

**Health financing in developing and
transitional countries**

Briefing paper for Oxfam GB

Sophie Witter

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THE UNIVERSITY *of York*

**International Programme
Centre for Health Economics
University of York
York YO10 5DD**

Tel: +44 1904 433639

Fax: +44 1904 432701

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Introduction

This paper aims to provide concise analysis of the main systems which are currently used for paying for health care services in developing and transitional countries. The goal is to give a clear framework for Oxfam and other NGO staff of the main features of health financing systems, and what issues to consider in different contexts. Lessons will be drawn from examples. Given the variety of settings, however, it will not be possible to make definitive recommendations of ‘best systems’ – only to highlight learning to date.

Health financing will be discussed here mainly in terms of raising revenue, with only brief treatment given to how that revenue is spent (which leads into a number of important but separate topics, such as purchasing, organisation of services, priority setting, and payment systems. All of these have important implications for health service goals, and are linked to, but different from, fund-raising issues).

Objectives of health financing systems

The ultimate goals of a health system will depend on local social and political preferences. They are often not expressed clearly. However, commonly they include:

- Better health: this may be seen as a goal in its own right, or as a means to other goods, such as improved productivity
- Equity: some concept of fairness, or social justice, however locally defined
- Solidarity: this embodies the idea that different groups in society are interdependent and should assist one another. This was a political ideal underlying the development of the Semashko health system in the former Soviet Union and also the development of most national health systems post-independence.

Health financing can only go part of the way towards achieving these ultimate goals. Other important issues relate to what kind of services are provided and how well they are provided. What are the objectives which are specific to the health financing function? Let’s answer that by looking at some important features of health care markets.

For most goods, such as food or shelter, we expect individuals and households to buy and pay directly for whatever they think they require. Health care differs in a number of ways:

1. The need for health care is sporadic and unpredictable, so it is hard to ensure that you have the money to pay for it when it is needed
2. Health care can also be very expensive, particularly in the case of hospital treatment, accidents and long-term illnesses
3. Poor people are not only less able to afford health care (which is also true of other goods), but also more likely to require health care, as poor housing, nutrition and employment conditions tend to generate higher health needs.
4. When you fall sick, it can fundamentally impair your ability to function.

These characteristics generate important objectives for financing systems (though not all systems meet all of them).

1. **Risk spreading.** They should spread risk over time so that households can plan for health care expenditure. Medical savings schemes, for example, require households to make regular payments into a savings account, so that ‘lumpy’ health care costs can be met.
2. **Risk pooling.** For expensive treatments, even personal savings schemes may be inadequate to meet the high costs. Financing systems should therefore aim also to pool risk between different members of the community, so that those with low health needs can subsidise those with high health needs. Another form of cross-subsidy could be between poorer and richer groups in society, or between the old and the young.
3. **Connection between ill-health and poverty.** Because there is this link, we should try to ensure that the poor have access to health systems and that they are not paying disproportionately for them. Where this is not achieved (as is the case in many developing and transitional countries at present), poor households end up paying a higher proportion of their disposable income on health care and often receive a lower standard of health care than richer households.
4. **Fundamental importance of health.** Health is a basic need, without which we are unable to enjoy other goods. We therefore aim for the highest access possible to appropriate health care services by all members of society.

In common with other markets, a financing system needs to provide adequate and reliable flows of funds, so that services can be planned and sustained over time at an acceptable level of quality. It should also do so in the most efficient way possible (i.e. involving the least waste of resources) and involve users, so that services are appropriate to their needs and delivered in an acceptable way (which ensures that they are effective).

Main models of health care financing and criteria for assessment

1. Paid direct by individuals <ul style="list-style-type: none"> • user fees (public and private) • savings-based (e.g. medical savings accounts) • informal payments 	3. Insurance-based (selective) <ul style="list-style-type: none"> • social insurance • voluntary community insurance • private insurance
2. Insurance-based (universal) <ul style="list-style-type: none"> • general taxation (national or local) • payroll tax 	4. Other <ul style="list-style-type: none"> • donor funding (aid)
Evaluated against 7 main criteria: <ol style="list-style-type: none"> 1. risk spreading (over time) 2. risk pooling (between different groups of people) 3. universal access (highest possible coverage) 4. fair financing (costs proportionate to income, or increasing with income levels) 5. adequate and reliable funds (financial sustainability) 6. ease of operation (not too complex or expensive to manage in that context) 7. user involvement (community input into design, running and evaluation) 	

DIRECT PAYMENTS BY PATIENTS

Direct payment systems share a number of features. One is that individuals have a direct incentive to look after their own health. They are unlikely to use services ‘frivolously’ because they, rather than society, bear the costs of ill-health. This should reduce inflation of health care costs, as individuals will be concerned with the price they are paying, and so put pressure on health staff to keep costs down.

On the negative side, there will be problems of equity and access to services with a system financed through direct payments, unless the state is able to finance contributions for disadvantaged groups. None of the direct payment systems pool risks to any large extent, though some do spread risks over time. None guarantees universal access, and all tend to be regressive (to place a higher burden of financing on the poor).

Another issue is that direct payments create a market with multiple private purchasers: each patient or family is buying services direct from providers. This is seen as positive by ‘free market’ advocates. However, individuals are not always able to tell the quality and appropriateness of medical care (which is a very complex good). There is therefore usually a need for strong public regulation of the providers, to ensure that they do not, for example, prescribe unnecessary drugs or recommend procedures which are not needed by the patient (what economists call ‘supply-induced demand’). Direct payments usually imply a fee-for-service payment method, which gives health care providers an incentive to induce demand (as their revenue is directly linked to activity).

1. User payments

Key features. User payments are direct, out-of-pocket payments made by patients for use of health facilities (both public and private). In contrast to informal payments, they are officially sanctioned. This means that they can be monitored, in terms of amounts collected and how they are used. Policies can also be set for how much is paid, and who, if anyone, is exempt from paying.

Fees can be structured in different ways. The most complex charge according to the intervention or treatment and have to be paid each visit. Private sector charges are usually of this type. Others are flat-rate (i.e. same for everyone) and cover a whole episode of illness, regardless of number of visits. The latter have a risk-spreading and pooling function, whereas the first type do not.

Prepayment schemes, where cards are bought which entitle users to a certain number of visits or drugs, are a form of user fee which incorporates risk-spreading and some degree of risk-sharing. (Costs are fixed per visit, though the sick will still pay more if they have to visit the clinic more frequently).

Potentially, user fees could be related to income, in order to make charging progressive (i.e. wealthier pay a higher proportion of costs), though in practice this is too complex to be common. More often, fees are set at a uniform rate, but with some

exemption scheme, whereby households under a certain income threshold do not have to pay. These schemes do not always operate effectively (see below).

Another important variable is the level of fee charged. The lower the absolute amount, the less will be the negative impact on access to services for the poor. On the other hand, the lower the amount, the less effective it is as a vehicle for raising finance for the health care system.

Another issue is the type of service, or level of facility, that levies user fees. Fees can be used to encourage certain patterns of use – for example, by charging user fees for people who attend secondary facilities without referral. Similarly, higher fees could be charged for certain services which are considered of low social importance, while services with important positive effects (like vaccination) are provided free of charge. User fees can be used to encourage cost-effective health care patterns, though those benefits would have to be weighed against any negative features, such as reduced utilisation.

Impact. User fees can play a role in alleviating specific resource shortages which are reducing the effectiveness of health services. They are not, however, ideal as the principle fund-raising method, for a number of reasons:

1. they do not (generally) spread risks over time
2. they do not (generally) pool risks between patients
3. they do not guarantee access to health services
4. they are regressive as the financial burden falls on the sick, who are often also the poor
5. they do not generate adequate and reliable sources of funds
6. they are time-consuming and expensive to administer
7. they do not in themselves encourage active user participation in service development

User fee schemes have been common in developing countries since the early 1980s. They are less common in transitional countries, for historical reasons. Since they take very varying forms, it is hard to generalise about their effects. However, studies point to some lessons:

- user charges can add useful small amounts of income at the local level, but rarely re-coup a large proportion of costs. A review of African experience by Gilson (1997) found that they commonly raised in the range of 5% of revenues, net of administrative costs (one as high as 15% - Ethiopia – but others, like Burkina Faso, a mere 0.5%). They should therefore be seen as a supplementary channel, rather than the main one.
- there is some evidence that user charges permit private practices in the area to increase their charges
- they may limit ‘excessive demand’ (unnecessary use of services), as originally argued by organisations such as the World Bank, but they also limit legitimate demand, especially by poorer families. There is evidence that the poor may respond by delaying treatment, which is likely to aggravate the illness. Many will self-prescribe, which can be costly as well as ineffectual. Even where families do manage to pay, there may be serious negative consequences for them, in terms of reduced consumption of other important goods, or indebtedness.

- some studies have found adverse effects on case-mix (e.g. drop in treatment of respiratory infections and STDs in Swaziland, Yoder 1989) and/or differential effects on different groups (e.g. sustained reduction in rural utilisation in Ghana, Waddington and Enyimayew, 1990).
- exemption schemes for the poorer are rarely well implemented, so the equity effects of charges have to be considered carefully in advance. Some studies suggest that the rich benefit disproportionately from exemptions. A study of the Bamako Initiative in three African countries concluded that ‘no country had developed an effective mechanism of protecting the poorest from payment and there were signs that the existing mechanisms benefited the non-poor’ (Gilson, 2000). This was attributed in part to the emphasis given to financial sustainability, over the goal of equity.
- they may not reduce utilisation of services - indeed, in some cases, are thought to have increased it - if they are used to improve quality
- the cost of administering user fees can be high, especially in relation to revenue (sometimes in the region of 40-60% of revenue), which makes it a relatively inefficient method of fund-raising
- in terms of participation by users, it is hard to see paying fees as amounting to involvement in the running of services (as appeared to be the argument in the early days of the Bamako Initiative). Participation needs to be developed separately through involving users in management structures.

Equity and user fees: the case of Sierra Leone

A study was commissioned by UNICEF of the Bamako Initiative in Sierra Leone, which had consisted of introducing user fees to cover the cost of essential drugs, vaccines and salary incentives.

The study examined the effect of PHC curative fees on household welfare. Survey data was gathered from 1,156 households, mainly subsistence farmers, in 2 rural districts, during the dry and rainy seasons.

The study found that while the richest 20% of the population spent 4% of their income seeking treatment, the poorest 20% spent a quarter. This related partly to greater need: they were 20% more likely to have been ill than the richest group.

The greatest burden was, however, caused by use of hospitals and private practitioners. These episodes, while few in number, accounted for over 50% of household expenditure on treatment. The mean cost of a single visit to these places was 0.41% of mean annual income, compared with 0.13% for a PHC visit and 0.05% for a market drug purchase.

Affordability was a general problem. Of 2,539 cases, 1432 (56%) did not have money available to pay for treatment. Of these, 540 obtained money, while 892 (62%) did not, and did not access any formal medical treatment.

The most common method of raising money was borrowing from friends and relatives (50%). Selling stored rice was also common. The methods that were most likely to have adverse effects on household welfare were borrowing from a moneylender, pledging a cash crop, pledging other property, using business capital and selling possessions, which together totalled 7.2% of all cases in which money was sought. Unsurprisingly, the richest 20% of households made less use of high-risk methods.

This study suggests that user fees are adding to household burdens, particularly for the poor, but that exemptions at primary level would make little difference, because the highest costs are incurred by visits to hospitals (public or NGO-run) and private practitioners. This suggests that the focus should be on financing systems which pool costs at secondary level.

(Taken from Fabricant, S., Kamara, C. and Mills, A. Why the poor pay more: household curative expenditures in rural Sierra Leone. International Journal of Health Planning and Management, vol. 14: 179-99, 1999.

Policy issues. If user fees are developed as a supplementary source of income, the following points should be considered.

- If user fees are to enhance service quality, they need to be additional and supplementary, rather than an alternative to central funds. Introducing user fees should not therefore be an excuse for the Ministry of Finance to slash budgets.
- Conversely, they should be an alternative (and NOT supplementary) to informal payments, if relative affordability of the service is to be improved.

- A range of supporting measures will be necessary to ensure that quality does improve: these may include in-service training; improved supervision; improved drug supply; or new information systems.
- User fee revenue, or at least a substantial portion of it, should probably be kept at the local level and used to relieve key shortages (e.g. funds for supplies, for drugs, for staff incentive payments etc.). This creates incentives for staff to collect monies, but does make it harder to redistribute revenue from richer towards poorer areas.
- As with other types of decentralisation, it also requires strengthening of management skills at the local level, so that funds are well administered.
- They may be appropriate in re-directing demand - for example, in encouraging people to seek care at the primary level, by imposing user charges on self-referral to secondary facilities, by charging more for non-essential services or by cross-subsidising preventive services. The effectiveness of this approach does rely, of course, on primary services being of a reasonable quality. It may also be difficult to channel funds levied at the referral level back to primary care facilities.
- The response of the private sector needs to be considered. For example, raising user fees in an area with a thriving private sector may simply lead to patients changing providers (reducing utilisation and revenue at the public centres).
- Fee rates and exemption policies should be simple and clearly advertised.
- Guidelines for how revenue can be used (for quality improvements) should be published and monitored.
- They should be set at modest levels and be accompanied by effective exemptions. These may be based on a number of factors – e.g. income levels; geography; occupation; age; or type of service. For example, all children under a certain age could receive free services, if this is seen as a social priority and is affordable. Equally, preventive services are often exempt from fees, because demand for them is low, and yet they provide benefits both to individual and society (reduced spread of infectious diseases, for example). The difficulty in a poor country is that exemptions may extend to virtually the whole population, making user fees redundant as a source of income!
- Where possible, fees should incorporate risk-spreading and pooling features – for example, by prepayment schemes and by charging flat rates for consultations. These payment schemes can be adapted to local requirements – for example, permitting payments in kind, or collecting payments after harvesting time – and can be developed in a participatory way by community organisations.

A study of a prepayment programme in Bolivia focused on the importance of community involvement in ensuring sustainability. This involvement was encouraged by a number of factors, including:

- awareness by the community of shared financial risks
- awareness of externalities
- an existing community organisation
- indigenous concepts of savings/prepayment
- transparency of benefits and organisation
- presence of a group of people able to invest energy in the creation of the scheme
- active involvement of the community in planning and running the scheme.

(Toonen, unpublished)

2. Savings-based

Key features. Savings-based financing schemes are characterised by risk-spreading but not risk-pooling. This means that users do bear costs in proportion to their use of facilities, but are assisted in setting money aside to cover health costs as and when they occur. Singapore pioneered such savings schemes (see box below), but they have also been implemented in the US and China, and are under consideration in a number of other countries, such as Malaysia and Uzbekistan.

Medical savings schemes: the example of Singapore

Singapore has a long-established medical savings account scheme, whereby pre-tax deductions are made from employee's pay into health accounts. This 'Medisave' system was introduced in 1984. The funds are used by the employee to cover some ambulatory and minor hospital costs over their lifetime. Any funds left over in old age can be used by the household for other purposes, or be transferred to relatives.

Major health expenditure is covered by a compulsory public insurance programme, Medishield, financed from employee contributions and with high deductibles (i.e. patients have to pay a fixed initial amount before the insurance fund kicks in).

There is a further fund, Medifund, which provides means-tested grants for the small number of Singaporeans without adequate personal cover.

One feature of the system is that households pay a number of out-of-pocket expenses for healthcare, including ambulatory care costs, payments for hospital care which exceed the fixed rates which are reimbursable out of Medisave, and Medishield copayments (these include high deductibles, a 20% copayment and limits on lifetime expenditure).

There are also high levels of public subsidy in the form of low-cost ambulatory clinics for those who want a cheaper alternative to the private sector for primary care, and subsidies to hospitals (the majority of which have remained in the public sector, though autonomous in management). Overall, public funding of total health care costs remains substantial, at around 30%.

In terms of the objective of limiting the growth of health sector costs, it appears that Singapore's experiment has been reasonably successful. Although health care costs have grown as income levels increased, they have grown less than other similar economies, such as Hong Kong. This may also be related to restructuring on the supply-side: shortly after MSA was introduced, public hospitals were restructured and given semi-autonomous status, which increased competition between them.

All these features indicate that while MSA may be applicable in other contexts, they will require very specific conditions to be successful. These are likely to include:

- Relatively high income levels, so that contributions are affordable
- A large formal sector workforce, so that taxes can be collected easily
- An effective system of payroll tax collection, combined with efficient fund management and claims processing
- Strong public financing and regulatory capacity.

Based partly on 'Medical savings accounts for developing countries' by Nichols, L., Prescott, N. and Kai Hong Phua, in 'Innovations in health care financing, edited by Schieber, G., Washington, D.C.: World Bank, 1997.

Impact. MSS suffer many of the same disadvantages as the other direct payment systems, in terms of lack of risk-pooling; lack of universal access; and generally regressive payments (the sick pay more). They also require subsidies and back-up

financing methods; are highly complex to operate; and involve users mainly in terms of paying for services, rather than any wider definition. They do, however, offer the advantage of spreading the costs of health care over time for individuals and households, thus making them more predictable, and alleviating hardship at the time of illness.

Policy issues. Medical savings schemes are suited to certain conditions:

1. Where the culture is individualistic, rather than emphasising social solidarity
2. Because they are relatively complex to operate and assume, for example, an efficient banking system, they are unlikely to operate well in very poor and remote communities
3. They are generally restricted to primary care or lower cost interventions, as individual's accounts are unlikely to be able to handle chronic or expensive conditions. This means that a secondary insurance market is required
4. Their main 'selling feature' is cost control, which is highly relevant in some health care systems (e.g. US and some other OECD countries). This is less likely to be a priority goal in low income countries, where expenditure is still relatively low, but may have appeal in middle income countries which are concerned about escalating health care costs.

3. Informal payments

Key features. The key feature of informal payments is that they are payments by patients - usually to health staff, but also sometimes to other support staff in health facilities - which are not officially recognised or authorised. In many cases they are technically illegal, but where they have become very common, a blind eye is often turned by other officials.

These payments take many different forms. They could include payments in advance for a service, gifts after a procedure has been carried out, or bringing drugs, supplies or food into the clinic.

Estimates of the importance of informal payments are hard to gather, since by their nature they are hidden, but a number of studies suggest that they form a significant element in health financing in transitional and developing countries at present. In Bangladesh, for example, informal payments were recently found to outnumber formal payments at public health facilities by a factor of 12 (see box below). In Bulgaria, a survey found that 49% of patients paid unofficially for services. In Kyrgyzstan, 78% of in-patients paid for drugs (which were supposedly free). In Kazakhstan, a survey of acute hospital care found that patients were contributing around 50% of costs, mostly in the form of payments for drugs. In Poland, a survey of doctors' income found that 38% came from official sources, and 62% from 'gratuities' (Kornai and Eggleston, 2001).

Informal payments: evidence from Bangladesh and Uganda

A number of recent studies in Bangladesh have provided evidence on the scale and nature of informal payments for health care. The predominant form of financing is still public taxation and donor funding; low-level user fees have also recently been introduced to augment public revenues. Despite this, informal charging remains common. A recent study found between 20-30 % of users reporting informal payments. These included direct payments to staff for treatment (sometimes via ancillary staff), as well as a proportion of payments for drugs and supplies, taken by staff as 'commission'. The evidence suggested that such payments are 'virtually standardised and routinised' at district hospital level and above.

One interesting finding was that unofficial fees seemed to mirror official, in that they were highest where official fees were highest (presumably because a more complicated case-mix and richer clientele were found at higher level facilities). They were considerably higher though – by a factor of 12.

85% of unofficial fees were for medicines or supplies (this includes an element of profit for the staff selling them).

The studies suggest that there is no systematic relationship between income levels and payments. Payments were roughly equal across income groups, which implies that they are regressive (as income levels rise, the proportion which will have to be spent on health care will fall. The opposite of this is 'progressive', which is desirable from an equity point of view).

A study of public health workers in Uganda came to similar conclusions about the extent to which public health systems are being funded through informal payments at present. The study concluded that: 'In other respects, this facility operated as if it were a private clinic in which services were bought and sold on a commercial basis. The medical assistant monopolized most of the facility's revenue-generating capacity. Other health workers operated more minor businesses on the fringe of the clinic's main activities and earned correspondingly minor incomes as a result. The drugs supplied to the unit were, to a significant extent, treated as the private property of the health staff and traded on that basis'. A 40% leakage rate was found, and these included the most valuable drugs.

(Taken from Ensor, Hossain and Miller, 2001, Funding health care in Bangladesh – assessing the impact of new and existing financing, HEU Research Paper 24. Killingsworth, J. et al, 1999, 'Unofficial fees in Bangladesh: price, equity and institutional issues, Health Policy and Planning, 14,2. Asiime, D. et al., Private-sector activities of public-sector health workers in Uganda, in Bennett, McPake and Mills, 1997, Private health providers in developing countries, London: Zed.)

Why have informal payments become so common in many health systems? It is easy to dismiss informal payments as corruption, but the motivations are more complex. One issue is underfunding. Many developing and transitional countries have seen a decline in tax revenue – often of a dramatic nature (e.g. Georgia's tax in 1995 was 3% of the 1991 level). Where health staff salaries fall below earning opportunities in other sectors (such as private trading, for example) – and often below the level required to pay for food, school fees etc. – then staff become inventive in increasing their income.

Similarly, if budgets for supplies have been cut due to budget short-falls, then staff will be unable to carry out procedures unless they can get patients to pay for drugs, bandages etc. Payments in these situations are actually allowing the health care system to function (albeit not in an ideal fashion).

If, on the other hand, doctors and others are abusing the fact that they are the only suppliers of that type of service in the area to extract extra income over and above what they need to run the service or could earn elsewhere, then informal payments can more appropriately be described as corruption.

Impact. From an equity point of view, informal payments are far from ideal. There is no risk sharing or even risk-spreading mechanism: users bear the cost as and when illness strikes. If they cannot afford to pay, they will not be treated, or will be treated in a sub-standard way. Costs are also uncertain: as there is no fixed tariff, usually, patients are likely to be unsure how much they need to pay to get the service they desire.

Being informal, and hence unrecorded, it is hard to estimate their volume, type and effects on the system. For example, it is possible in some areas that providers discriminate by income between clients, charging richer people more. That would have a risk-pooling effect, allowing some cross-subsidy of poorer patients. However, unlike official fees, which can be designed with certain features like that in mind, there is no accountability with informal fees. In general, they are almost certain to be regressive – i.e. to impose higher burdens on the poor.

Informal payments are also rarely the main source of health sector financing. They can provide additional funds for specific underfunded inputs (such as staff or drugs), but by their very nature are unsuited to be sole financing mechanism.

On the provider side, it is likely that informal fees distort the type of services provided. Richer areas will attract more practitioners, and some specialties will be more lucrative than others. For example, surgery and gynaecology/obstetrics typically generate higher informal payments than, say, public health. From a social point of view, it is likely that public health specialists contribute more to health gain, so a financing system which attracts health staff to other specialties is working against the public good.

From the patients' point of view, informal payments are usually something negative – a drain on household resources – but there can be a willingness to pay where it is perceived as buying a higher quality of service. In some contexts, such as some of the transitional countries where health care is nominally free but of a low quality, patients see informal payments as a way of ensuring that they can choose their physician, for example, or be treated with more care.

Policy issues. There is a debate about whether informal payments should be 'legitimised' into official user fees. The argument in favour is that it would be easier to control these funds and use them appropriately and that the cost would be more predictable for customers. Where customers feel that they are able to use additional payments to secure quality, and practitioners have an entrenched interest in receiving them (this tends to be more the case amongst urban secondary specialists), it may not

be easy to ban informal payments. The risk is that user charges are added onto, rather than replacing, informal charges.

Informal payments are generally a symptom of a system which is underfunded and poorly regulated. There are therefore a number of options for reducing or removing them:

1. Ensuring that health staff are paid adequately. What is adequate pay? In absolute terms, you can ask the question: can you live reasonably on that salary? In relative terms, the issue is: what are people of that level of skills and training earning in other sectors? The point of that question is that health staff can and will migrate to other activities if the rewards are high enough (rewards taken in the round, including all benefits, such as training, security of tenure, benefits in kind etc.).
2. At the same time, the quality of service needs to be considered, so that patients do not feel that they have to 'top up' to get adequate treatment. Incentives for health workers to provide quality service could include promotion systems based on merit or bonuses for good performance (which require careful implementation, however, to ensure that the right incentives are set and that the system is operated fairly).
3. Professional regulation often needs improving too, so that informal charging practices are not continued under the new, improved pay regime. Effective sanctions against informal charging would be part of this (e.g. dismissal – very rare in most countries today).
4. Where there are a large number of badly paid, poorly trained health staff, the politically difficult decision to reduce numbers may be necessary: a smaller, more effective, better paid, more motivated and ethical work force is preferable to a large, out of control, parasitic one.

A number of countries are experimenting with ways of reducing or eliminating informal payments. In Bangladesh, payments have been formalised at sub-district level, which has reduced, though not eradicated informal payments. A tertiary hospital has introduced a system whereby patients make payments direct into a commercial bank account, and receive proof of payment. This is also believed to have been fairly successful in reducing informal payments. In Kazakhstan and Kyrgyzstan, a number of measures have been taken, including increasing physician pay, making information on prices more explicit and formalising payments for acute services. In Uganda, doctor's pay has been substantially increased this year, in an attempt to reduce the prevalence of informal payments. Without clear measures of levels before and after such reforms, it is often hard to evaluate how successful these initiatives have been.

UNIVERSAL TAX-BASED SYSTEMS

All insurance-based systems face the potential problem of what is called 'moral hazard'. Moral hazard is used to describe a situation where consumers do not bear the direct costs of services and so are encouraged to behave in a way which increases the use of those services. For example, they may take risks or fail to take preventive measures if they know that the insurance company will pay for all future treatment.

On the supplier side, suppliers may encourage excessive treatment in order to boost their income (supplier moral hazard).

This raises the cost of premiums, which is undesirable, and so insurance schemes need to find ways of limiting moral hazard. One option is to set up co-payments, so that use is not entirely free to users. Another is to limit the range of services or individual utilisation levels. Another is to risk-rate individuals, so that those who are likely to use services more pay higher premia. Another, again (most common in tax-based systems) is having waiting lists for oversubscribed services. All of these will reduce coverage by the scheme.

However, even in the absence of formal or informal fees, users already face substantial indirect costs of using services. These include travel costs and loss of income during the time which it takes to seek care. These are often heaviest for the poorest – for example, for those who live furthest from facilities, and for self-employed and peasant farmers, who are not compensated for time off work. It seems unlikely that these groups will use services ‘frivolously’. Indeed, the key to increasing their access may be to reduce the indirect costs which they face (e.g. by reducing distances to facilities).

A study of different DOTS strategies for treatment of tuberculosis in Pakistan found a correlation between economic status and drop-out rates. Though treatment was free, the time implications of attending clinics daily were serious, and it was found that the economically active were most likely to fail to complete the treatment. Similarly, studies have found that even when services are free (e.g. for members of an insurance scheme), utilisation rates tend to be lowest for those living furthest from facilities, especially for non-urgent treatments.

Rather than deterring patients, it may be more important to tackle the incentives for suppliers to inflate costs. One way of doing that is to use payment systems which do not reward doctors or facilities according to activity levels. Although the detail is beyond the scope of this paper, fee for service payments should generally be avoided, especially when combined with insurance. Payments systems which have some in-built limits, such as fixed budgets, capitation, salaries or contracts are less likely to lead to cost escalation.

The universal systems are united by the common feature that all citizens are entitled to use the health services (whether they have contributed financially or not). They therefore incorporate both risk-spreading and risk-pooling, as well as guaranteeing universal access (at least in principle).

3. General taxation

Key features. The key features of general tax-based funding are that:

- the whole population is included in the risk pool;
- contributions are not based on health or utilisation but on some measure of income, wealth or expenditure (depending on the tax system)
- contributions are not earmarked for health, but go into a general pot, which is then allocated to different sectors according to political priorities.

This type of funding has traditionally been the main source of public finance in transitional and many developing countries. It is, however, declining as a proportion of overall spending in the health sector in these regions, which opens up a financing gap to be filled by other collection mechanisms.

It is associated with integrated bureaucratic health care systems in which funds pass to health facilities in the form of budgets and staff payments. These in turn are associated with poor quality and efficiency, partly because of the lack of internal incentives for institutions and staff to perform well, but also because of declining revenue. The decline has been caused by a number of factors. The most common, which have recently been experienced by many developing and transitional countries, are:

1. economic recession (fall in overall growth rates in the economy)
2. economic restructuring (e.g. shift to informal sector employment, reducing tax collected via payrolls)
3. poor tax collection systems.

To illustrate the third point: government revenues, as a percentage of GDP, were 20 % in low income countries, compared with 31% in middle income and 42% in high income countries (1995 figures). This shows the relationship between revenue-generating capacity and income. It severely inhibits the capacity of low income country governments to develop public financing mechanisms.

In addition, in many developing and transitional countries the proportion of government revenue has been dwindling, even in the context of a growing economy (such as China's). Many low income countries now collect less than 10% of GDP in taxes. This has encouraged the semi-privatisation of health systems, with unfortunate consequences, both in efficiency and equity terms.

Impact. Tax-based funding has the advantage of pooling risks over a large group (as taxation is compulsory, at least in theory), which increases access and also reduces operating costs. It can also be progressive, if taxes take proportionately more from the richer in society and services are used proportionately more by the poorer. In practice, however, in many developing countries taxes may fall more heavily on the middle class and poorest, and services are often monopolised by the relatively better off. Further, although everyone has theoretical entitlement under this system, if the collection system is poor, or if the allocation to health is low, then the reality can be a semi-privatised system, relying substantially on contributions from households.

The first question, then, is what are the main sources of tax, and who contributes the most to them? Direct taxes - like income tax, for example - are often structured so that the more you earn, the higher proportion of your income you pay. In this case, rich are subsidising poor to some degree (assuming that they pay tax, and that the poor have access to services funded by the tax revenue). Similarly, wealth taxes, inheritance taxes, and taxes on capital gains or land normally target the richer members of society. In contrast, indirect taxes, such as sales taxes, import/export duties and service taxes, tend to hit the poor. They may have to consume as much of these goods as the rich, but the proportion of their income which is consumed is much higher (because their income is lower in absolute terms).

As they are easier to collect, governments in low and middle income countries tend to rely more heavily on indirect taxes. Often those with the highest ability to pay contribute little: they are not only politically influential, but also have income which is hard to assess and capital which can be moved around internationally. Wealth and property taxes play an important role in richer countries' tax collection, but contribute little in developing countries.

In many transitional countries, local taxes play a major role in supporting local facilities (as the enterprises used to, under the old communist system). Some countries (particularly in Latin America) also use 'sin taxes' (taxes on alcohol and cigarettes, for example) or funds from public lotteries as a supplementary source of finance for health care. Although small, these are likely to be regressive, in the same way as other sales taxes.

Governments are hampered in their revenue collection efforts by a number of factors, including:

1. low income levels and inequality of income distribution
2. low population density and remoteness of rural areas
3. subsistence farming in rural areas and informal activities in urban areas
4. low and unstable prices for agricultural and mineral exports in world markets
5. poor administrative capacity.

These limit public funding systems in general – general taxation, payroll taxes and social insurance all struggle in these conditions.

In terms of providing a stable and adequate funding source for health services, in the context of a well developed administrative structure and tax enforcement regime, general taxation funding should be fairly reliable, pooling, as it does, funds from a number of tax sources.

In terms of user involvement, tax-based systems typically perform rather badly. This is the reverse side of the coin of some positive aspects, such as size of risk pool, services free at the point of delivery, and allocation of funds according to needs. As the client is not paying directly, they have little leverage over doctors and other health staff, who are in the powerful position of deciding how to allocate resources. While they should do this wisely and according to health objectives, it is likely that the system becomes to some extent self-serving rather than client-orientated.

Policy issues. Funding health care out of general taxation can be one of the most efficient and equitable methods. There are, however, a number of issues to be addressed to improve current performance in low and middle income countries.

1. Revenue collection must be improved (economic growth on its own may feed into private channels, unless the public financing system is strengthened). For example:
 - Bringing in groups which currently escape paying tax (e.g. through wealth taxes, capital gains, land tax, income taxes for the employed).
 - Closing loopholes and enforcing payment more effectively
 - Fewer, broader taxes with simple rate structures are generally easier to broadcast and enforce

2. If public allocations to health care improve, then the issue of unresponsiveness and poor quality can start to be addressed (without funds, there is little hope). Measures here include:
- Improving training and pay of health staff
 - Setting new performance measures in the public sector, with rewards and sanctions to support them (e.g. promotion/demotion)
 - User involvement, in planning and monitoring of services at different levels.

There are some encouraging recent developments, where government revenues have been increased through debt relief and SWAP programmes (see later in the paper). In Uganda, for example, the health budget increased by 237% between 1997/8 and projections for 2003/4, as a result of the HIDC initiative and donors putting what had been project money into budget support instead. While still chronically underfunded, this increase in resources has allowed for some positive developments, such as the removal of user fees in rural areas and increases in doctors' pay.

4. Payroll tax

Key features. Payroll taxes raise many similar issues to general taxation. The main difference is that the funds raised are specific to the health sector, rather than being subject to the annual bargaining round with the Treasury or Ministry of Finance. This gives a certain security and transparency to health financing. It is thought that employees will be more willing to pay a tax if they know that the resources raised will be used for a specific (and usually popular) purpose. It is not however a guarantee of specific levels of funding. For example, if unemployment rises, or wages fall, then the income from the payroll tax will decline too.

Impact. Payroll taxes are one of the most common earmarked taxes (which can also include taxes on specific goods or services). They are levied - like social insurance contributions - as a proportion of pre-tax income of employees. However, unlike social insurance, which operates a separate structure for collecting and spending funds, payroll tax revenue goes directly into the Ministry of Health. They do not therefore imply the same structural reforms as social insurance systems (see below).

Payroll taxes have the advantages of taxation-based financing systems, in terms of coverage, risk-pooling and efficiency (because they can be operated on a large scale and through existing tax collection mechanisms). They also avoid the costs of extra bureaucracy of social insurance systems, while achieving some of the gains of having a source of funding for health care which cannot be diverted to other sectors.

There are however some potentially negative features too. Payroll taxes have a narrower base than general income tax, which is usually levied on all forms of income, including profits, investment and land income. By contrast, payroll taxes depend on wages alone, and as such tend to affect those in middle to low wage industrial employment disproportionately. They are therefore more likely to be regressive.

The effect of payroll taxes depends on the structure of the labour market. Where there is excess labour, the costs (regardless of who pays the contributions) may be passed

on to employees, in the form of lower wages. If on the other hand there is a shortage of labour (with appropriate skills), the costs may be borne by employers. In this case, payroll taxes (like other wage taxation, and social insurance contributions) push up the cost of hiring staff, and so can act as a disincentive to employ people. This may exacerbate the impact of economic recession.

While it may seem a good idea to earmark a specific revenue source to pay for health care, it can equally be argued that education, say, or transport should have protected streams. The result of ‘carving up’ taxes in this way for other sectors would be a public system with very rigid finances, where funds could not necessarily be allocated according to changing circumstances and priorities.

Policy issues. Payroll taxes are relatively simple to implement and can provide an acceptable source of additional funding for the health sector. They add to the general tax burden, but are less regressive than many alternative funding methods and can be used for specific purposes for which there is public support. For example, in Romania in 1991 a 2% payroll tax was created to provide funding for pharmaceuticals which were in short supply.

Where a transformation of relationships in the health sector is desired, countries are more likely to turn to social insurance, which has more radical implications for how the health sector is organised.

SELECTIVE INSURANCE SYSTEMS

Selective insurance schemes differ from universal ones in that (a) eligibility is limited to those who have contributed to the scheme and (b) there is usually a specified package of benefits (e.g. free or reduced price services, and sometimes drugs).

6. Social insurance

Key features. Social insurance is characterised by:

- compulsory membership (at least for certain professional groups)
- payroll-based contributions
- entitlement to services based on contributions
- specified benefits package
- management by autonomous sickness funds
- often being part of wider social security system (including pensions, sick pay etc.)
- cross-subsidy of premia, commonly

It was first introduced in Europe at the end of the 19th century, but has become much more widespread since, particularly in Latin America since the 1930s and in Eastern Europe and the former Soviet Union since the early 1990s. It has also been introduced in a number of developing countries, but often only covering civil servants or those in formal employment.

Introducing social health insurance in low and middle income countries

Region	Year Introduced	Coverage	Per capita income (US \$)
Africa			
Key feature:	Gradual introduction for civil servants and formal sector		
Burundi	1984	10-15%	150
Kenya	1960s	25%	260
Namibia	1980s	10%	2,030
Eastern Europe & FSU			
Key feature:	Transition from tax funded to social insurance		
Estonia	1992	94%	2,820
Hungary	1992	High [1]	3,840
Russia	1991	High [1]	1,910
Slovenia	1993	High [1]	7,140
Asia			
Key feature (transitional):	Response to declining level of state funding		
Kazakstan	1995	70-80	1,110
Vietnam	1993	10%	200
Key feature (other):	Expansion a response to the growth of the economy		
Indonesia	1968	13%	790
Thailand	1990	13%	2,210
South Korea	1977	94%	8,220
Latin America & Caribbean			
Key feature:	Introduced from 1920s as part of wider package of pensions, unemployment and other benefits		
El Salvador	1960s	11%	1,480
Argentina	1920s	90%	8,060
Mexico	1930s	42%	4,010
Bolivia	1930s	18%	770
Paraguay	1930s	14%	1,570

From Witter, Ensor, Jowett and Thompson , 2000

This table, which gives examples of coverage rates and reasons for introduction of social insurance in a selection of middle and low income countries, illustrates a number of points about social insurance.

1. There are a variety of motivations for introducing social insurance. In some cases, it is seen as an answer to the problem of declining revenue from general taxation. In the case of many of the FSU countries, for example, providers saw their income falling below market levels, while consumers saw the quality of health care sink. These countries were starting from full access to services, but sought an improved and safeguarded source of funding. In other cases, such as Latin America, social insurance was more a way of extending coverage.
2. Coverage levels are broadly correlated with per capita income levels. This in turn is probably related to other important features, such as industrialisation, urbanisation and population density, all of which favour higher coverage rates.

Impact. One issue will be the proportion of the population that is covered. Clearly, where coverage is high, equity should be good, as most will have access to the same level of care. At the other end of the spectrum, if social insurance covers only a small elite (e.g. civil servants), then there is a strong risk of developing a two-tier system, with higher quality, subsidised services for the elite and poorer, more expensive services for the rest.

In comparison with taxation-based systems, social insurance tends to be less progressive: it levies a fixed proportion of pre-tax income, whereas income taxes usually levy an increasing proportion as incomes rise.

In terms of generating sustainable revenues for the health sector, the question is whether the conditions are likely to be met for high coverage and full payment by businesses of the payroll contributions. To give an extreme example, a country with a large agricultural and/or informal employment base, with low population density, weak administrative structures and undergoing recession, is unlikely to be able to reach high effective coverage rates.

A number of transitional countries have thought that social insurance would be the answer to their health financing problems, but found performance disappointing. In some cases, it continues to run alongside central government and local tax funding (which still provides the bulk of funds). It is merely complementary, rather than a supplementary source. In Georgia, for example, coverage has increased from 1.9% to 14% of the population, since the introduction of compulsory health insurance in 1996. In other countries, such as the Czech Republic and Estonia - small, relatively industrialised countries - coverage has been higher and contributions paid on time on the whole. Most systems rely on some continued subsidisation from the general government budget, even if only to extend coverage to disadvantaged groups.

Where funds are not specific to the health sector, but are combined with some other funds, such as paying for pensions, it will be even harder to ensure sustainability. In a number of Latin American countries, a united tax was used to fund health and pensions and/or unemployment benefits, without fixing the proportion allocated to each sector; the result, not surprisingly, was that other areas often took priority over spending, resulting in budget crises for health care.

There are also a number of structural implications of setting up social health insurance.

1. As social insurance is usually administered by an autonomous agency (though often with political and community representatives on the board), its establishment has a major impact on the role of the Ministry of Health. It transfers the roles of raising funds and allocating them to providers to the fund. This can include purchasing functions (such as assessing health needs) and monitoring the quality of providers. The MoH will have to adjust to a more strategic role of establishing policy and regulating the health market (accrediting health care providers; human resource planning; capital expenditure planning; administering national programmes etc.). This can be quite a shift.

2. Social insurance also requires a break -up of the traditional bureaucratic structure which linked purchasers and providers (what has been called the 'purchaser-provider split'). Instead of health facilities receiving annual budgets (based commonly on last year's allocation, with some adjustment), they have to compete for work . The insurance funds reimburses them (using different methods, such as contracts, or fees for service), and monitors the quality of services delivered. This requires a new set of accounting and purchasing skills for the fund.

2. It also requires providers to have more autonomy than they had within a public bureaucracy. Providers may be privately owned, or publicly owned, but the key feature is that they are managerially independent so that they can enter into service agreements and be held accountable for delivering on them, and manage their finances soundly. This requires new management skills for providers.

4. The relationship with the patient should also be altered, as patients have clearer entitlements, and may also have formal representation on the management boards.

These changes can be positive, creating more transparency in the system and raising the standard of care.

Social insurance systems do, however, cost more to run than tax-based systems (in terms of management costs), and typically spend more on health care. The decision to introduce therefore depends on:

1. where you are starting from (tax-based system? user fees?)
2. what the main objective is (increased quality? increased coverage? restructuring of health system? cost control?)
3. whether the preconditions for successful implementation are met.

These pre-conditions include:

- the structural changes mentioned above
- support by stakeholders for the change
- in particular, high demand for coverage, which usually reflects the fact that the benefits are well known, highly valued and that users already face considerable costs in accessing health care (also that they believe the insurance scheme will replace, rather than merely adding to existing payment systems)
- legal and regulatory frameworks
- ability to assess and collect premia (e.g. that state-owned firms can and will pay on behalf of employees; that there is sufficient knowledge of the private sector etc.)
- development of human resource skills to operate the system, including purchasing skills (needs assessment, contracting, monitoring services etc.)
- ensuring that the health infrastructure is adequate to deliver the promised services and at an appropriate level of quality.

Policy issues In setting up social insurance, a number of issues need to be considered (many of which apply to private and community insurance too).

1. Who is to be targeted? Coverage of formal sector employees and their dependents is most easily achieved. Identifying, assessing income and collecting contributions from informal sector workers and small-scale farmers is much more difficult.

(Hence the development of voluntary community insurance programmes targeted at this group.)

2. What is to be provided? Any selective insurance programme has to have specified benefits (unlike universal schemes). Indeed, this is one of its attractions: that there is an explicit contract between contributor and health service about what kind and quality of service will be provided. There are all sorts of consideration here, including whether services are of high priority (in terms of their contribution to the health of the community), whether there is high demand for them and whether they are affordable.
3. How much to charge? There is no right answer to this, as obviously premia reflect different service costs, size of the pool, administration overheads etc. However, commonly contributions are split between employer and employee and are in the range of 3-15% of income.
4. Controlling excess demand. There is potential for overuse of services, as with all financing systems where patients do not pay directly for services. It is therefore common to have low-level copayments, to discourage frivolous use. More importantly, payments to doctors and hospitals should be structured so as not to reward excessive treatment. There is considerable evidence that fee for service payments, in particular, encourage doctors to provide more treatment than may be necessary.
4. Single or multiple funds? Setting up social insurance involves at the minimum setting up new structures to collect and distribute funds. This could be a single fund, or a number of funds, with users choosing which fund to register with. The advantage of the latter arrangement is that competition is introduced, which should put pressure on the insurance funds to operate efficiently. On the other hand, multiple funds introduces a risk of 'cream-skimming' – i.e. funds trying to attract low-risk patients, who will not cost so much to treat.

There is commonly a legal requirement to register patients, to deter cream-skimming. A competitive market (in terms of insurers) requires strong regulation to ensure that competition is on a fair basis. This is usually done on the basis of a specified benefits package, so that insurance funds compete over the cost of offering the package, rather than varying the contents of the package itself. It is also helpful if the funds co-ordinate purchasing of services from providers - using the same contracts, for example, to avoid providers playing off one fund against the other.

Russia has introduced a competitive market for insurers in a number of regions. Employees, or more commonly employers, register with a not-for-profit carrier of their choice. These are then paid weighted capitation payments (i.e. a fixed amount per person, but with some allowance made for likely health needs, according to their age and sex) from the territorial medical fund (Ensor and Thompson, 1997). In many regions, however, there is no alternative to the state plan.

5. Management structure for the fund. In the transitional countries which have adopted health insurance, some, such as Turkmenistan, have put the Ministry of Health in charge of the insurance fund. Others, such as Albania and Georgia, have made it independent, but with MoH officers represented on it. Others again, such as

Hungary and Kazakstan, have a supra-ministerial body in charge, with officers appointed by Parliament. In Bulgaria, it is an independent fund accountable to Parliament.

There is no basis for saying that any one of these arrangements is superior to the others. However, experience suggests that autonomy is important to insurance funds in a number of ways (Normand and Weber, 1994):

- financial independence allows separation of funds from government budgets;
 - organisation independence allows the fund to be managed in a more entrepreneurial way than government bureaucracies usually can be;
 - political independence allows focus on health goals, rather than political considerations;
 - autonomy can also facilitate decentralisation and community participation at various levels (though as with all decentralisation programmes, strengthened monitoring and accountability systems have to be put in place to complement greater local freedoms).
5. National or local level? The ability to generate revenue will differ between different regions (some will be wealthier than others) and health needs will also vary. If funds are collected and used locally, then it is likely that regional inequalities will emerge, with facilities better funded in some areas than others etc. One way of getting round that is to collect contributions at the national level and then distribute them according to number of members of each fund (and possibly some other criteria to reflect likely need, such as poverty). In the case of Estonia, it started with local level collection, and then moved to a national system, in response to the problem of redistribution.

Local offices of the fund usually concentrate on registration of members and collecting premia, while regional offices contract with providers, monitor their activities and market policies.

6. Public or private funds? Social insurance funds are usually independent but not-for-profit (i.e. neither public nor private in the traditional sense of those labels).
8. Coverage for all? The theory of social insurance is that contributions determine entitlement, but the practice is more complex. In most transitional countries, the 'socially protected' (children, elderly, unemployed) are paid for by government contributions. In practice, however, it may be hard to obtain the correct registration, and substantial numbers may be uncovered. In other systems, such as Hungary, although all are not entitled, access is near universal. The Russian system is universal in theory, but very varied in practice between oblasts. In Kazakstan, a significant minority of people who are poor but do not qualify as socially protected are left without cover, while in Georgia only the very poor are covered (Ensor and Thompson, 1998).
8. Public or private providers? Social insurance can provide access to public or private providers. Does it matter which? There is some evidence from countries like Thailand that costs may be higher in the private sector and that the private sector may be treating a less complex case-mix (a form of cream-

skimming)(Bennett and Tangcharoensathien, 1993). This may, however, be related to payment systems and regulatory features.

Whether providers are public or private, it is important to use payment systems which do not encourage cost-escalation (i.e. not fee-for-service) and to have a system for monitoring provider patterns (e.g. prescription rates, number of consultations etc.). Gate-keepers (such as family practitioners) can also reduce costs by carrying out more procedures at primary care level, and referring patients to specialists only when necessary.

The introduction of social insurance: lessons from Russia

In 1991 the Health Insurance Act was passed, introducing mandatory health insurance to Russia (which had until then been financed purely out of general taxation). The aims of the reform were: (1) to raise additional revenue; (2) to increase the efficiency of the system by moving from integrated bureaucracy to a purchaser/provider split, with changed payment systems for providers; (3) to enhance quality of care through third party payers; and (4) to maintain solidarity and equity while increasing consumer choice.

The main features of the reforms, at least in principle, were:

- Universal coverage for all citizens
- Clearly specified and comprehensive package of benefits
- Earmarked payroll tax supplementing existing general budget revenue
- Employers contribute 3.2% of payroll to territorial mandatory health insurance fund, and 0.4% to federal fund
- Local governments pay for non-working population and directly finance a number of health programmes and facilities
- Decentralisation, with prime responsibility for health care shifted to the oblasts (regions)
- Competition between insurers, who get weighted capitation from territorial funds according to number of enrolled population.
- Insurers purchase services from providers according to payment methods and tariffs negotiated locally (by insurers, health insurance fund, oblast health committees and medical associations).

The results of these reforms are very varied, by region, and hotly debated.

- In terms of revenue generation, health expenditure in Russia initially grew, over the years immediately after these reforms, and then diminished, in real terms. Given the overall recession in the economy at that time, it can still be argued that health insurance protected health care from the more severe reductions experienced by other public sectors during that recession.
- The proportion of public health revenue which the payroll tax contributed has failed to reach the high levels expected (and found in Western Europe). In 1995, it was 26%, with most of the funding still coming from regional and local budgets. Local governments are even the main funders of the insurance funds - supposedly contributing more than half of their revenue. In practice, though, they often do not pay their full contributions, and have reduced their overall contribution to the health sector as a result of the introduction of health insurance.
- Direct provision by employers has been reduced. This was supposed to be offset by the take-up of voluntary health insurance for services outside the specified package, but take-up has been low and confined to wealthier, urban areas. The broad nature of the basic package gives little incentive for top-up insurance.
- Formal user fees are not significant, but under-the-table payments have increased, particularly for drugs, materials and surgery.

- Inter-regional gaps are growing, with the federal fund insufficient to compensate for differences between richer and poorer regions. This is exacerbated by decentralisation, and the ability of oblast governments to set sectoral allocations.
- The extent of competition within the insurer and provider markets varies by region, as does the extent of separation of the two. It is hard to comment on improvements in efficiency or quality. It is likely, however, that reforms have increased the proportion of administration costs in the system as a whole.
- Complex, overlapping and poorly specified roles between government and the insurance funds made it hard to plan an integrated service. Fragmentation is both vertical (e.g. between national and regional levels) and also horizontal, with, for example, insurers paying for outpatient care and governments for inpatient.

Sheiman concludes that ‘The payroll tax has brought insignificant growth to health sector resources. There has been no shift in the formal public-private mix of health finance. Private finance and provision are not structured as a component of national health policy, and have been developing in an unregulated, chaotic manner.’

(taken from ‘From Beveridge to Bismarck: health finance in the Russian Federation’, Sheiman, I., 1997)

7. Voluntary community insurance and other community financing initiatives

Key features. The main distinction between social and community insurance is that membership of community insurance is usually voluntary. Linked to that, community insurance schemes tend to be set up on a smaller scale than social insurance programmes, and to target a different set of people (often farmers, casual workers, the self-employed). Community insurance may be seen as a complementary way of financing services for people left out of the social insurance system.

There is, however, enormous variety in community insurance schemes, which makes it hard to outline a single model. In terms of how they were developed, for example, there are many different stories. Some programmes, such as the health card in Thailand, were set up as national programmes, but allowing some degree of local variation in how they were implemented. Others, for example in Vietnam, have been set up nationally and have allowed little variation. In other countries, such as Guinea Bissau, locally developed schemes were scaled up. In other settings, such as Bangladesh, NGOs operate community insurance linked to other activities, such as credit programmes. Mutual health organisations in a number of African countries operate an indigenous form of community insurance, as do micro-credit organisations in South Asia.

A common model is for pre-paid cards to be sold by local providers or other local outlets (shops, markets etc.). The sellers are given a commission, and the funds are then managed by the local insurance fund. These have a wide variety of ownership, including by health facilities, communities, cooperatives, governments and NGOs.

Patients are often required to enrol at a local primary care centre. Their services are reimbursed, and additional incentives may be offered to the providers to encourage quality and appropriateness of treatment (e.g. bonuses for high coverage of antenatal checks).

Benefits generally include a specified number of consultations per year, and sometimes listed drugs (drugs generally form the bulk of health care expenditure for patients, and often a higher proportion for the poor). Some schemes have specified exclusions, for example for chronic illnesses, such as cancer, and 'avoidable' diseases such as alcoholism and sexually transmitted diseases (STDs). Others operate an 'essential package' system which lists what is included (e.g. all primary care and specified high priority secondary care). Patients generally pay small co-payments, even for scheduled treatments and drugs. These are designed to address the issue of 'moral hazard', described above.

A distinction can be made between schemes which focus on high-cost, low-frequency events (such as hospitalisation), where the main aim is usually to protect patients against high user fees, and schemes which focus on low-cost, high-frequency events (such as visits to the local health centre), where the main focus is often on improving the quality of services (Creese and Bennett, 1997). The latter are more likely to be based at the village level, and to aim at partial cost recovery, based on ability to pay (rather than what the actual costs of service delivery are). This makes them simpler to establish and operate.

In addition to insurance schemes, there is a wide range of community finance initiatives which raise funds for health facilities. These include:

Drug-revolving funds (DRFs). A number of these started in the late 1980s to tackle the shortage of essential drugs at health facilities in developing countries. UNICEF and WHO played a key role in supporting them, under the 'Bamako Initiative', launched in 1988. The idea was to provide seed-funding to purchase a stock of essential drugs. These would be sold and the stock replenished - hence the term 'revolving'. Some of these have been successful. However, many failed. The main problems included:

- management weaknesses, such that funds ran down, and there was not enough money to cover administrative costs and restocking. This was found to be a common problem in Honduras, where poor stocking, inadequate prices and inflation combined to produce decapitalisation in many of the funds (Fielder and Wight, 2000)
- poor accountability and corruption: funds being used improperly for other purposes
- hard currency shortages: the scheme generated local currency, but drugs often had to be purchased in foreign exchange, which was a problem in countries with shortages of forex. A Save the Children Fund (UK) project in Khartoum in the early 90s, for example, ran up against problems of converting local resources into foreign exchange, in order to repurchase drugs, and also raised questions about the interaction with local private drug supply networks.

The lessons here appear to be:

- that DRFs are most appropriate where there are no markets, or a very restricted market for drugs.

- that donor support is likely to be needed beyond the start-up period.
- that there are considerable training implications, particularly in purchasing and business management.
- that accounting and management systems should have transparency and cross-checking procedures built in.

Income generation programmes. These can take many forms. For example:

- Community organisations or NGOs may use funds from an income generating scheme to support the health facilities at grassroots level.
- Savings for health schemes may be set up, encouraging families (often women) to set aside money regularly for health care, and offering loans at favourable rates for health expenditure. This is a variation on the traditional savings and credit schemes.
- Community development programmes may set aside a certain proportion of revenue (e.g. 5%) for health promotion activities.
- Villagers may assist in the building of a clinic. This reduces the capital costs of extending the infrastructure.

The Bwamanda prepayment plan - factors behind its success

The Bwamanda prepayment plan - a voluntary community insurance scheme - was launched in 1986 in a rural district of Zaire, with the support of a local NGO, CDI Bwamanda, and as part of a wider rural development project.

The scheme offered families the opportunity to pay an annual premium, which would allow them, when referred, to be refunded 80% of their hospital costs. Ten years on, the scheme is still running, despite difficult socio-economic conditions in Zaire during the period. Over that decade, between 50 and 75% of the families in the district have been enrolled each year, and cost recovery by the hospital has doubled, from 40 to 80%. What are the factors underlying this success?

1. The scheme was part of a wider development programme, and was able to tap into effective consultative mechanisms in designing and managing the project.
2. The health services in the district were well organised before the scheme started, with a strong district management team and effective financial and referral systems.
3. The project never aimed for full cost recovery, and the hospital continued to receive support from CDI throughout the period (the government presence in the district being virtually nil, for that period).
4. Moral hazard was reduced via a number of features: first, patients had to be referred; secondly, they had co-payments of 20% of the cost; finally, the hospital was paid by flat fee according to type of admission, rather than fee for service.
5. The hospital was the only one in the district, and had a good reputation for quality.
6. Due to other development activities - boosting literacy, farmers' incomes etc. - premia were relatively affordable for most households. Premia were the same for everyone and well publicised.
7. By enrolling whole families, adverse selection was controlled to some degree.
8. To avoid erosion of revenue by inflation (a big challenge in many contexts), funds were stored in the form of non-perishable drugs.

(Taken from 'How replicable is the Bwamanda prepayment scheme?', Freddy Moens, Christelijke Mutualiteit Mechelen (Belgium), unpublished.)

Impact. From an equity point of view, community insurance presents a mixed picture. It can extend coverage of services to marginalised groups, but can also perpetuate regional inequities. This occurs in two ways. First, because funds are retained locally, there will be no cross-subsidy between areas. Secondly, it can justify the continuation of a common pattern, in which public subsidies are largely captured by urban facilities which disproportionately favour the rich, leaving rural areas to top up funding from other sources which impose a burden on users.

If, however, the alternative is user fees or informal payments (as it commonly is), then community insurance is preferable, giving, as it does, some cost ceilings and predictability to health care spending. Risks are spread, and pooled within a limited group. Universal access is of course not guaranteed, but utilisation of services is likely to be improved.

Voluntary insurance schemes tend to target the rural middle classes rather than the poorest. To increase their coverage of poorer households, they would need to have

sliding scales for premia, and/or reduced copayments for poorer households, and/or exemptions for defined groups. Some schemes have tried these, but most do not. The goals of financial sustainability and equity come into direct conflict on this point.

There are typically a fairly high number of failures among community insurance programmes. One issue is making packages attractive, so that there is a high take-up. Set against that, and sometimes mutually incompatible, is the necessary business of keeping financially viable (i.e. not spending more than you take in, plus admin costs).

Another dichotomy can be the desire to increase local ownership and autonomy in running the scheme, and the need for tight management systems and defined packages to avoid money going astray and/or schemes going bankrupt.

Typically, community insurance covers only part of the costs of services (the rest covered by public subsidies, donor funding or copayments). The proportion of costs covered is likely to fall for higher level services (e.g. hospital care), which is why access to those tends to be more restricted.

Policy issues. Careful consideration needs to be given to the following issues prior to implementation.

1. Design of package. In a voluntary scheme there may well be a conflict between the three guiding principles of priority, demand and affordability. For example, from a public health point of view, you may wish to include programmes with knock-on positive effects, such as tuberculosis treatment or immunisation, both of which limit the spread of a disease to others. However, popular demand may focus more on what are perceived as urgent needs, such as accident and emergency services. There may also be a high demand for free drugs, for example, but including this in the benefits package may violate the last principle of affordability, as costs would escalate if users faced no charges for drugs. All three principles are important and have to be balanced against one another, so that the scheme achieves some measure of all - attractive, affordable and making a contribution to improving community health

2. Setting a group premium. This is relatively simple, but runs the risk of 'adverse selection', which means that only relatively high-risk individuals or families choose to join. This will cause premiums to rise, if the scheme is to remain financially viable. To counteract adverse selection, a number of options are available:

- rules to stop people joining when they are already sick (e.g. cannot use services for 1 month after joining; or one-year in the case of pregnancy).
- exemptions for high-cost illnesses
- ceilings on annual number of visits to facilities

3. How much should be charged? The simple answer is: enough to keep the fund solvent. Assuming that the premium is fixed-rate, this means working out:

- the cost of the benefits which are covered by the scheme
- the number of people who you think will join
- how much it will cost to administer
- a reserve to cover difficult times (and profits, if the scheme is profit-making)

$$\frac{\text{community premium} = \text{expected benefits} + \text{administrative costs} + \text{reserve} + \text{profits}}{\text{number insured}}$$

Some schemes have had sliding scales of premia, or lower rates for certain groups (e.g. those living furthest from the facility), but these are rare, as they increase the complexity of operating the scheme.

4. Achieving high coverage. The smaller the scheme, the higher will be the costs of running it (as a proportion of revenue) and the smaller the risk pool (implying less stability, and/or the need for a bigger reserve). Schemes will want to achieve economies of scale (lower costs, because of being larger), but this can be difficult if membership is voluntary. The following conditions also make high coverage hard to achieve:

- the dominance of peasant agriculture and/or informal trading activities, where assessing incomes and collecting payments is difficult
- high levels of informal payments; these are likely to reduce the benefits of scheme membership. They may not be easy to reduce, especially where customers see them as a way of buying quality services
- low ‘social capital’. In former communist countries, for example, levels of trust in institutions may be low, and people are unwilling to put their money into a ‘leaking pot’. Sometimes social capital may exist at the local level, but as schemes are scaled up (to increase the risk pool), that trust and cohesion are likely to be diluted. Scaling up from a local to a national scheme is not always possible, where the roots of success lie in local structures and relationships which cannot always be replicated nation-wide.
- failure to address the issue of quality (e.g. on-going lack of supplies and drugs in the health centres)
- failure to reinvest funds in local facilities (e.g. if funds are taken up to central level).

Early involvement of the community in designing the scheme and ‘social marketing’ through easily accessible outlets are all likely to increase local awareness and uptake. Some schemes have also used additional incentives. For example, the Thai health card, in the early stages in the 1980s, included in its benefits access to cheap loans.

5. Avoiding perverse incentives. It is important to ensure that staff are not rewarded for non-effective practices. If, for example, staff salaries are being supplemented by income from sale of drugs, as happened in a number of health centres in China and Vietnam in the 1990s, then not surprisingly, prescriptions will rise. Many of them will not be needed by or appropriate for the needs of the patients.

6. Coordination. Without stifling local initiative, it may be helpful to increase the coordination between small local schemes. A study of community health insurance schemes in Guatemala and the Philippines concluded that ‘at the very least, the proliferation of such schemes could benefit from national guidelines, a formal accreditation process, and an umbrella organisation to provide assistance in design, training and information services’ (Ron, 1997).

4. Private insurance

Key features. Private insurance schemes usually operate individual risk-rating, which means that a high-risk individual (e.g. who smokes, or has a history of medical complaints) will be charged more to join than a low-risk individual. This may attract low-risk individuals to join the scheme, but it pools risk less, and is also more complicated to operate (as information on lifestyles etc. must be obtained for each applicant). Another approach is to get applicants to reveal their preferences and self-assessment of risk by offering policies with different levels of coverage. Those with higher risks are more likely to opt for more expensive policies with higher coverage, whilst those whose health is generally good will tend to go for cheaper policies with less cover.

Factors behind the development of private insurance markets are partly economic but also cultural and historic. For example, the proportion of citizens in Latin American countries with private health insurance is relatively high (27% in Chile, for example), whereas in Asian countries of comparable GDP per capita, coverage is much lower. (Korea is the exception: private insurance is mandatory there, and finances most of health care.) In low income countries, rates of around 1% are common and the proportion which private health insurance contributes (out of total health expenditure) is often well below this. This probably reflects a number of factors:

1. lack of affordability (private insurance is often seen as a luxury good, giving access to high quality services, rather than low-cost access to basic health services)
2. the historic pattern of high public funding for health (free health care is seen as an entitlement, even if the reality is different)
3. lack of government encouragement of private insurance markets (health seen as a social good).

For all those reasons, private insurance has been a supplementary source of finance in most countries, and has tended to focus on the ‘extras’ which the public service is unable to offer (such as better accommodation and food, or shorter waiting times for treatment).

In almost all policies, pre-existing conditions, self-inflicted illnesses and STDs (including AIDS) are excluded.

Private insurance companies can be constituted in a number of ways. Some are profit-making. Others may plough back profits in the form of reduced premia for members.

Private insurance is often a perk which comes with specific jobs. In Africa, employer mandates are relatively common. Private or parastatal firms may provide medical allowances, reimburse workers for expenses, operate facilities or contract with the private and NGO sector to provide services for their employees.

Private health insurance in Egypt: a limited role

Private health insurance in Egypt accounts for about 1% of health care expenditures. What are the reasons for it playing such a limited role in national health financing?

1. Dominance of other sources. The government guarantees all citizens the right to free health care through MoH facilities. This provides a safety net. In addition, the Health Insurance Organisation (HIO) covers about a fourth of the population, including employees, pensioners and school children. Private insurance is therefore limited to well financed companies (which opt out of the HIO) and wealthy individuals.
2. Government policies. These do not favour private insurance, but rather aim at keeping the largest pool of beneficiaries in public programmes. As public costs of supporting the public health network are more or less fixed (all medical graduates are guaranteed a job in the public facilities etc.), the government has an interest in maintaining utilisation levels. Thus, for example, firms wishing to opt out of the HIO have to pay a 1% salary tax into the HIO.
3. Non-affordability. Premia remain outside the reach of most Egyptians, despite the fact that they are making substantial out-of-pocket payments for health care.
4. Non-profitability. Profit margins for private insurers are small. Thus there are few companies providing private plans, despite the size of the insurance market as a whole.
5. Lack of skills and systems. In general, the industry is underdeveloped, and lacks the IT and expertise to design policies and process claims efficiently.

(Taken from 'Private health insurance in Egypt', Rafeh, N., 1997)

Impact. Private insurance spreads risk for an individual or family (or sometimes for a workforce, where provided through employers), but does not pool risk on a large scale. In countries where access to health services for all is a social priority, private insurance is likely to remain a small supplementary source of income, rather than the main one.

A notable exception is of course the United States, where private insurance is the norm. This fits with the national individualistic culture. It has advantages in terms of quality, for those who have insurance coverage. However, it has generated problems of access (a substantial proportion of the population has no insurance, and hence limited access to services). The US also faces on-going challenges in terms of cost-escalation and allocative efficiency (getting resources to the most cost-effective services). These are partly related to how the health sector is structured and organised, but also to the financing base. It is instructive that attempts to tackle some of the problems of cost-escalation started in the publicly financed programmes (which account for just under half of expenditure), rather than the private.

Even in middle income developing countries with vigorous private sectors, the contribution of private health insurance is generally low, and focused on a small, urban formal-sector workforce, who are typically both young and well (Rannan-Eliya paper, Bangladesh workshop). Those with highest needs (the poor, the elderly, rural

people, the chronically sick) are least likely to be attractive to private insurers, which limits its ability to contribute to the health of the nation.

In addition, the 'transaction costs' (admin, contracts, monitoring etc.) are generally high - between 10 and 50%, according to a number of studies, compared with 5-10% for social insurance programmes. There are marketing costs which do not exist for mandatory schemes, and also individual billing for each episode of care. Paradoxically, these tend to increase as competition increases (higher marketing costs and fewer economies of scale as numbers enrolled fall). This makes it an inefficient method of raising money.

Policy issues. Private insurance requires effective regulation to ensure that consumers are protected (for example, that they know exactly what they are or are not entitled to when they buy insurance) and that companies are financially sound (e.g. have sufficient reserves to cover a rush of claims). The regulation and accreditation could be carried out by the Ministry of Health, or other public body, such as the Ministry of Finance. These regulations should be applied impartially to NGO and public schemes too, so that these compete with one another on equal and fair terms.

Close monitoring of provider practices and prescribing are also needed to control cost escalation. These systems tend to be lacking in developing countries.

One form of cost control which has been adopted in the US and elsewhere is the 'health maintenance organisation' (HMO). These are units which agree to provide or purchase all medical care for patients who register with them. They receive fixed payments per patient per year (with some variation according to age categories etc.). They therefore have an incentive to cut costs, as their payment does not depend on utilisation. It does however restrict patients' choice of provider. HMOs are a type of 'managed care' (i.e. way of reducing cost escalation in health care) which can be combined with any insurance-based health financing system.

Where government wishes to encourage take-up of private insurance, it can make premiums tax-deductible. Whether the fiscal loss which this generates is more than balanced by savings in terms of use of public health facilities needs careful examination. As many public health costs are fixed, it is quite likely that subsidising private insurance will not result in net savings to the public purse. Such subsidies also tend to constitute a transfer from poor to rich. Moreover, once tax breaks have been granted, they are typically very hard to withdraw.

Another important issue is whether private insurance is supplementary to the main channels, or an alternative. In some systems, the rich can take out top-up policies, but continue to contribute to the social insurance (or tax) system. From the point of view of social solidarity, this is preferable to allowing them to opt-out fully, which tends to reinforce variations in quality (a two-tier service for rich and poor).

Private insurers can be required to operate community rating, in order to encourage access. As with community insurance, this will tend to lower the cost of premia for the high risk, and increase it for the low. The larger the insurer, the more likely it is to be able to spread the risk. It may also need to reinsure itself to guard against insolvency if too many high claims are presented in the same period.

OTHER

Here we are talking about methods of raising supplementary funds for health care, which are not linked to individuals or groups of users (unlike the methods described above). In the case of aid funds, money is usually linked to specific programmes or inputs to health care (such as training of health workers, for example, or upgrading of facilities), or attached to agreed lists of health sector reforms.

9. Donor funding

Donor funding has many sources and takes many forms. As the name suggests, the money is supposed to be 'given', though in the case of some of the multilateral donors (such as the World Bank and regional development banks) the money is actually lent (often with low interest rates).

One of the main features of this type of funding is that the recipient has relatively little control over the amount of funding and how it can be used. Aid funds can grow and shrink, according to changes in the funding and policies of donor agencies (private foundations; non-governmental organisations; government agencies; multilaterals such as the UN and the development banks). Similarly, conditions are placed on use of the funds by donors, which host governments have to comply with (or seem to comply with) if they wish to receive the money.

This generates a number of disadvantages from the recipients' perspective:

- **Unpredictability.** Given that funds (at least, aid funds - loans are usually more reliable) can be withdrawn at any moment, it is hard to plan services on the basis of donor funds.
- **Sustainability.** Similarly, given that funds are coming from an extraneous and temporary source, it is important to anticipate the moment when services will have to be paid for out of local financing pools. Many projects have failed this sustainability test. Capital items which are expensive to maintain require especially careful planning. At the macro level, a health system which is heavily dependent on donor aid is in a vulnerable position. This is true of a number of African and South Asian countries: aid accounts for an average of around 20% of health expenditure in sub-Saharan Africa as a whole (excluding South Africa), and more than 50% in several countries. It is less significant in transitional countries.
- **Lack of ownership of ideas.** Project design is often dominated by the donor, with only nominal involvement at the local level. The activities which result may therefore not be of the highest priority locally, and this makes them vulnerable to collapse when donor interest and support wanes.
- **Tied aid.** Restrictions on how aid is used may reduce its cost-effectiveness. For example, bilateral aid may have to be spent, at least in part, in the donor country or on equipment manufactured in the donor country. That equipment may not offer the best value for money, and/or may not be the most appropriate use of the money. All this reduces the value of aid below its apparent market value.

- Multiple reporting requirements. Most developing and transitional countries play host to hundreds (and in some cases thousands) of donors, of varying sizes, shapes and interests. Each one is prepared to contribute funds, for specific uses, and requires different types of information to satisfy their clients back home that the money is being well used and is achieving the right kinds of results (often quite hard to prove!). This places a heavy burden on the administrative and managerial system of the host country, and means that rather than concentrating on running services according to local requirements, they have to concentrate on satisfying a variety of donor ones.
- Parallel systems. In a similar vein, services can end up being structured around donor funding, rather than creating an integrated national health system. It is neither efficient nor user-friendly, for example, to have immunisation services run separately from local curative clinics. It can have a very fragmenting effect, too, if different donors are operating different systems in different provinces of the same country. It is also not uncommon to find that one province has well-funded services, because of donor aid, but a neighbouring province is operating on a shoestring.
- Poaching. Nor is it helpful if, as is often the case, donor agencies pay higher wages than government service, leading to a ‘brain drain’ of qualified people out of public service.
- Inequity. Donor allocation has in the past mirrored government funding patterns – going disproportionately to higher level facilities. In recent years, there has been a shift towards primary care facilities, which brings greater benefits to poor families.
- Non-involvement of users. Despite their rhetoric, many donors fail to carry out any real consultation with end users when designing projects. The larger the donor, the more likely this is. Being outside actors, there is also the real risk that they are poorly informed about what is really needed and appropriate in the local situation.

Donors have been working over the past decade to tackle some of these problems. For example, the development of sector-wide programmes (SWAPs) aimed to coordinate donor inputs into a nationally agreed plan for the health sector. This would hopefully minimise many of the problems listed above. Similarly, many donors (e.g. the UK in the late 1990s) have shifted away from tied aid (trying to separate the functions of development/aid and subsidies to trade and business). Some of the bias towards capital projects has been reduced, and there has been recognition of the need to strengthen health systems as a whole. However, there is still a long way to go.

SWAPs: the recent experience of Uganda

A paper on the experience of Uganda in implementing its SWAp over the past few years highlighted a number of important perceived gains:

1. Increased resources (a per capita increase of 141% over 1998-2004). This increase is partly the result of incorporation of what would have been project money. It could be argued that it did not therefore represent a real increase in resources. However, by coming under the control of the MoH, it increases its effectiveness and increases the control over policy of the MoH.
2. Increased predictability. Revenues were known in advance and planning was therefore more effective.
3. Increased transparency in resource allocation.
4. Increased government ability to prioritise.
5. Integration of programmes
6. Fewer transaction costs.
7. Improved management capacity.
8. Increased ability to attract resources.

At the same time, the paper emphasises some ongoing problems. For example:

1. that the health sector is still chronically underfunded
2. that some donors (including large ones like the EU or USAID) remain outside the SWAp
3. that global initiatives, where they set up separate programmes, threaten to add to the fragmentation of services
4. that there remain some capacity problems in planning and accounting, especially at lower levels
5. that there is some resistance to change.

(Source: Dr Patrick Kadama, paper on health financing in Uganda: the lessons of the SWAP, presented at Health Economics in Developing and Transitional Countries workshop, York, July 2001)

Financing systems: performance against key criteria

	Risk-spreading	Risk-pooling	Universal access	Fair financing?	Adequate and reliable funds	Ease of operation	User involvement
User fees	No	No	No	Usually regressive, but may be less so than informal payments, if exemptions are implemented effectively	Not usually (more common to use as supplementary source at facility level for supplies etc.)	Cost:revenue ratio often poor	Not necessarily
Savings-based	Yes	No	No	No transfers between rich and poor, so will be regressive	More appropriate for primary care	Complex	High emphasis on 'personal responsibility'
Informal	No	No	No	Unmonitored, so speculative, but thought to be regressive (charged according to illness, rather than ability to pay)	No	Fair	Some control over quality
General taxation	Yes	Yes	Yes	Depends on tax structure:	Depends on economy, tax	OK. Should be economies of scale	No

				some taxes tend to be progressive (income and property taxes); others regressive (e.g. goods taxes, trade taxes)	system and health service organisation		
Earmarked tax	Yes	Yes	Yes	As with general tax, it depends on what the tax is levied on	Ditto	Slightly more complex than gen. Tax	No
Social insurance	Yes	Yes	No	Usually progressive, as related to income, or at least proportional (same proportion across different income groups)	Can be, if structural and economic conditions are right	Complex. Costs increase with number of firms.	To some extent. Usually mechanisms for involving users.
Voluntary community	Yes	Yes, but size of pool	No, usually local	Flat rate charge, so	Issues of sustainability.	OK, but often problems scaling up	Can be built in (there are good and bad examples)

insurance		varies. Few countries get coverage above a few percent.		usually regressive (but may be less so than alternatives)	Management expertise and local commitment vital.		
Private insurance	Yes	No	No	Regressive, as risk-rated	Not usually main source	Complex	No
Donor funds (aid)	Yes	Yes	Usually limited, by area and services	Neutral in how raised (though can be used in ways that affect equity, of course)	Short-term additional funding only	Multiple donors impose high costs on system	Rarely

Key issues to consider for health financing projects

Single payer vs multiple payers. It has been observed, in the Western context, that a 'single pipe' financing system allows more effective control over costs than one where there are multiple sources of finance. That may be true, but very few countries are able to achieve this, relying as they do on revenue from many sources. Even in Germany, which has been operating a social insurance system for more than 100 years, the proportion of health expenditure which it contributes is still under 60% of the whole.

A typical transitional country today might be operating all of the following financing systems simultaneously:

1. taxation-based funding (for capital expenditure, public health, coverage of socially protected)
2. social insurance (covering employees)
3. local taxes (support to local facilities)
4. user charges (for drugs and other supplies)
5. private insurance (higher quality services for the rich)

In developing countries there is often an equally varied (though slightly different) mix of methods. One of the main challenges which this poses is for policy. If there are multiple purchasers of services, then it is hard for a public body (ministry or other) to enforce health policies and ensure that incentives for providers etc. are in line with public priorities. More complex regulatory strategies are required.

Public vs private sources. World Bank figures for 1997 indicate an average government expenditure on health in low income countries of US\$6 per capita (or 1.4% of GDP). The private equivalent was US\$8.1. Private expenditure therefore forms the main funding source for health care in low income countries, unlike established market economies, where government average input was \$1,890 per capita and private payments \$810. Private expenditure, as a proportion of the total in low income countries, increased from 35% in 1990 to just under 60% in 1995 (Jowett 1999). This suggests that government expenditure is being substituted by private, even where economies are growing. The region with the highest proportion of private expenditure was Asia (72%).

Regional figures from the mid-90s reveal that the richer the region, the higher the proportion of public spending on health care. The only exception to this are the transitional countries, which for historic reasons have maintained a high public share of spending (higher than predicted for countries of their GDP per capita).

Does it matter, whether the main sources are public or private? It probably does, as 'public' finance means tax-based, social insurance and donor funds channelled through government budgets, whereas private consists mainly of user payments, informal payments and direct purchase of items like drugs. The key distinction between them is that risk is pooled for the public payments. This increases the likelihood of the poor having access (though it does not guarantee it, as indicated in the discussion above). It also means that public health services, preventive activities and other cost-effective measures for which there may be low demand from the public can be effectively financed.

Increasing the proportion of finance raised through public channels is therefore an important goal, though we also have to consider how it is raised (e.g. what taxes? minimising adverse effects) and how it is spent. Note that if you have a strong base of public finance and effective public purchaser, there is no reason why services should not be provided through private providers.

Health goals and access can be ensured if the purchaser has the managerial and financial strength to allocate resources according to needs, enforce contracts, monitor quality etc. Where individuals are paying, that purchasing function is lost. Individuals can choose quality, in terms of polite treatment, convenient hours etc., but they are less able to judge whether treatment was appropriate and whether the price charged was good value for money. Public funds for capital expenditure can also enable medical technology to be properly assessed before introduction (though they do not guarantee this!).

Private finance tends also (though it is not inevitable) to be connected with a fee for service payment method, which is one of the least efficient payment methods used in health care. It encourages supply-induced demand (health staff providing more care than is needed, or inappropriate care), an emphasis on curative rather than preventive care (which has smaller profit margins), cost escalation and therefore reduced access. One of the advantages of a public purchaser with adequate public financing is that more efficient payment mechanisms can be negotiated (such as capitation payments, or cost and volume contracts).

A critical mass of public finance is probably a necessary condition for many of the functions listed above - but it is not, in itself, sufficient, if the will and the skills are lacking to carry them out effectively.

What's the right level of funding? Is there an easy rule-of-thumb about the right level of financing for a given area? Sadly not. Comparisons with other similar areas will tell you whether you are relatively well or poorly financed, but nothing about optimal (or ideal) levels. The optimal level depends on a whole groups of factors, such as the level of health needs; other priorities for spending in the area; income levels; and the effectiveness of health services. More is not always better - for example, health might be better promoted through increased funding for infrastructure or rural development. Health services can also be ineffective (or even harmful to people's health).

In practice, though, health expenditure tends to reflect purchasing power: in low income countries, the health sector typically accounts for 3-4% of GDP; in middle income 5-6%; and in high income countries 6-15%. In most developing countries the level of financing is rightly regarded as too low (in terms of both proportion and absolute amounts), and the issue is therefore how to increase it. In rich countries, cost control is more of a priority.

In 1990 (Jonsson and Musgrove in Schieber, 1997), developing countries accounted for 78% of the world's population, but only 10 % of its health expenditure. The transitional economies accounted for 7% of population, and 3% in expenditure. Internally, too, there is very uneven distribution of health care expenditure in low

income countries between richer and poorer groups. In richer countries, by contrast, studies have found that health expenditure tends to be fairly evenly distributed across the different income groups.

Recent analysis of health expenditures across 40 highly indebted poor countries (most of which are in sub-Saharan Africa) (Save the Children Fund, 2001) reveals an average health spend of under \$10 per capita per year. This is far below the recommended level of \$60, suggested by WHO, and 20-40% below the sum considered necessary to fund the World Bank's recommended basic minimum package of services.

What services to fund? Although this paper cannot adequately deal with issues of priority setting and delivery of services, it is hard to discuss financing without considering what services are to be funded. The combination of limited funds and the expansion in both medical technology and patients' expectations means that some sort of rationing is inevitable in all health care systems. Where public funds are limited, there are a number of ways in which rationing can take place (none ideal, but some worse than others):

1. people near to big urban facilities get reasonable treatment; more remote areas are financed by direct contributions (highly inequitable, but common in many developing countries)
2. resources go to priority groups or regions (poor, children, unemployed); the rest pay (politically unlikely)
3. resources directed to primary care, or lower facilities; patients pay for secondary (again, hard to enforce, as secondary care is more expensive and seen as high priority by patients, as well as doctors)
4. resources used for 'essential package' of priority services, based on the burden of disease in the country, cost-effectiveness of interventions, and social benefits which they generate. The World Bank 1993 World Development Report gives examples of such minimum packages, and there have since been a number of examples of implementation both in developing and transitional countries. One of the difficulties in practice is avoiding cross-subsidies within facilities which are providing listed and non-listed services.

Drugs pose a particular challenge for risk-pooling arrangements. The bulk of household expenditures on health care in low income countries are spent on drugs. Over 80% of drugs expenditures are private in low income countries according to World Bank estimates. Risk-pooling arrangements should in principle cover the cost of drugs, but they are in practice often excluded. In Turkmenistan, for example, when health insurance was introduced in the mid-1990s, drugs expenditure was fully reimbursable. Because of rapid price escalation, this gave rise to a swift depletion of the health funds, and full reimbursement for drugs was subsequently removed from the benefit package.

Some schemes cover in-patient drugs but not outpatient ones. This can have adverse consequences for other policies, such as reducing length of stay and reducing hospital utilization for minor ailments. Co-payment for drugs are probably necessary in all health systems, in conjunction with exemptions for the poor and an active regulatory policy which reduces the use of over-priced and/or ineffective medicines.

Improving equity. Typically, financing systems which ‘pool risk’ tend to score higher on equity than those which do not. To achieve cross-subsidy, we need to look at who is paying for services (e.g. in the case of central taxation, who is paying the taxes: on which groups in the population does the highest burden fall?) but also, crucially, at who is using the services. If public funds are concentrated on services which are mostly used by a relatively affluent urban elite, then increasing those finances will have an adverse effect, in terms of equity.

The World Health Report 2000 uses the criterion of “fair financing” to assess health systems. This equity principle is based on the idea of affordability, and of equalizing the burden of health expenditure across households. Under this view, a “fairly financed” health system might be one in which the ratio of health expenditure to non-food household expenditure remained constant across different income brackets. In general terms, a positive relationship exists between prepayment (which implies some degree of risk-pooling) and “fairness”, although there are of course exceptions. The WHO example was India and Bangladesh, where the overall burden was progressively distributed, despite the predominance of user fees. At the other extreme, Brazil’s overall financing pattern was regressive, despite high prepayment levels.

The WHO notion of fair financing reflects observed utilization patterns, and so ignores unmet need, in the form of decisions not to seek health care or to self-treat. Poorer households tend to be more sensitive to price increases, so shifting costs to the household will result in their needs being suppressed.

The poor are generally the most risk-averse group: they cannot afford large variations in spending, because they have very little income and savings to fall back on. The poor therefore most need insurance-based systems of health financing. However, in reality, the pattern is the reverse at present. A major challenge is to extend risk-pooling to the poorest.

It used to be assumed that health financing systems would follow a pattern of extending coverage and risk pooling, starting with user fees and informal payments and progressing to tax-funded or social insurance models which covered all the population. That assumption was based on the pattern of development in Western Europe. A number of Latin American countries seemed to follow a similar pattern, which started later, but progressively included more and more groups in the risk-pooling system. However, the pattern in other regions has not been so simple. Communist countries which were able to provide universal coverage to health care have, in the last decade, in most cases, regressed to partial coverage, with user fees, informal payments and private insurance filling in the gaps. Similarly, in many African and Asian countries, the post-independence promise of free health care for all has proved unaffordable.

Other important actions to improve coverage for the poor are: (1) to reduce the indirect costs which they face (extending services, operating at more user-friendly hours; improving transport, cutting waiting times); and (2) to improve the quality of service which they receive. Studies in a number of countries have borne out that the poor tend not only to pay more for health care than the rich, but also to receive poorer

treatment. No wonder then that many delay treatment, use alternative sources of care, and self-medicate (all of which are likely to be cheaper, but to worsen health outcomes).

Checklist for evaluating a new (or on-going) health financing scheme

In relation to existing financing mechanisms, how far does the new scheme achieve the following?

- Increase spreading of health care costs over time (decreasing uncertainty over when they will fall)
- Pool risks over a larger population (based on realistic projections of take-up)
- Increase the number of people having access to services, based on their needs, rather than ability to pay
- Increase social solidarity across different groups in society (or increase fragmentation, with different groups having access to different risk pools, or different types and qualities of care)
- Shift the burden of financing from poorer to richer households (i.e. be relatively more progressive than the system which it is replacing) – for example, by relating contributions to income levels
- Have a specific policy of targeting the poorest – for example, using exemptions for the poorest, or methods to encourage them to enrol (lower payments; payments in kind etc.)
- Produce sufficient revenue to cover operating costs of services (or at least the part of these costs which is being envisaged). This requires careful assessment of demand (how much are families paying now? How much would they be required to pay under this new scheme? How attractive are the benefits?), as well as the likely costs (what level of utilisation? What are the costs of providing those services, including overheads?)
- Is it inflation-proof? (Will revenue increase in line with increases in costs of providing services?)
- If the project is dependent on an outside source (e.g. government, or aid donor) for part of its operating costs, how dependable is it? What would happen if that source diminished or ceased to exist?
- Protect against adverse selection (i.e. are there incentives for low-risk people to join?)
- Protect against consumer moral hazard (are there methods for ensuring that patients do not over-use services, e.g. co-payments?)
- Protect against supplier moral hazard (e.g. are there limits on the financial rewards for health staff and institutions? Licensing systems for new medical technology)
- Promote cost-effective health care (e.g. reinforce primary care? Strengthen referral networks for access to secondary care? Promote preventive measures? Defined package of care according to CE principles? Active purchasing of services? Reimbursement of essential drugs only?)
- Offer services which are attractive to users (e.g. catastrophic cover? Improved access to drugs?)
- Improve the quality of services (e.g. will funds be used to address the most serious constraints? Will consumers be able to choose their providers? Will there be monitoring of service quality?)
- Be well managed (e.g. do the operators have the skills and motivation?)
- Be simple to operate, requiring skills and technology which are available in that context. Will it keep operating costs to a reasonable level (5-10% of revenue?)
- Involve users in the design and the on-going monitoring of the system

- Finally, does it replace or add to existing financing systems? (There is no ‘right answer’ to this question – it will depend on your objectives – but it is important to be clear about how this financing system will relate to others, and how it may impact on or interact with them)

It is highly unlikely that any one health financing scheme will be able to score highly on all of these questions (indeed, some of the questions may conflict with one another). Moreover, depending on the objectives of the project, some aspects will be more important than others. However, the decision to proceed should involve consideration of all of these questions, if only to be aware of the implications of the project, both positive and negative.

Conclusion

As stated at the start of this report, it is not possible to recommend the ‘best’ financing system for such a wide variety of contexts. It will have become clear to readers that there are many different criteria for judging financing systems, and that often these criteria are in conflict with one another. For example, there may be a trade-off between a system which scores highly on risk pooling and access and one which scores highly on user involvement and quality. This paper has aimed to equip readers to evaluate, in a specific context, how to modify existing arrangements to get as close to local objectives as possible.

For a low-income developing or transitional country, the key objectives are likely to be:

- Higher spending on health care
- Higher public share of funding
- More risk-pooling
- More equitable distribution of payments
- Resource allocation according to need
- Higher quality services, especially for the poor
- More emphasis on primary facilities
- Increased efficiency of use of funds
- More emphasis on preventive and cost effective services
- Regulation of the private sector

The richer (middle income) developing and transitional countries tend to have more risk-pooling systems in place and higher public spending on health care. They will however share most of the items on the bottom half of that list, concerned with efficiency and quality. For some of the wealthier, cost control is also a high priority.

Health financing decisions do not occur in a vacuum. This paper has avoided broadening further, but this does not negate the huge importance of a wider range of factors, which will affect the impact and implementation of health financing systems. These include political and social factors; institutional and personal incentives; resource allocation and spending decisions; regulatory structures; and the transparency and accountability of policy processes and bodies.

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GLOSSARY OF HEALTH ECONOMIC TERMS (used in this report)

Ability to pay	The capacity of an individual or organisation to pay for a good or service. See also <i>willingness to pay</i> , which may sometimes be higher than ability, leading to borrowing or indebtedness.
Acceptability	Degree to which a service meets the cultural needs and standards of a community. This in turn will affect utilisation of that service.
Accessibility	Extent to which a service is easy to use for its intended clients. This will depend on a number of factors, such as its costs (see <i>affordability</i>), its distance from them, the way in which services are organised etc.
Adverse selection	A situation where individuals are able to purchase insurance at rates which are below actuarially fair rates, because information known to them is not available to insurers (see <i>asymmetric information</i>).
Affordability	Extent to which the intended clients of a service can pay for it. This will depend on their income distribution, the cost of services and the financing mechanism (e.g. whether risks are pooled; whether exemptions exist for the low-paid etc.).
Bamako Initiative	Programme promoted by UNICEF in the late 1980s to generate funds for drugs and other recurrent costs by developing a range of community financing schemes, including the operation of revolving drug funds by health centres.
Capitation	A method of reimbursement under which a provider is paid a fixed amount per person, regardless of the volume of services rendered.
Case-mix	A measure of the assortment of patient cases treated by a given hospital, indicating the degree of complexity of the cases.
Community financing	A wide variety of risk pooling and prepayment schemes introduced in developing countries to fill in gaps in the financing of health care. See also <i>Bamako Initiative</i> .
Community participation	The involvement of community representatives in setting priorities in the health sector and promoting health. This is a major strand of the <i>PHC</i> philosophy. It is sometimes confused with two separate issues: (1) the pragmatic need to shift some of the cost of services onto households and individuals; and (2) the empowerment of individuals to take responsibility for their own health.
Community rating	Insurance term: all members of a scheme are charged the same premium, regardless of their risk status.
Compulsory health insurance	Health insurance under an obligatory public scheme. Payment for such an insurance amounts to a tax. Employers may have to pay contributions on behalf of their employees. Contributions are usually income-related. CHI is usually, but not always, administered by a public body.
Copayment	Amounts paid by the insurance beneficiary as a result of <i>coinsurance</i> and <i>deductibles</i>).
Cost control	Ability to limit the resources used in a particular service or sector. This

	is one of the criteria frequently used to judge health sector performance (along with <i>efficiency</i> , <i>equity</i> , <i>acceptability</i> etc.).
Coverage (rates)	The proportion of the estimated target population which has been reached. These are often used in relation to preventive programmes, where target populations can be more easily estimated.
Cream-skimming	Practice by which insurers or doctors discourage patients with expensive needs from joining their scheme or practice in order to protect their profit margins. Even if illegal, it can be achieved by subtle means such as having poor access to facilities for the elderly or disabled.
Decentralisation	Shift of power and/or of functions from the centre to the local level, however defined. This policy, which can have many different motivations and forms, is commonly thought to increase the effectiveness and accountability of services.
Deductible	The amount of health care charges for which a beneficiary is responsible before the insurer begins payment.
Demand	The quantity of a good purchased at any given price.
Economics	The study of how a society with limited resources decides what goods to produce, how to produce them, and how to distribute them among its members.
Efficiency	When the firm produces the maximum possible sustained output from a given set of inputs this is known as technical efficiency. By contrast, allocative efficiency is used to describe a situation in which either inputs or outputs are put to their best possible uses in the economy so that no further gains in output or welfare are possible.
Elasticity	Percentage change in some dependent variable (e.g. quantity demanded) resulting from a one percent change in some independent variable (e.g. price). Elasticities which exceed one in absolute value are considered elastic; elasticities less than one are inelastic.
Equity	At its most general, equity means being fair or just. How to judge that is subjective and controversial, and involves value judgements. However, one common understanding is that everyone should have equal access (both geographical and financial) to existing health care facilities and services. A common distinction is drawn between 'horizontal equity' - which means treating people with the same needs equally - and 'vertical equity' - which means that people with unequal needs should be treated unequally.
Essential drugs	A policy initiative to ensure that a minimal number of effective drugs is available to treat priority health problems at a cost which can be afforded by the community. A related aim is to save the resources used by prescribing more expensive or even unnecessary drugs.
Essential (or basic) package	This developed out of the World Development Report of 1993. Given the shortage of resources for health in developing countries and the high burden of disease, it suggested that public funds be concentrated on a defined range of highly cost-effective services. These are often called 'essential packages'. The term is a relative one, as what is deemed essential in a wealthy context may be a luxury in a poorer one.
Exemptions	Rules allowing certain groups in society (often lower income groups) not to pay charges or insurance premia. The difficulty lies in defining which categories should be exempt and in monitoring the system.

Fee-for-service (FFS)	A method of payment under which the provider is paid for each procedure or service that is provided to a patient
Good	Economic term, meaning a commodity whose consumption provides utility for individuals
Health	Can be defined narrowly as the absence of illness, or more broadly as the ‘state of complete physical, mental and social well-being’, as the WHO Constitution declares.
Health care	Goods and services used as inputs to produce health. In some analyses, one’s own time and knowledge used to maintain and promote health are considered in addition to conventional health care inputs.
Health economics	The study of the value of health and how it can be produced most efficiently and distributed to maximise social welfare.
Health Maintenance organization (HMO)	An organization which, in return for a prepaid premium, provides an enrollee with comprehensive health benefits for a given period of time.
Health sector reform	A substantial change to the structure or processes of health services, with the intention of improving outcomes.
Incentives	Systems which reward and therefore tend to encourage certain types of activity.
Informal payments	Payments which are not officially set by health providers. These take many forms. They may be monetary or in kind. They may be for clinical or non-clinical services (e.g. food). They may be voluntary or compulsory (i.e. treatment is withheld if they are not paid). They may be flexible or a fairly fixed tariff. They may go to individual staff or be used by the institution as a whole. They may provide a small top-up income or the largest portion of the facility’s budget. Their shared feature is that they are not legally mandated and cannot be enforced in a court of law.
Insurance	Pooling risks with others in order to spread costs of health care (or other commodity) over time and protect against catastrophically expensive illness. See also <i>voluntary health insurance</i> , <i>compulsory health insurance</i> , and <i>social insurance</i> .
Managed care	A term encompassing a broad set of actions which a firm or insurer establishes to reduce costs.
Moral hazard	An insurance term. Where services are not paid for directly by individuals, they may take risks or act in a way which increases the demand for health services. It is in insurers’ interests to create disincentives to such behaviour (such as <i>copayments</i> or risk-rated <i>premia</i>).
Needs	What a person requires in terms of health care. Judged subjectively this is often called WANTS, to distinguish it from an objective judgement about appropriate treatment. Commonly needs are judged by a professional, which introduces a different kind of bias. These are distinguished from what is actually purchased, which is DEMAND.
Payment systems	Way in which medical institutions or staff are paid for their work. These will set certain incentives and encourage certain patterns of health care provision. The most common types are: <i>salaries</i> , <i>fee for service</i> , <i>capitation</i> , <i>target payments</i> , <i>case-based payments</i> , <i>fixed budgets</i> , and <i>contracts</i> .
Performance measures	These can be applied to institutions or individuals. For example, how

well is one hospital doing, compared with another? How well is a doctor working, compared with his or her colleagues? These questions call for agreement on what the priorities are. For example, if cost-cutting is the key, then a low ratio of inputs to outputs may be the focus. If there is strong competition for patients, on the other hand, then patient satisfaction may feature highly. High levels of activity may seem a good thing, but what is the cost in terms of quality? In terms of outcomes, is the goal to have low rates of failure, or do you want to maximise health gain? It is a challenge to agree priorities and avoid *perverse incentives* in setting up performance measures.

Perverse incentives	Where your system of rewards unintentionally encourages behaviour of an undesirable kind (e.g. paying according to the number of patients seen. Its aim may be to increase staff productivity. One result will almost certainly be lower quality treatment for patients.)
Premium	Payment for insurance. These may be community-rated (averaged across a group of individuals) or risk-rated (tailored to the claims experience or actuarial risk of each individual).
Price elasticity of demand/supply	Percentage change in quantity demanded (supplied) resulting from a 1% change in price. (See also <i>elasticity</i> .)
Primary care	In a system with a gatekeeper, all initial (non-emergency) consultations with doctors, nurses or other health staff are termed primary care, as opposed to <i>secondary care</i> or referral services. In systems with direct access to specialists, the distinction is usually based on facilities, with health centres, for example, providing primary care and hospitals secondary care. (See also <i>primary health care</i> .)
Primary health care (PHC)	According to WHO, PHC is essential health care made accessible at a cost which the country and community can afford, with methods that are practical, scientifically sound and socially acceptable. It is a normative concept, implying <i>access</i> for all, <i>community participation</i> and the importance of health promotion and a <i>multisectoral approach</i> to the production of health.
Priority setting	Deciding the relative importance attached to alternative goals or activities in a given setting. It is often connected with resource shortages and the need to <i>ration</i> care.
Private sector	Usually refers to organisations which are not managed by the state. Covers a wide spectrum of profit and not-for-profit organisations; formal and informal; competing with public facilities for customers or complementary etc.
Progressive (tax)	Tax or other form of financing in which the percentage of the contribution to be paid rises with rising income levels. (See <i>regressive</i>).
Provider	An organisation which provides health care, such as a primary care doctor or a hospital, and sells its services to purchasers.
Purchaser-provider split	Where the purchasers and providers of health care go from being vertically integrated in a bureaucratic system to being autonomous bodies which deal with each other through contracts for work. This aims to introduce competitive pressures into the public sector (see <i>quasi-markets</i>), although it may also significantly increase <i>transaction costs</i> .
Quality	How 'good' a service is - something which can be considered from

different perspectives. There are objective medical standards: was the correct procedure followed? What about outcomes: did the patient get better/ achieve the expected health gain? From the patient's point of view, was the procedure well managed? Were staff courteous? Were they given appropriate information? Etc.

Rationing	Restricting supply of services according to implicit or explicit criteria, where demand exceeds supply. It implies the absence of fully functioning market mechanisms to link demand with supply.
Regressive (tax)	Form of tax or other financing in which the proportion of income paid falls with rising income levels.
Regulation	Government intervention in the functioning of markets. Can be interpreted narrowly as bureaucratic measures such as rules, backed by legal sanctions, or more broadly to include economic signals such as subsidies, taxes and incentives.
Resource allocation	In a general sense, all of health economics is concerned with resource allocation issues. However, this term is often used more narrowly to refer to the system by which recurrent funds (and sometimes staff) are divided between different geographical regions. Some kind of population-based formula is preferable to infrastructure-led spending, which tends to perpetuate inequity.
Risk aversion	The degree to which a certain income is preferred to a risky alternative with the same expected income.
Risk pooling	Process by which people contribute to a general fund, from which they can be reimbursed if the need arises. This is the basis for all insurance funds. The costs of illness are then shared between members of the fund (thus risks are pooled).
Risk rating	Insurance term by which an individual's premium is linked to the likelihood of them incurring health expenditures in future (i.e. their expected ill health, based on information about their past record, genetic factors or lifestyle). Risk rating can also be applied to a larger group, such as a community.
Secondary care	Care provided by medical specialists, usually in a hospital setting (see <i>primary care</i>), but also some specialist services provided in the community.
Sector wide action programmes (SWAps)	Instruments for coordinating national plans for health sector development with funding by international donors. SWAps aim to increase the involvement of recipient governments in planning health sector development, reduce the burden of multiple reporting requirements of donors, and focus on the sustainability of the sector as a whole.
Social insurance	Government insurance programmes in which eligibility and premiums are not determined by the practices common to private insurance contracts. Premiums are often subsidized and there are typically re-distributions from some segments of the population to others.
Supplier induced demand (SID)	The change in demand associated with the discretionary influence of providers, especially doctors, over their patients. Demand that is provided for the self-interests of providers rather than solely for patient interests.
Sustainability	Used in different senses, but in the health field it generally implies the ability to maintain a system over time, at a reasonable level of

operation and using the resources are likely to be available. Sustainability has various dimensions, including financial, institutional, and social.

Third party payment	Refers to situation where the first party (patient) does not pay directly for the activities of the second party (providers), but this is done through a private insurer, sickness fund or government agency (third party). This set-up will affect the quantity (and possibly quality) of the service demanded and supplied.
Transaction costs	The costs which are incurred by the process of negotiating between buyer and seller - for example, the cost of collecting information about products, drawing up contracts, negotiating prices etc. These reduce the profitability of doing business in that market.
Transitional economy	Term used to describe economies which used to be run on <i>command</i> lines, but which are now giving an increased role to market forces. As the term implies, they are still in the process of reform, and not yet fully established market economies.
User charges	Direct payment for services by patients, though not necessarily covering the full costs of that service. These are often introduced to supplement public finance for health services which used to be free. Charges can be officially sanctioned and their levels controlled, but commonly they develop informally and vary between facilities and even members of staff. (See also <i>informal payments</i>).
Utilisation	Use of existing capacity, often measured as an average over a period (e.g. bed occupancy, or theatre usage).
Vertical equity	The (Aristotelian) principle that those with differing ability to pay for services will contribute different amounts, and similarly that those with different needs will be treated differently. This complements the principle of <i>horizontal equity</i> , but is harder to interpret in practice.
Voluntary health insurance	Health insurance which is taken up and paid for at the discretion of individuals (whether directly or via their employers). It can be offered by a public or private company.
Weighted capitation	Sum of money provided for services to each resident in a particular locality. The three main factors commonly reflected in the formula are: age structure of the population; its morbidity; and the relative cost of providing services.
Willingness to pay	The maximum amount of money that an individual is prepared to give up to ensure that a health care intervention is carried out. (See <i>ability to pay</i> .)
World Bank	Set up after the Second World War, together with the International Monetary Fund (IMF), the World Bank's function is to promote recovery and development globally. It is currently the largest donor in the health field (although it makes loans, they are highly concessional to the poorer countries, and therefore count at least partially as aid). It plays a major role in developing thinking about health and development and also in setting agendas in-country for reform in the health and other sectors.
World Health Organisation (WHO)	United Nations organisation, based in Geneva, responsible for promotion of health throughout the world.
Source: adapted from Witter, Ensor, Jowett and Thompson, 2000.	