brand names was observed with generics predominating; most patients received 0-2 drugs; dosages were not specified in 10% of the cases, duration not specified in 30% of the cases, and dosage form not indicated in 30% of all drugs prescribed; treatment was sought for problems pertaining to gastrointestinal, respiratory, dermatological and musculoskeletal systems; and the most prescribed drugs were analgesics, antipyretics, antimicrobials, hematins and antihistaminics.

Phadke et al [1996] analyzed the rationality of prescriptions in relation to the diseases for which they are given in a representative district of Maharashtra, India. A total of 3582 prescriptions of a district-level stratified purposive sample of 49 doctors from the Satara district in Maharashtra were assessed. The prescriptions were collected prospectively from the outdoor clinics of these doctors from widely varying health sectors: private practice, government employment, differing educational qualifications and diverse socio-economic zones and geographic locations. With the help of Prescription Analysis Guidelines (PAGs) and a scoring system developed for this study, these prescriptions were compared with standard prescriptions, and were ranked on a quantitative rationality scale. The rationality scores of various categories of doctors were then compared.

The average score per prescription was 14.2 out of 30. The score increased significantly with educational qualification. The use of drugs was irrational in 19% of prescriptions, unnecessary in 47% and hazardous in 11%. Unnecessary injections were given in 24% of cases. Prescriptions given by doctors working in the public sector were significantly better than those given by private sector doctors in all respects, except for the use of unnecessary injections. The study concluded that overall, the quality of prescriptions, especially in the private sector is low with a high prevalence of undesirable drug use.

Srishyla et al [1995] carried out another study of prescribing pattern in tertiary, primary and urban general practice levels of the Indian health care delivery system. They analyzed 1810 prescriptions for 3932 drugs. The study evaluated feasibility of data acquisition methods and compared the prescribing frequency of various drug groups and of individual drugs in three commonly used categories. The mean number of drugs per prescription was highest in urban general practice (2.41). The four most frequently prescribed drug groups were antibacterials, vitamins, nonsteroidal antiinflammatory drugs (NSAIDs) and respiratory drugs. The study delineated the differences in prescribing frequency of drug groups and individual drugs across the three levels of health care and the results suggested intervention strategies to promote rational drug therapy.
A similar methodology was used by Guyon et al. [1994] in the neighboring Bangladesh. The drug use pattern and the quality of care were assessed in 80 public sector facilities throughout rural Bangladesh. A total of 40 health complexes and 40 union sub-centers, the lowest level in primary health care facilities, were selected at random. A total of 2880 prescriptions, consultations, and drug-dispensing practices were studied, and the availability and use of essential drugs and of the essential drugs list were recorded.

The average consulting time (54 seconds), the proportion of adequate examinations (37%), and prescription of drugs according to standard treatment guidelines (41%) were unsatisfactory. The mean number of drugs prescribed per patient was 1.44; 25% were treated with antibiotics, and 17% with metronidazole, irrespective of the diagnoses. The availability of drugs (54%) and the presence of an essential drugs list (16%) in the health facilities were low. However, 78% of the drugs were prescribed by their generic names, 85% complied with the essential drugs list, and 81% were dispensed according to prescription. The average dispensing time (23 seconds) and the proportion of patients who correctly understood the dosage (55%) were poor.

Sri-Ngemyuang [1996] described the situation of drugs and drug sources found available at the village level in Thailand. He concluded, from village-survey data from 195 participants and 15 village case studies, that drugs were available in abundance. A vast variety of drugs, including prescription drugs, are available at various sources, of which the most common ones were grocery stores. The situation was indicated to reflect the failure of the drug regulation system as well as the influence of commercial pharmaceutical sector in drug provision. This situation was suggested to hamper attempts to rationalize drug use by consumers.

Overuse of drugs in rural areas of China has led to a growing concern regarding service quality and cost. Zhan et al. [1998] found evidence of high levels of drug use in some rural health facilities in comparison with a number of other developing countries. Such a result was significantly associated with the government policy of financing health care, regulation and monitoring of health services, and users' attitudes and behavior. It underlined the need for measures to be taken in China to improve drug use in order to allow its population access to effective care at reasonable cost.

A study by Leyva et al. [1997] from Mexico evaluated the medication pattern of febrile patients and determined what proportion of these drugs were included in the Mexican Essential Drugs List. A cross-sectional study was conducted in 32 rural communities located in malarial endemic areas near the Mexico-Guatemala border. Of 817 febrile patients interviewed, 55% self-medicated, while 16% consulted a physician. The most frequently used drugs were antipyretics (68%), antibiotics (25%), and antimalarial drugs (37%), despite the fact that only 2% of all febrile patients were diagnosed with malaria. Antipyrine, acetylsalicylic acid, and
acetaminophen represented 84% of antipyretics, and ampicillin, penicillin, and sulfadiazine-trimethoprim represented 51% of total antibiotics.

Public health service and self-medicating patients used essential drugs (antipyretics and antibiotics) significantly more than those consulting private physicians. These findings demonstrated the need to foster access to primary health care (PHC) facilities, rational drug prescription by private physicians, and to review guidelines for prescription of antimalarial drugs for febrile patients.

One of the interesting studies which assessed the lay perspective of quality of care provided by private and public hospitals was undertaken in Bangladesh. The study revealed that service quality were rated better by consumers at private hospitals than in public hospitals. Consumers identified discipline, responsiveness, and income as the three most important factors that accounted for the type of hospital chosen and the degree of satisfaction from Quality of services provided. The study suggested that by improving these three domains, private hospitals in Bangladesh managed to improve their image and be perceived more favorably.

A recommendation was made that service quality can be improved in the health care sector by gradually exposing the hospitals to market incentives. It is important, especially for public hospitals and regulatory agencies, to understood how market incentives work. With better understanding and over time, public hospitals may be gradually weaned from their present survival guarantees that do not seem to motivate them to enhance service quality; such guarantees are also not available to private hospitals.

The study asserted that private hospitals are playing a meaningful role in Bangladesh, justifying their existence, continuation and growth. However, it suggested that before unleashing the forces of privatization in this sector more widely, a tight control schemes over quality of care should be devised. This goes in line with the notion that private hospitals have been known to reduce quality by reducing inputs, to disregard social pricing considerations or, worse, to try to increase their profits by pro-viding services that are unnecessary or even harmful.

The study suggested also that quality perceptions are driving many patients to private hospitals (e.g. a greater proportion of patients are seeking private care). It was indicated, however, that because quality levels are still not where patients would like them to be, many patients who can afford it are seeking treatment alternatives in other countries. Not only does this burden the nation’s foreign exchange resources; customers seeking health care abroad have also been known to suffer collateral miseries that are associated with travel, accommodation, meals and related needs. For any major mishap necessitating a longer stay than originally planned, these inconveniences could easily be magnified several-fold.
To alleviate these problems, it was recommended that the quality challenge should be addressed vigorously and methodically to better meet the needs of patients. In this regard, market incentives were seen crucial. However, they should be supplemented by four other incentives. These include competitive, social, internal and regulatory incentives.

Competitive incentives may be introduced by the Government by encouraging controlled growth of the private sector and by inviting foreign capital and expertise so that new technology and modern managerial practices with their attendant efficiencies are introduced in the country. Local hospitals and health care professionals would be better off emulating these practices to ensure their viability, thereby upgrading the quality of health care services in the country.

Social incentives can also enhance and upgrade service quality. For example, some form of public dissemination of information must be envisaged to focus on the extent to which service quality standards are being met by the hospitals. In developed countries, evaluation systems have evolved that rank or rate organizations (such as banks, mutual funds, insurance companies, etc.) as well as a variety of products and services (through Consumer Reports etc.). Similar ranking or rating mechanisms could be established in the health care sector and, initially at least, the prominent hospitals (public and private) periodically evaluated. As the rating system evolves, other hospitals could be gradually included in the set.

The rating responsibility should, realistically, be borne by some independent agency comprised of health-care professionals and technical analysts. These evaluations should then be widely disseminated through information centers, public awareness campaigns, media participation and a variety of accessible and easy-to-comprehend literature. When health care customers are able to make more informed choices based on the evaluations, it is likely to provoke those hospitals that earn a poor rating or ranking to improve service quality. Those hospitals that earn low ratings consistently should be targeted by regulatory agencies for appropriate action. The social incentives of being rated low should also serve to foster a competitive environment for better ratings among hospitals, especially when they are held up to public scrutiny. To this purpose, this study has attempted to establish relevant criteria along which hospital service quality could be periodically evaluated to determine whether the overall quality of service in the two sectors is improving or deteriorating. When the evaluations are widely disseminated, their impact should be felt not only on patient satisfaction ratings but, eventually, also on the level of foreign exchange outflows that are tied to patients seeking health care services abroad.

Internal incentives must also be structured to motivate health care staff to deliver the desired standards of service. One solution is to tie a part of their compensation to services rendered and the feedback received from patients. This, of course, is a
complex issue especially for public hospitals where health care staff, as government servants, are bound by certain pay structures. While beyond the scope of this paper, it is felt that employees in private or public hospitals should be compensated on the basis of performance. Where compensation adjustments cannot be legally made in the short run, other benefits including promotions, transfers, training, study leaves, etc., could be tied to performance evaluation mechanisms that need to be tightened and fine-tuned. It may also be important to completely bar public health-care personnel from involvement with the private sector. Those who pledge their allegiance to the incentives of the private sector should not have to be cushioned by the taxpayer.

Finally, regulatory incentives can be designed to reward (through lower taxes; substantive grants for infrastructure, research, and other developmental activities; or allocations to hospitals from a resource pool on the basis of performance) or punish (through fines, negligence laws, foreclosure, etc.) hospitals that are benchmarked and compared periodically on the basis of established criteria and standards. Such incentives should also be carefully thought through in the overall context of the evolution of health care delivery in Bangladesh, and revised and upgraded over time.

At any stage of the process, when the appropriate combination of incentives are designed and applied, we believe it will encourage a variety of activities including training, CQI (continuous quality improvement) and TQM (total quality management), organizational renewal, restructuring, six sigma programs and other innovations that have served proactive organizations well in other countries. It will also be important to monitor the extent and direction of change in the overall quality of services in the hospitals. Such oversight measures should provoke the pride and professionalism of the country’s health care providers to deliver what patients have long expected from them; when this happens, the neglected health care recipient is likely to get a better deal.

The summary of the review of the quality of care in public and private providers revealed a surprising finding. There is a severe shortage of systematic comparative research of the quality care in both settings that can cover the technocratic requirements and the lay perception of quality. However, the existing body of literature points out to facts. The first is that in several developing countries the private sector provides a considerable proportion of health care. The private sector provision is concentrated at the primary care level, especially outpatient services.

Secondly, there is no evidence that the quality of health services in the private sector is better than the public sector. Aspects of quality related to the outcome of treatment are similar in both sector. For example, the patterns of drug prescription, the quality of diagnostic workups, the quality of counseling and follow-up are similar. However, aspects related to patient satisfaction and convenience are better considered in the private sector.