LESSONS FROM COST-RECOVERY IN HEALTH

Andrew Creese
Joseph Kutzin

Secretary: National Health Systems and Policies Unit
Division of Strengthening Health Services, World Health Organization
Also available in this series:

Discussion Paper 1: Cassels, A. *Health Sector Reform: Key Issues in Less Developed Countries*

Discussion Paper 3: Cassels, A. *Aid Instruments and Health Systems Development: An Analysis of Current Practice*

Discussion Paper 4: Saltman, R. *Applying Planned Market Logic to Developing Countries' Health Systems: An Initial Exploration*

Discussion Paper 5: Paul, R. *Capacity Building for Health Sector Reform*

---

September 1995

This paper was originally prepared for the Workshop on Financing the Social Sector in Developing Countries, 28 February to 2 March 1994 at the Institute for Development Studies, Sussex, UK. Based on this paper, a presentation on financing issues was made at the second meeting of the Forum on Health Sector Reform held in Geneva in April 1994. WHO gratefully acknowledges the permission of the organizers of the IDS workshop to publish this paper in the Discussion Paper Series of the Forum on Health Sector Reform.

This document is not a formal publication of the World Health Organization (WHO) and all rights are reserved by the Organization. The document may, however, be freely reviewed, abstracted, reproduced and translated, in part or in whole, but not for sale or for use in conjunction with commercial purposes. The views expressed in documents by named authors are solely the responsibility of those authors.

© World Health Organization, 1995
ABOUT THE FORUM ON HEALTH SECTOR REFORM

The *Forum on Health Sector Reform* is a group of experienced senior technical people with a common interest in health policy and health sector reform who meet regularly. Members are currently drawn from bilateral and international agencies, regional development banks, ministries of health and selected resource institutions.

*Forum* meetings serve to share information about the scope and nature of current and planned activities related to supporting health sector reform; identify priority issues in health sector reform; review discussion papers on priority topics commissioned and produced by the *Forum*; discuss relevant country experiences as well as different agencies’ approaches to supporting the reform process in countries.

Members of the *Forum on Health Sector Reform* are:
Dr A Asamoah-Baah, Dr W Bichmann, Dr A Cassels, Dr E Castagnino,
Mr A Creese, Dr F Decailliet, Mr R Emrey, Mr S Glovinsky, Dr D Gwatkin,
Dr K Janovsky (secretary), Mr S Jarrett, Dr K Kalumba, Dr R Lea,
Dr J Martin, Dr S Mogedal, Dr R Owona-Essomba, Dr M Palacio,
Dr Sanguan Nitayarumphong, Dr F Schleiman, Ms J Thomason,
Dr M Vienonen, and Ms E Wallstam.

For further information, write to

*Secretary, Forum on Health Sector Reform*  
*National Health Systems and Policies Unit*  
*Division of Strengthening of Health Services*  
*World Health Organization*  
*1211 Geneva 27*  
*Switzerland*

*Tel:*  (41 22) 791 2568  
*Fax:*  (41 22) 791 0746  
*E-mail:* janovsky@who.ch
LESSONS FROM COST-RECOVERY IN HEALTH

Table of Contents

1. INTRODUCTION ............................................. 1
2. WHY COST-RECOVERY IN HEALTH? ....................... 3
3. THE SCALE OF COST-RECOVERY IMPLEMENTATION .......... 6
4. TO WHAT EXTENT HAS COST-RECOVERY RAISED REVENUES IN HEALTH? .... 8
5. HAS COST-RECOVERY IMPROVED EFFICIENCY? ............... 13
6. HAS COST-RECOVERY IMPROVED QUALITY? ................. 15
7. IMPLEMENTATION ISSUES IN COST-RECOVERY .............. 19
8. CONCLUSIONS ............................................. 22

REFERENCES .................................................. 25
1. INTRODUCTION

In the last decade, government financed health services in most developing countries have come to depend increasingly on payments by patients. Severely practical reasons underpin this trend. Real public expenditures per capita in health have often fallen. This decline has been in progress since the late 1970s in many countries. The quality and quantity of publicly subsidized health services has fallen correspondingly. Utilization levels, particularly at rural health facilities, have declined. Outreach services no longer function, drugs are often unavailable, and health staff are unsupervised and sometimes unpaid for long periods of time. Rural populations have faced higher costs for health care in terms of transport and time to get to hospitals in larger towns, or by payments to private providers of treatment and medication. "Free" care has come to mean unacceptably poor care.

At the same time, governments have been under pressure to contain budget deficits by reducing subsidies and raising revenue. In the health sector, the preference of most governments has been to raise fees for services in response to these macroeconomic conditions. This has often been perceived to be easier than re-allocating resources within the health sector. The latter option entails a clash of interests between health care providers (doctors, in particular) and politicians. On several occasions, however, cost-recovery initiatives have resulted in unexpected levels of popular opposition.

In many countries (e.g., Ghana, Jamaica, and Zimbabwe) a tariff (sometimes more than a decade old) was already in place but was no longer enforced, because the prices charged had become outdated by inflation. In other contexts (e.g., Kenya, Malawi, and Zambia), introducing fees has meant legislative change, but the revenue collecting and management functions were expected, in the interim, to be carried out by existing staff. In yet other settings, government health workers had been operating unofficial fee systems for private gain prior to the formulation of an official cost-recovery policy.

Thus, circumstances have been favourable to the expansion of cost-recovery policies. Run-down public services, the compliance of health care providers, competition from private sources of service provision and an increasing cost to the user of access to care of acceptable quality, have made it easier for governments to implement official fee systems than in the past. External pressure and conditionality has also helped to convince governments.

The resulting changes in policy have been dramatic. Cost-recovery in health is now widely accepted by governments as an instrument of financing policy. By 1993 almost all countries in sub-Saharan Africa had some form of cost-recovery scheme in place or about to be introduced.

Yet questions of principle and practice remain. In most industrialized countries, a shift to user charges does not occupy a prominent position in contemporary reform movements. In most OECD countries, performance improvement in the health sector is seen
to depend more on altering the behaviour of providers than that of consumers. In the context of Canada, a vigorous debate on the principle of user charges is in progress, in which it is argued that such a system is both regressive fiscally and inefficient in its allocative effect. It is even claimed that promotion of user charges in this context reflects a conspiracy by the well-to-do against the poor (Evans, 1994).

It is thus important, given the climate of policy change in developing countries, to examine what the effects of these recent changes have been. This paper reviews recent experience in relation to three claimed areas of potential benefit: revenue-raising, improved access and equity, and greater efficiency. The paper focuses principally on sub-Saharan Africa, though selected experiences from other parts of the world are included.

Some general lessons are already clear. Early expectations that cost-recovery in the health sector might prove an important supplement to tax-based financing, raising as much as 15 to 20% of total government expenditure, have not been met. A combination of relatively low fees, low ability to pay as marked by high formal or informal exemption rates and "leakage" through inefficiency or embezzlement have kept national cost-recovery levels in health in Africa to an average of 5% or less. Equity improvements have not been achieved by any large-scale cost-recovery scheme in health; indeed there are several well-documented accounts of large and sustained drops in attendances at government health facilities from different countries. There is some evidence that certain groups with important health needs - the poor, those with communicable diseases or with vaccine-preventable diseases - are not being met because of limitations to access to care caused by the introduction or increasing of fees. Country experience suggests the supporting conditions needed to allow additional revenue to be converted into improved access to care for the sickest and the poorest. Creating these conditions can be costly, requiring increased investments in infrastructure, in health and in other sectors, such as rural banking. From small-scale projects there is some evidence of beneficial efficiency effects: where it has been possible to retain and use revenue from cost-recovery to improve the quality of services offered, the marginal productivity of such expenditures appears to have been high. There has been a strong tendency for well-managed cost-recovery revenues to invest in general quality improvement rather than to be specifically targeted to improve access for the poor. Limited evidence, from small-scale projects suggests that quality improvements made possible by this process can disproportionately benefit those with the least time and money available to travel to more distant facilities (Litvack and Bodart 1993). More often than not, however, studies have illustrated inefficiencies and inequities related to cost-recovery.

In spite of this very unsatisfactory record thus far, cost-recovery in health in poor countries is now widely accepted as an instrument of health policy. A clearer understanding of the desirable supporting conditions needed to improve efficiency and equity, relating to the setting of prices and exemptions, and to the capacity for the retention and management of revenue, is emerging. These "implementation conditions" provide one specific set of lessons from experience. But there are also more general lessons. Implementing successful
cost-recovery policies has proved both politically controversial and technically difficult. The health gains are far from clear. Cost-recovery initiatives have to be, not an isolated policy change, but part of a broader reform package, in which the emphasis is on better value for (probably more) money. Careful publicity to explain the purpose and nature of changes, and to identify exempt groups, is necessary. Rapidly visible improvements in service quality are needed. In the decade ahead, cost-recovery alone is likely to be less central to the thrust of health policy than it has been in the recent past. It is likely to be more concerned with realizing small but important efficiency gains, and to be accompanied by an array of complementary organizational changes and policy measures.

2. WHY COST-RECOVERY IN HEALTH?

From the perspective of national budgetary authorities (a Ministry of Finance, for example), the general rationale for cost-recovery in health, as in other sectors, is that of macroeconomic balance. In situations of chronic and growing trade and domestic budget deficits, cost-recovery for publicly financed goods and services offers one route to deficit control. There are, of course, other instruments for achieving fiscal balance, on both the revenue (e.g., improve tax efficiency) and expenditure (e.g., lower public employment levels) sides, and alterations in these may be possible without changing the basic rationale for subsidized access to publicly financed goods and services. Cost-recovery initiatives in health have on several occasions (e.g., Ghana and Mozambique) resulted directly from the implementation of structural adjustment packages, emphasizing control over public expenditure, improved productivity in public enterprises, reduction of subsidies on publicly financed goods and services, and accompanying fiscal and monetary policy changes. In these cases the health sector has been treated like any other sector, notwithstanding the health-specific market failure arguments referred to in the literature (see, for example Arrow, 1963; Barnum and Kutzin, 1993; De Ferranti, 1985; Griffin, 1989; Jimenez, 1987; and World Bank; 1993).

There are also well-developed sector-specific arguments for and against cost-recovery in health. The case against full cost-recovery through user charges is based on both efficiency and equity arguments. The efficiency arguments have to do with market failure (health care is not like other commodities). The equity arguments have to do with the distinction between need and demand; that is, a population's capacity to benefit from health care is likely to be distributed very differently from its purchasing power. Unregulated market solutions will be both inefficient and inequitable. The policy implication has perhaps been most succinctly stated in the context of Ontario, Canada, where user fees are described as a tax on "those unfortunate enough to become ill" (Barer, Evans and Stoddart, 1979). High fee levels, whether determined administratively or by market forces, are thus likely to deter precisely those people who most need access to care. The problem facing policy-makers in severely resource-constrained countries is that when fees are absent or are set too low, revenues are usually insufficient to enable the supply of services to meet
demand. As a result, quality and efficiency are compromised, and the poor remain underserved.

The most compelling case for user charges in the poor countries has been their capacity to provide an emergency boost for the recurrent (usually non-salary) costs of health care provision, which have been most depleted by declining real expenditure. When a country has a slender tax base, a small formal employment sector, and poor prospects for real growth, few alternative sources of health finance are available. Poor countries face a severe problem because their health systems suffer from some of the same cost inflation problems as those in industrialized countries. Not only is there a severe resource mobilization problem; there is also (as in developed countries) strong upward pressure on costs due to demographic pressure and import price increases. Further, countries of all types often have patterns of resource allocation that favour relatively high cost and low effectiveness interventions. In poor countries, therefore, there may be potential benefits from user charges in both mobilizing additional resources and in setting price signals to encourage more efficient behaviour by purchasers and providers.

Cost-recovery as an instrument of health policy in developing countries became of prominent concern in the mid 1980s. During the early 1980s a major revision of the World Bank's position on cost-recovery in health took place, as part of a growing concern with questions of financing. The Bank's 1980 health policy paper was cautious about the scope for cost-recovery as a source of finance:

"User charges are unpopular with governments because of the high cost of their administration and widespread problems of misappropriation of cash by health workers. User charges are also criticized for discouraging the use of preventive services and early treatments of diseases. Many countries have proclaimed the right to free health care, thereby limiting opportunities to impose charges." (World Bank, 1980, p.19).

The financing strategies envisaged for the following decade in the 1980 paper primarily depended upon the achievement of overall economic growth and a higher share of public resources for health: "governments will have to spend substantially more on health...growth in national income should be allocated for primary health care" (pp. 45-46). The importance of technical efficiency improvements was stressed, and a role was identified for "local financing" schemes, such as revolving funds for drugs or locally operated insurance schemes, but cost-recovery through user charges as a national strategy was not actively promoted.

In contrast, the 1987 statement on health care financing (Akin, Birdsall and de Ferranti, 1987) identified four components of a reform agenda - user charges, insurance, decentralization, and a greater recognition of the role of the private sector. This document exercised considerable influence both on health policy in developing countries and within
the operations of the World Bank and other external assistance agencies. It suggests that a carefully designed policy of user charges has the potential to increase revenues and improve efficiency and equity.

The vision was of government using fees to choke off a substantial and essentially "frivolous" demand for free services, with a cost-related fee system encouraging people to use lower level health facilities first. A "substantial portion of the operating costs of current programmes (p. 26) was expected to be recovered, and the proceeds would be used to improve access for the poor by extending appropriate (and presumably, fee-exempt) services to them.

The discussion of user charges in the 1993 World Development Report reflects a further evolution of Bank thinking on the subject. On the basis of cost-effectiveness analysis, the document recommends that countries provide a basic package of public health and "essential clinical" interventions. Efficiency (market failure) arguments are used to promote public financing of both the public health services and some of the essential clinical services. Moreover, public financing of essential clinical services is also supported as an anti-poverty measure because the poor are disproportionately affected by the burden of disease. However, in countries where the cost of the basic package of essential clinical services is beyond the means of government, selective user charge and targeting mechanisms are needed as means of resource mobilization.

The case for fees to improve equity differs from that posited by Akin, Birdsall and de Ferranti. The WDR suggests that charging fees can improve equity if fee revenues are used to improve service quality and thus make acceptable services available closer to where patients live. The important deterrent effects of non-fee costs (i.e., time and transport costs) are noted, and sub-national examples from four African countries are cited where fee policies actually led to increases in utilization, especially by the poor. The WDR suggests that if fees represent less than one percent of household income, they have little impact on utilization, even by the poor. Where fee levels are higher than this, exemption mechanisms are needed to ensure access for the poor.

In both the 1987 and 1993 documents, little recognition was given to the likely transaction costs and capacity requirements for operating fee collection and exemption systems, and for retaining and managing the proceeds in the interests of the poor. Sections 4 to 6 in what follows briefly review lessons from experience in relation to the three broad objectives set out above: raising additional money; efficiency improvements; and improving equitable access to health services for the poor. Before proceeding to that discussion, however, it is necessary to provide some background as to the context within which cost-recovery policies have been implemented.
3. THE SCALE OF COST-RECOVERY IMPLEMENTATION

The context in which official cost-recovery policy has been pursued in health varies substantially among countries. In many parts of the world from eastern Europe to southeast Asia, charging users is a widespread unofficial practice, with "gratitude payments" to health workers used to ensure patients' access to care of acceptable quality. In some countries (e.g., Ethiopia) user charges have been a long established practice, but one which has hitherto been poorly coordinated, and in which big variations in the enforcement of regulations occur. Systems of very low tariffs that remain unchanged for many years are also common (e.g., Ghana prior to 1985, Botswana, Jamaica, Lesotho, and Turkey). These have been seriously eroded by inflation since the time they were last reviewed, and their falling importance as a source of funds has often led to negligence in their collection.

In a number of countries revenues collected through health institutions still revert to central treasury (e.g., Eritrea, Ethiopia, Namibia, and Zimbabwe). Sometimes (as in Mozambique in 1985) user charges for health care were introduced as part of a more general process of subsidy reduction in the public sector. In other cases (e.g., Kenya) user charges were introduced as a more or less isolated instruments of policy change, without substantial accompanying organizational changes or a broader package of civil service reform. In yet other countries (e.g., China and Hungary), a policy of greater reliance on out-of-pocket payments in health was part of a much broader transformation of economic and financing structures, involving organizational and fiscal change in most sectors, and numerous changes in the health sector in addition to the user charge policy.

User charge policies for health care in Africa have sometimes contrasted sharply as between the government sector and the private not-for-profit sector (the latter comprising principally mission or non-governmental organization providers). Mission health facilities often have a reputation for being relatively low cost providers (possibly because of elements of subsidy in the price of their inputs) of good quality services. Some mission providers have shown themselves assiduous in operating assessments of patients' ability to pay and occasionally ingenious in devising non-monetary equivalents of fees (see the case of Namibia, for example, presented in WHO, 1994).

Cost-recovery innovations over the last decade have also included an important number of local, project or district level schemes. The notion of community financing in health goes back well beyond the last decade, though community contributions in health and education have often consisted principally of donated money or labour for capital projects, such as primary school or dispensary building, or occasionally even larger construction projects. The growing failure of the government to maintain its own infrastructure in health in many countries (Abel-Smith and Creese, 1989), together with an increasing disenchantment with the prospects for improved performance in public infrastructures, has led some communities to pursue more autonomous routes to the maintenance and development of their health care system. Zaire is a good example of self-financing in health
following the declaration in 1986 that government responsibility would be limited only to the payment of salaries of certain public servants. With support from external non-governmental agencies, several zones in Zaire have implemented innovative health financing arrangements, with a heavy reliance on user charges and some mediation through insurance arrangements (Shepard, Vian and Kleinau, 1990). Similar initiatives have been taken, often with support from external non-governmental agencies in other countries, such as Mali, Senegal, and Benin. A major boost for the development of such schemes came through the UNICEF-WHO (African Region) initiative, later known as the Bamako Initiative, which focused initially on improving the supply of drugs through community-managed payment and purchasing systems.

So substantial has been the spread of these schemes that a recent review defines "two models" of cost-recovery in health cost-recovery in Africa - one seen at the national policy level, the other at local or project-based schemes (Nolan and Turbat, 1995). Cost-recovery policy in some form now characterizes almost all countries of sub-Saharan Africa. Of the 37 countries surveyed in 1993, 33 had cost-recovery schemes in place (national, local or both) or about to be introduced. The great majority of these cost-recovery policies were implemented or had been overhauled since 1980.

An accompanying change of attitude on the part of decision-makers in the health sector in Africa is clearly detectable. At a recent consultation of senior officials from twelve African countries, Ministers and Vice-Ministers of Health firmly endorsed the role of user charges in overall health policy (WHO, 1994). In addition to the revenue-raising and efficiency arguments mentioned above, policy-makers also identified service quality improvement as a primary rationale for charging patients. Indeed, the goals of improving the efficiency and quality of health services appear to be much more widely shared than that of improving access for the poor. This may well reflect the fact that there is little health gain likely from extending people's access to non-functional services, thus making the improvement of quality a prior requirement. Other operational objectives, such as promoting community involvement, ensuring improvements in drug supply, and promoting a shift from public to private care, have also been identified (Nolan and Turbat, 1995) as underpinning recent moves towards cost-recovery.

Cost-recovery is also widely used in the health sector in Asia (Griffin, 1992). China, which relied on cost-recovery for significant levels of resource mobilization even during the early development of its rural infrastructure, witnessed a major shift in its health financing patterns during the 1980s when overall economic reforms were implemented. This gave even greater prominence to user charges, while insurance mechanisms remained an important source of financing, although the number of persons covered by insurance was reduced. Table 1 on page 8 shows the evolution in China of fees as a percentage of total health expenditure. Korea, Thailand, Malaysia, Singapore and Indonesia also have user charge policies in health which coexist as cost-sharing provisions with national or partial
social insurance schemes. In Central and South America, cost-sharing is also often an important component of health insurance systems.

<table>
<thead>
<tr>
<th>Source</th>
<th>1980</th>
<th>1989</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>31</td>
<td>20</td>
<td>-35</td>
</tr>
<tr>
<td>Insurance</td>
<td>45</td>
<td>44</td>
<td>-2</td>
</tr>
<tr>
<td>Fees</td>
<td>24</td>
<td>36</td>
<td>+50</td>
</tr>
</tbody>
</table>

Source: Yu Dezhi, 1992

The widespread existence and rapid recent growth in experience with user charges suggests that, in spite of the difficulties facing any policy innovations, initiating such schemes is probably much less of an administrative challenge for central government than implementing other financing options, such as social insurance. However, establishing or raising fees is not the same as getting the user charge system to function as a mechanism for improving efficiency; even less is it a guarantee of improvement in the equity with which services available.

4. **TO WHAT EXTENT HAS COST-RECOVERY RAISED REVENUES IN HEALTH?**

The World Bank’s 1987 statement on health care financing (Akin, Birdsall and de Ferranti) suggested that greater revenues would result from increasing fees at government health facilities. The increased revenues would have the potential to sustain cost-effective basic services over the long term, services which tended to be underfunded from government sources alone. More immediately, user fee revenues could finance a substantial share of the operating costs of ongoing programs and facilities, especially basic curative care. The authors suggested that governments could recover 15 to 20% of operating costs through user charges, even in poor countries. Similarly, in the *World Development Report* (World Bank, 1993), the revenue potential of fees for an essential clinical package of services is estimated to be about "10 to 20 percent of total government spending for health" (p.118).

This section assembles evidence on the financial yield from cost-recovery policies, principally in Africa. First, national cost-recovery data are presented, then evidence on cost-recovery based on records from individual health facilities is given. Second, cost-recovery experiences from a range of sub-national projects or programmes are presented. Finally,
indications are given of cost-recovery levels in health facilities operated by non-governmental organizations.

Table 2 (on page 10) presents estimates (from several different sources) of fee income as a percentage of Ministry of Health recurrent expenditure in a range of different countries. From this table, Ghana’s experience shows how cost-recovery levels after the 1985 policy change peaked in 1987 at around 12% of health expenditure, falling subsequently as exemptions increased and the relative value of fee levels to expenditures changed with inflation by 1992. Mozambique’s data show a similar high early yield, followed by a substantial decline. In China, on the other hand, the relative importance of user charges grew rapidly in the 1980s as public subsidies were withdrawn from health and some pre-existing insurance schemes dissolved, at a time when the economy as a whole was experiencing very rapid and continuous growth. The absolute levels of cost-recovery were in fact much higher than those indicated in the table when insurance reimbursements are included.

Systematic evidence about cost-recovery at individual health facilities is fragmentary and shows such wide variations as to make generalization hazardous. Table 3 (on page 11) on hospital cost-recovery (adapted from Barnum and Kutzin, 1993) shows big variations.

The authors comment:

"...in most countries revenues generated from nongovernment alternative financing sources remain a small fraction of total hospital expenditures. Surprisingly, the percentage of costs recovered does not appear to be related to the level of per capita income or the prevailing ideology of a country" (p.254).

In a number of recent studies, particularly in the context of appraising Bamako Initiative schemes, and for drugs revolving funds, attention has been given to the level of financial sustainability from local sources. Nolan and Turbat (1995) report that Zambia achieved 10-15% cost-recovery for community projects. Other sources provide the following figures for community-based financing schemes; Benin: 43% to 58% in BL districts, (UNICEF), Rwanda 14 - 59% of recurrent costs at pilot health centres, (Shepard, 1993) and up to 97% of non-salary operating costs in some health zones of Zaire (Bitran, 1986) UNICEF (1991) also reports the following cost-sharing experiences in 1988-1990 in community-based schemes:

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guinea</td>
<td>52%</td>
</tr>
<tr>
<td>Guinea Bissau</td>
<td>32%</td>
</tr>
<tr>
<td>Mali</td>
<td>55%</td>
</tr>
<tr>
<td>Senegal</td>
<td>50%</td>
</tr>
<tr>
<td>Uganda</td>
<td>19%</td>
</tr>
</tbody>
</table>
### TABLE 2: Percentage of Ministry of Health recurrent expenditure recovered through fees

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>PERCENTAGE</th>
<th>YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td>1.3-2.8</td>
<td>1983</td>
</tr>
<tr>
<td>Ghana</td>
<td>7.9</td>
<td>1986</td>
</tr>
<tr>
<td></td>
<td>11.8-12.1</td>
<td>1987</td>
</tr>
<tr>
<td></td>
<td>7.8</td>
<td>1992</td>
</tr>
<tr>
<td>Guinea-Bissau</td>
<td>0.5</td>
<td>1988</td>
</tr>
<tr>
<td>Kenya</td>
<td>2.1</td>
<td>1993</td>
</tr>
<tr>
<td>Lesotho</td>
<td>5.8</td>
<td>1986/87</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>1991/92</td>
</tr>
<tr>
<td>Mozambique</td>
<td>8</td>
<td>1985</td>
</tr>
<tr>
<td></td>
<td>&lt;1</td>
<td>1992</td>
</tr>
<tr>
<td>Swaziland</td>
<td>2.2</td>
<td>1985</td>
</tr>
<tr>
<td></td>
<td>4.6</td>
<td>1988/89</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>3.5</td>
<td>1991/92</td>
</tr>
<tr>
<td>Côte d'Ivoire</td>
<td>3.1-7</td>
<td>1986</td>
</tr>
<tr>
<td>Mali</td>
<td>1.2-7</td>
<td>1986</td>
</tr>
<tr>
<td>Senegal</td>
<td>4.4-7</td>
<td>1986</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>3</td>
<td>1987</td>
</tr>
<tr>
<td>Yemen Arab Republic</td>
<td>3.3</td>
<td>1983</td>
</tr>
<tr>
<td>Salvador</td>
<td>4</td>
<td>1990</td>
</tr>
<tr>
<td>China (excludes insurance reimbursements)</td>
<td>24</td>
<td>1980</td>
</tr>
<tr>
<td></td>
<td>36</td>
<td>1988</td>
</tr>
</tbody>
</table>


Non-government sources of health care in developing countries, both religious missions and secular aid agencies, also have substantial experience with cost-recovery. A review of different sources of evidence from Africa, (Kutzin and Wouters, 1994) finds a range of cost-recovery in non-governmental organizations of between 25% and 50% of total expenditures -- substantially higher than the averages for comparable government facilities. Lower costs, and a combination of higher prices, more energetic fee collection and greater willingness to pay, are evinced as likely explanations, though more research evidence on both the costs and quality of NGO-provided health services is necessary. Several sources report 100% cost-recovery for drugs in community financing settings.
<table>
<thead>
<tr>
<th>Country and year of data</th>
<th>Level of hospital</th>
<th>(HA/C)**</th>
<th>Number of hospitals in study</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Low-income countries</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China, 1986</td>
<td>Central</td>
<td>90.1</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Provincial</td>
<td>87.9</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>District</td>
<td>97.3</td>
<td>7</td>
</tr>
<tr>
<td>Ethiopia, 1984-85</td>
<td>Urban</td>
<td>32.1</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>22.9</td>
<td>10</td>
</tr>
<tr>
<td>Indonesia, 1985-86</td>
<td>All public</td>
<td>19.9</td>
<td>-</td>
</tr>
<tr>
<td>Mali, 1986</td>
<td>Tertiary</td>
<td>7.5</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Tertiary</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>District</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Niger, 1986-87</td>
<td>Tertiary</td>
<td>14.8</td>
<td>1</td>
</tr>
<tr>
<td>Zaire, 1988</td>
<td>District</td>
<td>78.9</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>District</td>
<td>66.3</td>
<td>1</td>
</tr>
<tr>
<td><strong>Middle-income countries</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bolivia, 1988</td>
<td>La Paz</td>
<td>47.5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Cochabamba</td>
<td>51.5</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Santa Cruz</td>
<td>38.4</td>
<td>5</td>
</tr>
<tr>
<td>Dominican Republic, 1986</td>
<td>Tertiary</td>
<td>2.7</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Provincial</td>
<td>2.6</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>District</td>
<td>1.5</td>
<td>3</td>
</tr>
<tr>
<td>Honduras, 1985</td>
<td>Tertiary</td>
<td>3.5</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Provincial</td>
<td>4.5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>District</td>
<td>5.3</td>
<td>8</td>
</tr>
<tr>
<td>Jamaica, 1986-87</td>
<td>All public</td>
<td>2.8</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>University</td>
<td>7.5</td>
<td>1</td>
</tr>
<tr>
<td>Jordan, 1987</td>
<td>All MOH</td>
<td>13.3</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>All RMS</td>
<td>22.3</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>University</td>
<td>51.3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>All public</td>
<td>22.6</td>
<td>-</td>
</tr>
<tr>
<td>Papua New Guinea, 1985</td>
<td>All public</td>
<td>2.5</td>
<td>-</td>
</tr>
<tr>
<td>St Lucia, 1986-87</td>
<td>Central</td>
<td>2.4</td>
<td>1</td>
</tr>
<tr>
<td>Swaziland, 1988-89</td>
<td>MOH</td>
<td>4.7</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Mission</td>
<td>12.6</td>
<td>2</td>
</tr>
<tr>
<td>Turkey, 1987</td>
<td>All MOH</td>
<td>12.6</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>All University</td>
<td>45.4</td>
<td>-</td>
</tr>
<tr>
<td>Zimbabwe, 1989</td>
<td>Central</td>
<td>7.3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Provincial</td>
<td>3.1</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>District</td>
<td>1.9</td>
<td>30</td>
</tr>
</tbody>
</table>

Adapted from Barnum and Kutzin, 1993
Total revenues from fees and insurance (HA) divided by total recurrent expenditures or revenues (C)

All of the above figures are estimates of gross revenue. Yet the process of collecting
fees itself entails costs. Little evidence exists on the administration costs of fee collection, though a study in Papua New Guinea found that collection costs at one health centre were 90% of the value of fees collected; with an average collection cost of just over 10%. The administrative costs associated with collecting fees are of several types. First, there are the costs of revenue collection. These include the purchase or printing of receipts, cash boxes and accounting materials, related banking charges, and the value of staff time devoted to assessing patients’ eligibility to pay, collecting fees and administering their banking, transfer or use. Second, where fees are retained for local use, there are costs associated with their management. Decision-making about the use of fee income often involves the time of local management committees. Indecision also has proved costly (e.g., in Ghana) where inflation and bank charges have rapidly reduced the purchasing power of fee revenue. Introducing or improving fee policy also entails training of staff, and increasingly includes costs of public consultations regarding the purpose and nature of the policy change. Finally, there are frequently losses due to embezzlement (Bennett and Banda, 1994).

In many instances the management and administrative costs of revenue collection in local or even national schemes have been funded through external assistance. This makes any assessment of their financial success very difficult, because these hidden subsidies distort actual cost-recovery achievements, when reports focus only on local costs and local revenues. Anecdotal evidence exists of cost-recovery projects in which the value of external inputs has exceeded local revenues by a factor of ten or even twenty. A more comprehensive approach to accounting for cost-recovery is needed if the financial and capacity requirements for successful implementation are to be fully understood.

Have user charges succeeded in raising additional funds for health? The answer must be "Yes...but". The total amounts of money recovered for health through user charges, measured as a national supplement to the sources of finance for health care, is well below the 10 or 20% anticipated in World Bank documents. If the actual capital and recurrent costs of operating cost-recovery are taken into account, the net yield of the above schemes further falls. As a substantial and untapped additional source of finance for health in poor countries, it seems safe to say that early hopes have proved over optimistic. Nevertheless, where suitable revenue retention, banking and management arrangements exist to enable quality improvement, there is evidence that funds collected have been put to good use in improving the functioning of services. Such arrangements appear to have been achieved much more frequently in the context of sub-national projects rather than as nation-wide government reforms. Typically, retained fee income has been used for the purchase of drugs and dressings, both in national and local contexts. Thus, in the common situations of recurrent funding crisis, where there is severe underfunding of critical inputs, the marginal productivity of additional net revenue may be greater than the small numbers which are indicated by the overall cost-recovery percentage.
5. **HAS COST-RECOVERY IMPROVED EFFICIENCY?**

The World Bank’s policy paper on health financing (Akin, Birdsall and de Ferranti, 1987) suggested several ways of improving efficiency in the health sector by charging fees. Most of these derive from the expected effect of prices on the behaviour of potential consumers (patients). First, fees would reduce unnecessary use of services. Second, by coordinating prices among different levels of facilities, fee systems could encourage appropriate use of first contact and referral facilities. Third, where fees are in place in a facility, exemptions for specific services, such as prenatal care or tuberculosis treatment, could encourage consumption of these important services. It was also suggested that providers of services would be encouraged, out of concern for the new financial implications facing their patients, to limit practices such as over-prescription of drugs. Moreover, charges were expected to provide an incentive for the provision of higher quality care.

The *World Development Report* (World Bank, 1993) does not make these efficiency arguments for fees. Indeed, the Bank suggests that, where possible, governments should fully fund an essential clinical package of services (as well as public health interventions). User charges for these services are only suggested for countries in which government resources would be insufficient to fully fund even a minimal package. Charging substantial fees in government facilities, especially hospitals, for services outside the package is supported, however. The (allocational) efficiency argument for this strategy is that such charges would imply a reduction in public subsidies to non-essential services, allowing a greater concentration of government funding on more cost-effective services.

User fees have reduced the utilization of services to some extent, particularly by the poor, as will be shown in the next section. However, there is no evidence to date that suggests that the utilization that has been dissuaded through the imposition of user fees was not really necessary (Creese, 1991). The probable reason for this is that the other costs (of time and transport) facing potential users of gaining access to services are sufficient to deter such use. Thus, it is unlikely that the imposition of fees will have the beneficial effect of discouraging unnecessary use of health care services, particularly in areas where there are significant non-fee costs associated with a visit to a health facility.

By graduating prices to the level of a health facility (i.e., having low prices at first contact facilities, higher prices in district hospitals, and the highest prices in tertiary hospitals), the structure of fees sends signals to potential consumers that can affect patterns of utilization. Such systems of “cascading” charges exist in a number of countries, including Kenya, Indonesia, Namibia, Zambia, and Zimbabwe (Barnum and Kutzin, 1993; WHO, 1994). Namibia goes further in encouraging proper use of the referral system by exempting referred patients from charges at higher level institutions. Intuitively, this type of coordinated pricing makes sense, but the effects of such pricing policies on the use of the referral system have not been studied. The common finding of under-used health centres and overcrowded hospital outpatient departments, as found in Zambia and Zimbabwe, for example, suggests
that the use of coordinated pricing policy is not, by itself, sufficient for improving use of the referral network. Other measures, especially those focused on improving the quality of care available at first contact facilities, would seem to be needed as well. Industrialized countries trying to limit unnecessary use of hospital resources are using techniques based on shifting payment responsibility not to patients but to "purchasers", agencies responsible from fixed budgets, for buying care from different providers from fixed budgets. One way that these purchasers economize is to require that, under most non-emergency circumstances, patients' first point of contact with the health services is in a non-hospital ambulatory setting.

The cost-effectiveness of health services can be improved by measures to increase the probability that persons with communicable diseases seek treatment. The reason for this is that such treatment (for tuberculosis or sexually transmitted diseases, for example) benefits not only the patient but also other members of the community who would have caught the disease from these patients if the patient had not been successfully treated. One way to encourage persons with communicable conditions to be treated is to provide such services free of charge. In many countries (for example, Ethiopia, Ghana, Jamaica, Mali, Niger, Papua New Guinea, and Zimbabwe), no fees are charged for treatment of tuberculosis in government health facilities. Unfortunately, as with other efficiency implications of fee systems, little is known about the impact of such exemptions on treatment-seeking behaviour for tuberculosis. If fee exemptions do encourage more people with tuberculosis to seek treatment, governments should consider applying similar exemptions to other types of communicable diseases. For example, all of these countries mentioned above except Papua New Guinea charge for treatment of sexually transmitted diseases (STDs). If these charges are causing persons with STDs to delay seeking care (an empirical question for which there is currently little evidence), policy makers should consider waiving them because the social costs from not treating a case of an STD are almost certainly greater than any revenue foregone by exempting the case from payment.

There is some evidence that revenues from community financing schemes, such as those applied under the rubric of the Bamako Initiative have led to improvements in the quality and perceived quality of available services. An evaluation of the Bamako Initiative found that in some countries, the revenues generated through drug fees were used to attain tangible improvements in health services (McPake, Hanson and Mills, 1993). Some indication of the importance of improving continuity in the local supply of drugs can be gained from analysing actual expenditures from fee income. In Kenya, over half of such expenditures have been for just two items - maintenance, and the purchase of emergency drugs. Where the drugs procurement, distribution and prescribing systems are sufficiently well managed to ensure that available drugs are currently chosen in view of the local disease pattern, cost-recovery can facilitate an improvement in the quality of care and thus the technical efficiency with which the health system operates.

The available evidence suggests, however, that the existence of fees does not encourage providers to be more restrained in their supply of services but rather the reverse.
The experience of China, where fees substantially finance health services, and thus where prices are high, suggests that providers will respond to price incentives differently than the manner suggested by Akin, Birdsall, and de Ferranti (1987). Certain services, including drugs and some complex procedures (e.g., CT scans, ultrasound, and renal dialysis), are priced in such a manner that health facilities profit by their provision. These price distortions have led to rapid increases in the "provider-induced demand" for and supply of these procedures and services. Indeed, it is likely that price incentives lead to potentially dangerous over-use of services, as suggested by evidence that an average of 2.3 drugs was prescribed per patient contact with the health system by the late 1980s (Bumgarner, 1992). This experience has implications for other countries attempting to implement measures, such as those in the Bamako Initiative, to encourage communities to self-finance drug supplies. Many studies (for example, Mwabu, Ainsworth and Nyamete, 1993; Litvack and Bodart, 1993; McPake, Hanson, and Mills, 1992) have found that the extent to which drugs are available in a health facility has an important positive impact on the demand for services in that facility. People seem to equate the availability of drugs with a higher probability that they will receive effective treatment. The danger is that the demand for drugs will exceed that which is medically necessary, yet providers will respond to financial incentives and meet this demand in order to increase revenues. The challenge facing policy-makers is to develop and implement pricing schemes for drugs that limit the incentive to overprescribe.

China’s experience suggests that prices can indeed send powerful signals that affect both the allocation and use of health resources. However, where user charges are set at relatively low levels, as in most developing countries where widespread insurance coverage is lacking, there is no evidence that referral patterns or the use of specific services are affected in a manner significantly different from that which would obtain if the services were provided free of charge. Where fee revenues are retained and well managed, e.g. are used to purchase essential non-staff recurrent inputs, such as pharmaceuticals, they can make an important contribution to the quality and availability of services.

6. HAS COST-RECOVERY IMPROVED EQUITY?

The evidence regarding the effect of fees on access to services is less positive. In most cases, user fees have had negative consequences for equity because income-related pricing and exemption measures have proved difficult to implement. As a result, fees have posed a greater barrier to service use by poorer persons.

Econometric studies using household survey data have found that the demand for health care services is more price elastic for poorer persons than for richer persons (see Gertler and van der Gaag, 1990, for demand studies from Côte d’Ivoire and Peru). Falling clinic attendances in many countries also suggest that user charges and, in addition, declining service quality, have had severely adverse effects on equity. In Ghana, for example, a national decline in attendances was observed in 1985, the year in which fees
were substantially increased: from 4.5 million outpatient visits in 1984 to 1.6 million in 1985. Utilization rebounded slightly to 2.1 million visits in 1986 (Waddington and Enyimayew, 1990). The authors found that in one region urban utilization fell by more than 50% one year after the increase in fees; rural utilization remained "well below" (p.299) pre-increase levels three years later, although there was an increase in the proportion of users in the most economically active age group (15-44). These phenomena were directly attributed to the increase in fees in 1985.

Yoder (1989) reported an average decline of about one-third in outpatient attendances at government health facilities in Swaziland in the three months following a fee increase in 1984, where the object of policy had been to equalize prices charged by public and mission health facilities. One year later, the general picture remained unchanged. Attendances at mission health facilities increased by over 10% in the same period. Yoder also reported big declines at government facilities in the use of services for diarrhoeal disease (more than a 40% drop), sexually transmitted disease (39.6%), acute respiratory infections (43.7%) and infant immunizations (37.6% for first Diphtheria, Pertussis, Tetanus shot). He concluded that up to one-third of the drop in attendance was by the poorest.

Studies of Kenya’s fee policy change in December 1989 estimate initial drops in outpatient attendances of 37% overall and of over 50% in some districts (WHO, 1994). The percentage of patients using government dispensaries (where fees were not charged) increased by about 10% in the same period. The registration fee was particularly unpopular; when it was replaced by an outpatient treatment fee in September 1990, attendance rose, though still to less than pre-1989 levels. Significant movement of patients away from non-government health facilities was reported after suspension of registration fees in public facilities. Demand for medical services in government health centres increased by about 41% after the suspension of cost-sharing in August 1990.

A study in Lesotho (Bennett, 1989) showed drops in attendance in the two districts studied of 40% and 51% after a fee increase in 1988 and corresponding increases in the use of private facilities of 19% and 35%, respectively. This implies that private sources of care only partially replaced public providers. The study also showed that although visits to all government health facilities fell following the fee increase, the decrease was greatest in facilities located in the more remote mountainous areas. Moreover, in the years following the fee increase, attendance levels rose at lowland facilities at a rate that indicated they would soon regain levels similar to those which obtained prior to the increase in fees. This recovery in utilization rates was not experienced in health centres and hospitals located in the mountains. The author also found that utilization by the most vulnerable group in the population, young children (0-5 age group), was reduced most by the increase in fees.

Sharp declines in utilization have also been documented, following fee introductions in the Gambia.
Evidence from China of a large utilization increase, when fees for the diagnosis and treatment of tuberculosis were removed, confirms that fees can be a source of both inequity and inefficiency.

Inequities have also been observed to stem from the ways in which some cost-recovery schemes have been managed. For example, the shift in Kenya to allow health facilities to retain all of the funds collected has been greatly to the advantage of those few districts with a Provincial hospital, since this is the level at which cost-recovery yields most money. In general these are not the least disadvantaged districts. This is a dramatic illustration of a trend which has also been observed in community-based cost-recovery schemes. Without some mechanisms for redistributing funds from better off areas, such policies are inherently inegalitarian between, as opposed to within communities.

Granting exemptions is usually advocated as a means to protect poor persons from the financial barriers posed by user fees. Barnum and Kutzin (1993) found that most countries include provisions to exempt the poor from payment of fees in government hospitals. However, they also found an array of other exemptions that ran contrary to equity goals, such as exemptions for civil servants and members of the armed forces (such non-income related exemptions can be found in Ghana, Mali, Niger, St Lucia, and Yemen, for example). Thus, for example, a survey of patients at Niger’s central government hospital in Niamey found that the income of non-exempt patients was, on average, less than the average for the entire sample of patients (Weaver, Handou, and Mohamed 1990). Experience to date suggests, therefore, that at least in some countries, existing policies for fee exemption may actually be anti-poor.

Even where stated policies for exemption would clearly enhance equity and improve access for the poor, implementation often varies from policy intent. The basic issue regarding the enforcement of exemption policies is to identify persons too poor to pay fees and ensure that they have access to needed services while guaranteeing that the non-poor pay the designated fee. It is administratively difficult to determine a patient’s income, particularly when most income is generated through subsistence farming and patients have little incentive to be truthful about their economic status. Gilson (1988) presents evidence to this effect from Swaziland and Thailand. Moreover, even if the administrative capacity were in place, the costs of implementing a strict means testing program might be greater than the revenues that could be collected from fees, especially where fee levels are low.

The determinants of utilization are complex, and economic factors are only one consideration in people’s health care-seeking behaviour. As mentioned above, fees charged (formally and informally) at the point of use are only one component of the total access costs facing patients. There may often be transport costs, and there are likely to be non-monetary losses to the patient and accompanying family members (loss of time in other productive activities, for example). Distance to health facilities is, therefore, an important factor restricting access to care for large numbers of people in poor countries. Consequently, one
way to improve equity is to reduce the distance between health facilities and people. Establishing outreach services and rural clinics have been important ways of improving equitable access to care in many African countries. Often these have been disproportionately hard hit by the economic deterioration of the country, as they depend critically on good supply systems for drugs and good transport systems for supervision purposes. Claims on drugs and transportation are typically made first by higher level facilities (WHO/UNICEF, 1989). As service quality has fallen at peripheral levels, people have to travel a greater distance to get to the standard of care that they had previously.

It is against this background that many community financing projects have sprung up. An important step to improved equity would be to restore peripheral services to their intended level of functioning and supervision, giving priority in the transfer of fee income to support such facilities.

Akin, Birdsell and de Ferranti (1987) argued that fees could improve equity by generating revenues that could be used to extend services to remote areas where modern care was previously inaccessible. However, there is no evidence that new facilities have been developed as a result of national cost-recovery policies re-cycling revenue downwards, nor that outreach services from existing facilities have increased. On the other hand, there is limited evidence from community studies that the recycling of fee revenues into existing facilities has improved their quality of care, resulting in improved geographic access to higher quality services for the surrounding population. The World Bank (1993) cites studies from four African countries (Benin, Cameroon, Guinea, and Sierra Leone) that suggest the use of formal fees can lead to reduction in the non-fee (e.g., transport and time) costs facing potential patients of accessing care of sufficient quality. In each of these studies, the poor benefited most by the introduction of fees because their ultimate effect (when combined with measures to recycle the revenues into improved quality at local facilities) was to reduce total access costs.

An experience from Cameroon has demonstrated that cost-recovery can be managed in such a way as to improve utilization by the poor (Litvack and Bodart, 1993). The project was small and had substantial external support, but its achievements draw attention to the importance of considering the non-fee costs (time and transport) of access to care, as well as monetary charges. In this case, higher fees were used to improve quality, and the result was to reduce total costs of access to care of acceptable quality. People incurred a saving in time and transportation costs big enough to offset the cost of the fee and adjusted their utilization pattern accordingly (see Section 7, below). Although the large scale replicability of such experience remains to be demonstrated, it does suggest that, in most settings and especially in rural areas, fees are probably not necessary to deter "frivolous" use, because non-fee access costs provide a sufficient deterrent. Because of these costs, the poor will have less access to care even where no fees are charged.
The goal of improving access for disadvantaged groups requires policies for user charges and exemptions consistent with ability to pay and which do not prevent access to essential services. The evidence from several studies suggests that the poor are more deterred by price (both monetary and time-related) than are the relatively well-off. Policies to exempt the poor from payment of fees are present in most countries, but these have proven difficult to implement effectively and often have features that favour the less poor. There is no evidence to suggest that fee revenues have been used explicitly to extend service availability to poor persons, but fee retention to improve quality in peripheral facilities has the potential to improve the availability of better quality services to the local population. However, there have been very few examples documenting an improvement in access by the poor and more from national scale programmes.

7. IMPLEMENTATION ISSUES IN COST-RECOVERY

User charges can mobilize some additional economic support for health services financed and provided by government. This support can be converted into real health resources that can lead to improved quality at the level of the health facility. This conversion is not automatic, however. Experiences over the last decade have identified a number of conditions which appear critical to the success of cost-recovery as an approach to the improvement of people’s health.

A first, and perhaps most important condition for user charges to increase the level of health resources, is that, some or all of the revenues collected must be retained for use within the collecting health facility. In some countries (e.g., Kenya WHO, 1994) a change in Ministry of Finance practice on revenue-retention has accompanied the introduction of the cost-recovery policy, in addition to assurances that overall levels of funding for health will not be reduced by central government. In other countries (e.g., Ethiopia, Namibia, Zimbabwe, Malawi, and Eritrea) revenues collected by government health facilities still revert to the Ministry of Finance. This practice means that cost-recovery in health is neither an instrument of transferring access rights to the under-served nor an earmarked revenue-raising device for health. Revenue retention within the health sector, to better achieve health objectives, is, therefore, an important quid pro quo in the negotiation of subsidy-reducing pressures between Ministries of Health and Ministries of Finance. A variety of mechanisms exist for sharing fee revenue between the facility making the collection, the district, and the Ministry of Health. In both Kenya and Ghana, splits (in different proportions) between the district and the central Ministry were a feature of early cost-recovery initiatives; in both cases this has now shifted so that all of the funds collected remain at local level. 100% local retention is currently practised in Zambia, Mozambique and Nigeria. In Cameroon, only health centres retain all fee income; hospitals remit half of their income to the central treasury. The retention arrangement recently proposed in Malawi was for a 50-50 split between the health facility and the central Ministry of Health (Bennett, S. and Banda, E. 1994).
In Kenya the development and retention of revenue sources at district level is claimed to have had a bigger impact on decentralized decision-making than the whole of the previous decade's slow progress towards devolved authority, creating the first discretionary budget for local managers. Whilst local retention gives a greater incentive for staff to collect fees, it also poses a potential challenge for inter-district equity unless higher-level resource decisions can offset these initial inequities.

Secondly, once fees are implemented, they are likely to require revision. In several countries (e.g., Botswana, Ghana, Jamaica, Lesotho, Papua New Guinea, Turkey, and Zimbabwe) for which an act of government is needed to change fee levels, prices have remained unchanged for many years. Consequently, the percentage of government health expenditures recovered through fees fell dramatically during the period when nominal fee levels remained constant. Based on this experience, several studies have concluded that periodic adjustment of fee levels to keep pace with inflation should be built into user charge systems. This policy is most likely to be successful if price changes are a routine administrative rather than a political act (e.g., if fee levels are tied to a price index).

A wide range of fee setting options exists, with options for differentiation by service level, type of illness and type of patient. Flat rate registration or consultation fees, and variable charges according to the number of items prescribed, use of diagnostic services, or length of stay are possible (WHO, 1994). The unpopularity of the flat rate registration fee in Kenya became clear when temporary gaps in drugs supply were experienced by health units. The present system charges people according to the number of items prescribed. Cameroon uses a combined system of registration fees and drug charges, with the former fixed by central government. Drug prices are set locally, but the prices charged by medical stores are set in such a way as to subsidize costs to more remote districts, and for essential drugs, such as chloroquine. Preferred fee-setting arrangements appear to include elements of central guidance, with local discretion in their application, rather than either a totally centralized or devolved system (WHO, 1994).

There is little evidence of experiences where mechanisms function successfully, consistently, and cost-effectively to identify the poor for exemption from fee payment so that their access to necessary care is not inhibited. This does not mean that exemptions do not work and should be abandoned. More research is needed to identify the effect of exemption measures on the utilization of services by the poor in the hopes of illustrating the institutional features that facilitate good performance.

Furthermore, in order to reduce costs to improve cost-recovery and keep financing schemes affordable, waste and inefficiency must be reduced. With lower costs, less revenue is needed, and thus facilities can charge lower prices (Bruet-Jaillly, 1991; Korte et al., 1992). Keeping down the costs of obtaining drugs is particularly important for the financial sustainability of community financing schemes (as in the Bamako Initiative, for example).
For user charges to contribute to the improved operation of health services, appropriate management skills and financial institutions must be in place. Fee retention will not automatically lead to an improvement in quality. Conditions for success in the collection and use of fee revenues in peripheral health facilities include having staff trained in basic financial management, the availability of reliable local banking arrangements for the investment of funds (especially in highly inflationary environments), development and use of simple audit procedures, and the establishment of locally accountable committees to oversee the use of revenues (WHO, 1994). Inadequate local banking facilities, especially in rural areas, have been identified as major sources of loss of funds. In Ghana revenues were deposited in non-interest bearing accounts, at a time of high inflation and slow decision-making; in Kenya, confusion about the post office accounts in which revenue was deposited has led to a prolonged struggle between the Ministry of Health and the post office. Waddington and Enyimayew (1990) found that many health facilities in Ghana had not spent any of the funds to which they were entitled because of a lack of clear guidance on how to do so. Changes in fee policy have sometimes caused high levels of confusion among both health workers and patients. Price uncertainty is argued to be an important factor inhibiting successful cost-recovery policy (Knowles, 1995). Careful publicity and information strategies are increasingly recognized as essential components of a successful fee policy.

Finally, even if all of the above are adequately managed, few health authorities at local or national level have the capacity to monitor the effects of their cost-recovery policies. In Africa in particular, a large slice of the implementation support for cost-recovery and the assessment of effects has been supported from external sources. Ministries of health are often unable, without special efforts, to monitor the level and composition of health system utilization with any accuracy. Thus, the capacity to implement and monitor the objectives of health policy which cost-recovery ostensibly serves, need to be substantially strengthened.

This experience underlines three conditions that are associated with increasing access for the poor through a policy of increased user charges at government health facilities. The first is a policy of local revenue retention: some or all of the revenues collected must be added to the economic resources of the collecting health facility. A related condition is that the managerial capacities sketched above must exist to convert the retained revenues into perceptible quality improvements. The third condition is empirical: the overall effect of the increase in fees and the use of the revenues to improve quality must be to actually lower the costs of access to effective care facing potential users. This last condition suggests that the equity rationale for implementing fees for publicly provided health services may be strongest for relatively isolated communities, or where private alternatives for equivalent services are very expensive in terms of both monetary price (travel and fee) and the amount of time needed to use these providers.
8. CONCLUSIONS

Cost-recovery policies have wide-ranging impacts on people’s health seeking behaviour; a focus on the revenue raising objective alone is dangerously narrow. In spite of a common consensus between politicians, administrators and medical professionals, health charges are often a potential political flash-point.

There is now very widespread acceptance (in Africa and elsewhere) that cost-recovery has some role to play in the financing and allocation of health services. This represents a major change from the early 1980s. From recent experience it can be seen that the trade-off between raising money and achieving more equitable access may be sharp unless several accompanying measures are put in place. Also it has been seen that small amounts of money at local level can make an important contribution to service availability.

Achievements in raising revenue in the aggregate are modest in most poor countries. Problems and costs in converting revenue into service improvements are substantial. There must remain real doubt as to the capacity of Ministries of Health to implement and manage all of the supporting conditions necessary to convert revenue into improved access to health care of better quality. The costs of achieving this are perhaps best estimated by looking carefully at technical assistance costs in a country like Kenya; where cost-recovery has been a central concern of government health policy in recent years. Together with the advantages of small scale, the often “hidden” quantities of external support may well be a common reason why “community financing” initiatives have in many cases overcome these implementation obstacles. Nevertheless, the potential for high levels of cost-recovery has been demonstrated in sub-national projects for improving service quality at health facilities through cost-recovery (Cameroon, Benin, and Guinea, for example).

The major lessons from experience draw attention to the difficult process of converting revenue gains into service quality and/or accessibility improvement. It is now clear that a composite package of accompanying organizational and managerial changes is needed to support successful cost-recovery policy if its most obvious predicted effect - reducing demand by those least able to pay - is to be avoided.

This review has illustrated several conditions that are associated with the capacity of fee systems to make a positive contribution to the goals of health sector reform. The most important conditions relate to cost-recovery policy, managerial capacity, and institutional development. In terms of policy, sustained progress towards reform goals of equity and efficiency requires that some or all of fee revenues be retained at the collecting facility and translated into quality improvement; and that periodic adjustment of fee levels be an integral part of fee systems. The managerial and institutional capacity must exist to use the retained revenues to promptly improve the quality of care in a manner that is perceptible to the local population. Local institutions (banks, for example) for the investment of collected revenues also need to be in place to prevent losses that are due to inflation.
Without other accompanying reforms, charging users of government health facilities is unlikely to yield substantial progress toward equity and efficiency. Associated policy measures include changes in resource allocation in favour of first contact facilities, bypass charges for persons using referral facilities for first contact care, and a waiver of fee payment in hospitals for persons who have been referred from first contact facilities. Such a package of reforms may be facilitated by an organizational structure wherein overall management, including resource allocation authority, is vested in a single institution responsible for the health of the population in a defined geographic area. Such a structure should facilitate coordination of services across providers better than do administrative structures organized on the basis of specific facilities.

Most of the reforms needed to accompany successful cost-recovery involve policy decisions and management training. There are few obvious tools available to support implementation. However, one method for periodically updating fee levels in community facilities may be a relatively simple and replicable approach. Updating fee levels can be achieved by tying these prices to the value of a fixed quantity of a local staple food. This could then be used as an index value relative to which prices for various services could be set. Such an approach has been used successfully in Zaire’s Bwamanda health zone to adjust the premium contribution for a rural health insurance scheme (Shepard, Vian, and Kleinau, 1990).

Maintaining an affordable supply of drugs is critical to the success of user fee programs because, as several studies have shown (see, for example, Mwabu, Alinson, and Nyamete, 1993; Litvack and Bodart, 1993; Waddington and Enyimayew, 1990), people appear to be more willing to pay for tangible products such as drugs than for other services. Reducing waste and inefficiency can play an important role in keeping services sustainable by reducing the prices that need to be charged to meet health facility costs. Many tools have been developed and are readily available that can help governments to reduce the costs of drugs. Amongst these are documents produced by WHO and others to assist countries to select which drugs to obtain, quantify drug needs, procure the desired products at the least cost, improve storage and distribution, and promote rational prescribing practices (WHO, 1990; WHO, 1988a; WHO, 1988b; MSH, 1984).

The scale and scope of non-government financing and provision in poor countries is becoming clearer. The focus of health system reform is on improving performance of the total system, ensuring some division of responsibility between public and private sectors, less direct service provision responsibility by the central ministry of health, and strengthening of its overall monitoring and regulatory functions. Stronger lines of accountability are being stressed.

Managerial capacity in ministries of health is often weak. There is thus limited prospect in the short term for nationally administered schemes of cost-recovery to be both important sources of additional finance and of improvements in the quality of care and
access to it. However, in the context of accompanying organizational and financing change and institutional development, cost-recovery will have a role to play in ensuring that those who can afford to pay for care do, that low efficacy services are provided at full cost where they are financed through the public sector, and that the price signals facing consumers reinforce a rational allocation of health resources.
REFERENCES


McPake B., K. Hanson, and A. Mills. 1992. "Experience to Date of Implementing the Bamako Initiative: A Review and Five Country Case Studies." London School of Hygiene and Tropical Medicine, Department of Public Health and Policy, Health Policy Unit.


Yoder R.A. 1989. "Are People Willing and Able to Pay for Health Services?" *Social Science and Medicine*