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Health Insurance for the Formal Sector in Africa: Yes, But…

Joseph Kutzin
Health Economist, Analysis, Research, and Assessment Division,
World Health Organization

Health insurance can be organized in many different ways, with different implications for the organization and delivery of health services. At a minimum, it is a way to pay for health care and to ensure access to services by providing a mechanism for sharing the risk of incurring medical expenditures among different individuals. This definition implies that (a) the use of health services is tied to a financial cost, and (b) people are able and willing to use the insured health services when they perceive themselves to be sick. The latter point reflects the importance of physical access to services of an acceptable quality. To be effectively insured, therefore, implies both financial protection and access to desirable services.

Countries and communities have implemented health insurance schemes that differ along a number of dimensions. One of the more important dimensions relates to the extent of the population covered by insurance. In many countries governments require coverage for the entire population and implement such coverage effectively. This coverage is financed either through general tax revenues (as in Canada, Finland, Sweden, the United Kingdom) or through mandatory earmarked contributions from employers, from employees, and sometimes from the government to a health insurance fund (for instance, Belgium, France, Germany, Korea). In other countries, insurance coverage is not universal. These countries tend to have a mix of schemes, including some for which the government mandates coverage of a defined segment of the population, and others for which participation is voluntary (for example, China, Kenya, Thailand, the United States). In countries without mandatory universal coverage, people who work in the formal sector of the economy are much more likely to be covered by insurance than those in the informal sector, because organizing contributions and large risk pools for this group is easier.

This chapter examines health insurance systems that are focused on people who work in the formal sector of the economy (and their dependents). Theories of what is possible are combined with a review of what has actually happened in practice in an attempt to identify the conditions that make expanding insurance coverage for the formal sector both feasible and desirable. The distinction between feasibility and desirability is important to remember. Public policy objectives in the health sector include improving health status, equity, efficiency, acceptability (to providers and users), and sustainability. Expanded coverage with health insurance may be a means to achieve progress on these objectives, but the pursuit of broad coverage through insurance is not an end of policy.

By assessing the conditions needed for health insurance to be feasible and desirable, the chapter looks at the appropriateness of strategies to expand coverage for formal sector workers in African countries. Some of these conditions are within the span of control of health sector decisionmakers. These relate primarily to the specific policies of the insurance scheme, the regulatory environment, and the organization of the health system. Other conditions are associated with broader issues of political economy and the relative power of different interest groups in society. Still other conditions relate to a country's level of economic, institutional, and managerial development. Countries can be expected to be at different stages with respect to many of these conditions. Therefore the appropriateness of expanding insurance coverage for the formal sector is likely to be different in different African countries.

Box 5.1 provides a glossary of terms used in connection with health insurance.

Common Problems Facing Health Systems in Africa

Countries in Africa (and in most other parts of the world) face an array of health care financing problems that leave their health systems far from achieving the objectives of good health status, equity, efficiency, acceptability, and sustainability. The main problem is simply a shortage of government budgetary resources for health care relative to increasing demand and need for care. One manifestation of the budgetary shortfall is a deterioration in the quality and effectiveness of publicly provided health services (Shaw and Ainsworth 1995). In a macroeconomic climate that, since the 1980s, has been characterized by slow or no growth in national income or government budgets, and often a per capita decline in real terms, governments are seeking ways to limit their financial responsibilities for health services (ILO 1993). The reforms being considered or implemented constitute strategies to improve the use of existing resources and/or mobilize additional nongovernmental resources for health.

In addition to an absolute shortage of resources going into the health sector, patterns of spending in most countries cause or reflect an inequitable and inefficient allocation of inputs and services. The clearest example of this is the concentration of government resources in large, urban hospitals. On average, people who live in urban areas have higher incomes than those in rural areas, yet the urban bias in government health spending means that the costs of gaining access to good quality care are highest for the most remote, and usually poorest, groups of the population. Moreover, evidence from several countries, for instance, Indonesia (Ministry of Health, Indonesia, 1995), Kenya, and Tanzania (Griffin and Shaw 1995), indicates that nonpoor people tend to consume more publicly financed hospital care per capita than poor people, which implies that they receive a disproportionate share of government subsidies. This pattern of government resource allocation may also be inefficient because the most cost-effective clinical interventions that health systems can provide are those that are most appropriately delivered in a health center or other nonhospital setting.[1]

High levels of waste and other forms of technical inefficiency also plague health systems. These problems are a threat to any gains that reforms to improve cost-effectiveness by reallocating resources might achieve (World Bank 1994).

Health Policy Objectives

To assess the appropriateness of any policy tool, including health insurance, for achieving health policy objectives, one must first define these policy objectives explicitly and identify the main obstacles to achieving

1. If the population is able and willing to pay for basic out-patient services on an out-of-pocket basis, however, a pattern of government health resource allocation targeted only at high cost referral services might be efficient from an overall sectoral perspective (Hammer and Berman 1995). This implies that government funds would provide insurance against high cost, low probability events, while private sources would pay for other personal health services. In practice, however, no government has proven able to target its hospital subsidies so precisely.

Box 5.1. Glossary of Selected Health Insurance Terminology

Adverse selection	Phenomenon that can occur in the context of voluntary enrollment of individuals into health insurance schemes. When a scheme covers a disproportionate share of people with a high probability of incurring expensive medical costs, this can jeopardize its financial viability.
Benefit package	Services and the means of accessing services that the insurance scheme covers.
Budgets	Periodic allocation of funds to (or on behalf of) health facilities. The total amount of the allocation is determined in advance.
Capitation	Fixed payment to providers per person enrolled in the insurance scheme. Providers paid by capitation bear the financial risk of providing a defined package of services to their beneficiary population.
Catastrophic costs	These are costs arising from treatment of an illness that are extremely high relatively to individual or household income. Catastrophic costs are usually associated with expensive referral hospital care.
Case-based reimbursement	Retrospective payment of an administratively predetermined amount per case or episode of illness. Individual services are bundled into distinct case categories that are reasonably homogeneous with respect to resource cost, and providers are reimbursed a fixed amount per case in each category.
Coinsurance	Percentage of the total charge for a service that those covered must pay for out-of-pocket.
Contribution mechanism	The means by which funds are mobilized for insurance. Sources of funds include allocations from general tax revenues, mandatory contributions for an identifiable insurance fund, and voluntary contributions.
Copayments	Flat amounts that those covered must pay out-of-pocket for each service used.
Cost sharing	Any direct payment the users of health services make to the providers of services. Modalities of cost sharing include copayments, coinsurance, and deductibles.
Coverage	This refers to the beneficiary population, for instance, the percentage of people who are covered by insurance or defined population groups (such as employees and dependents) who are covered.
Covered services	See benefit package.
Deductibles	Amount that those covered must pay out-of-pocket before the benefits of the insurance program become active.
Excluded services	Services or methods of using services that are not covered in the benefit package of an insurance scheme. Individuals are liable for the full costs of excluded services.
Fee-for-service reimbursement	Retrospective payment per item of service provided, that is, payment after those covered have reported the use of covered services. Fee-for-service reimbursement rates can be determined either by market forces or through administratively determined or negotiated fee schedules.
Fund holder	The institution responsible for spending the prepaid contributions for insurance (see purchaser). Fund holders are usually third party, public or private insurance funds, but can also be providers. In the latter case, some functions of insurer and provider are integrated in a single institution.
Gatekeeper	The institution or individual responsible for determining access to referral services. The gatekeeper function is usually the responsibility of the provider of first contact primary care.
Moral hazard	Impact on an individual's demand for care of an out-of-pocket payment that is less than the cost of providing services. Because insurance, including centrally tax-funded services, covers some or all of the costs of service use, individuals tend to use more services than if they faced the full cost of care.
Provider payment	The mechanisms by which resources are allocated from the insurance fund (or national health service) to institutional service providers (for instance, hospitals) or individual service providers (for example, doctors). Options include the following: budgets or salaries, capitation, fee-for-service reimbursement, case-based reimbursement, and various combinations of these options.
Purchaser	The institution responsible for purchasing health services from providers. This always includes the insurance fund itself, but some schemes involve additional purchasers as well, including entities that are also service providers. See fund holder.
Risk pool	Group of people covered by the same insurance scheme.
Risk rating	A basis for determining an individual's or group's contribution (premium payment) to a health insurance scheme. In a risk-rated scheme, the contribution rate is determined by an individual's or group's expected cost of service use rather than by their level of income (as in a social insurance scheme).
Salaries	Similar to budgets, but applies specifically to health workers. Salaries are prospectively determined allocations.
Social health insurance	System of financing care through contributions to an insurance fund that operates within a tight framework of government regulations. Social insurance usually involves mandatory, earnings-related contributions by employers and employees.
Supplier-induced demand	Phenomenon that arises from patients' reliance on providers for information about their need for specific services. While not necessarily harmful—an important function of providers is to inform patients about their condition and the available treatment options—the potential for costly and possibly harmful overuse of services exists where providers benefit financially from the treatment they recommend and provide. Supplier-induced demand is the reason why fee-for-service reimbursement causes cost escalation.

them. While the relative weight given to the different objectives of health policy varies from country to country, the objectives are fairly general and may be defined as improving equity, efficiency, acceptability or quality, sustainability, and health status. This chapter describes only equity and efficiency in detail. The other objectives are considered, where relevant, as elements of these two broad policy goals.

Equity in the health sector has several dimensions (Wagstaff and Van Doorslaer 1993). Equity in financing care implies that payment for health care is related to individuals' level of income, irrespective of their medical need. Equity in the receipt of care implies that access to and use of services of an acceptable level of quality is based on medical need, irrespective of individuals' ability to pay. Assuming that health care improves health, this second dimension should be closely related to a third, which is equity in health status. Equity in health status implies a pattern of health and disease in society that is not related to the distribution of income and wealth. Although analysis of equity issues usually involves comparisons across income groups, investigators should also consider other aspects of possible inequities, for example, differences in the receipt of care relative to need by gender, age, or ethnicity.

Efficiency is also multidimensional. Allocative efficiency within the health sector refers to the extent to which sectoral resources are distributed to their most cost-effective uses. Allocative efficiency is also a relevant concept for assessing the size of the health sector in the national economy. Thus policies can affect allocative efficiency by shifting the distribution of resources within the health sector or between the health sector and the rest of the economy. Technical efficiency is a narrower concept. It refers to the management and use of resources that have already been allocated within the sector. Analyses of technical efficiency try to determine if services are produced at the lowest cost possible for a given allocation of resources, and thus often focus on the extent to which poor management practices or inappropriate incentives generate waste. A third dimension, which is related to technical efficiency, is administrative efficiency. This is concerned with the costs of managing the health system (WHO 1993). Ability to administer the health system efficiently is also an important element of institutional sustainability.

Health Insurance Objectives

Expanding or changing the role of insurance in health systems can provide policymakers with a useful tool for addressing the health system problems described earlier to some extent. The need to mobilize additional nongovernmental sources of funds is the main impetus for a focus on health insurance as a policy option, but insurance can also be a way to expand access to care and to change the pattern of spending in a manner that improves the efficiency of resource allocation and use. Indeed, in many industrial countries and some middle-income countries the principal motivation for reforming health insurance systems is not to mobilize additional resources, but to control the rapid growth in government (and private) health spending. These countries have focused on changing incentives within health financing schemes to slow down the growth rate of expenditure. Another objective has been to improve technical efficiency by introducing competitive mechanisms into the health sector. Finally, expanding insurance coverage implies lowering financial barriers to access, and should thus enable a greater number of people to get the care they need.

From the perspective of government health policymakers, the likely objectives of health insurance are those just described, which relate to broad efficiency and equity goals. However, other organized groups in society are likely to have different, or at least additional, objectives. Three important groups are associations of health service providers, for instance, medical associations; formal sector workers, that is, civil servants and those who work in the private formal sector, who are probably already covered by insurance or will be the first to be covered; and employers. Important objectives of health insurance for providers are to raise their income levels and to increase their access to new technologies that could enable them to improve the quality of care. For the initial group of insured people, an important objective is to consolidate and expand their benefits, including greater choice and shorter waiting times, while trying to minimize the amount that they have to contribute to the scheme. Employers may be interested in providing good health benefits for their workers, but they also wish to keep their premium contributions as low as possible to

minimize their overall production costs. In this respect, they may be important strategic allies of government health policymakers. Understanding the interests of key stakeholders is essential if governments are to have a chance of achieving their aims.

Expanding Coverage: Questions That Government Should Ask

Is expanding health insurance coverage for the formally employed population feasible? If so, will such an expansion be consistent with the government's health policy objectives? For policymakers to answer these questions, they will have to address a number of issues. This section suggests a framework for addressing these issues and provides evidence from country experience to illustrate their importance.

Before getting into the issue of expanding coverage, note that the current situation in relation to health insurance varies considerably across African countries. Estimates of population coverage with either compulsory social insurance or private health insurance range from zero or near zero to 25 percent in Kenya (Monasch 1996). Some countries have government-run (or organized) systems of social insurance, others rely primarily on private insurance (also referred to as medical aid schemes), and still others use a combination of the two. The important point is that countries need to address the current situations they are facing, in addition to determining whether or not to promote expanded coverage. While the information is this section is presented as issues related to the expansion of coverage, much of the discussion, especially with respect to equity and efficiency, is relevant to government policy as it relates to the existing health insurance situation in their countries.

As noted earlier, an expansion of health insurance coverage can increase health sector revenues, reduce financial barriers to care for the insured, and improve the efficiency of resource allocation and use. Where insurance coverage is universal and cost sharing, for instance, copayments, is limited or nonexistent, this reduces financial barriers to access for the entire population. However, universal coverage is not feasible, and does not exist in countries where a relatively large percentage of the population works as self-employed farmers or in the informal sector, because of the difficulty of organizing premium collections for these people or of targeting subsidies for their purchase of insurance. Nevertheless, some have argued (Griffin and Shaw 1995, for example) that governments should encourage the expansion of insurance coverage for the relatively small formal sector, because this could ultimately benefit the poorer, uninsured population. The argument for this is that newly insured persons would switch from public to private providers, thereby freeing government resources to be targeted more precisely to the provision of cost-effective services for the poor, uninsured majority.

Other authors have raised concerns that expanding insurance for the formal sector could exacerbate inequities between insured and uninsured people. The concern is that the methods used to encourage the expansion of coverage invariably involve some type of government subsidy for people who are relatively well-off economically. Moreover, there is no guarantee that the government health budget freed by this process will be better targeted, either to the poor or to more cost-effective services (Bennett and Ngalande-Banda 1994; Kutzin 1995).

How valid are these arguments? Those responsible for the health sector in each country must evaluate the issues for themselves. To do so, they need to address the following questions:

- Feasibility questions
  - What are mechanisms for expanding insurance coverage to people who work in the formal sector of the economy?
  - What are feasible strategies in the medium and long term for expanding insurance to poorer segments of the population?

- Desirability questions
  - How can insurance coverage be expanded without subsidizing its purchase to the extent that the government does not end up concentrating even more of its limited resources on a relatively well-

off segment of the population? In addition, how can the authorities limit subsidies for the use of government health services by the insured population?
- What can the authorities do to limit the possibility or the effects of a diversion of scarce health human resources from public to private patients that an expansion of insurance coverage may induce?
- What mix of incentives and regulations should the government use to organize service delivery and contain costs within the insurance scheme(s)?

The rest of this section analyzes each of these questions, using country experience if it is available, in an attempt to identify the conditions that countries must meet to make the expansion of insurance coverage possible and to have desirable effects on health objectives.

Feasibility

The possibilities for expanding coverage can be divided into two aspects: expanding coverage to the formal sector and expanding coverage beyond the formal sector.

Expanding coverage to the formal sector. Insurance coverage of workers in the formal sector of the economy can be increased in two ways. The first is for the government to make such coverage compulsory, either by creating a social insurance scheme funded through a tax on employers and employees, or by mandating that employers provide insurance (or directly provide or reimburse health services) for their workers. The second is for the government to provide incentives to employers and individuals to encourage them to purchase insurance.

Several African countries have social insurance systems financed through mandatory employer and employee contributions that cover health services for employees in the formal sector (for example, Burundi, Cameroon, Côte d'Ivoire, Kenya, Senegal). Where these schemes cover civil servants, the government contributes in its role as employer. In a few countries, private employers are required to provide coverage for their employees' health care costs, either by reimbursing their health expenses (Zaire) or by creating company or intercompany medical clinics (Madagascar) (Griffin and Shaw 1995; ILO 1993; Shepard 1995).

For a system of social health insurance to be feasible, a number of administrative requirements have to be met. First, mechanisms for collecting contributions must be in place, with the level of contributions defined as a percentage deduction from income. Because this requires having a common, agreed measure of income, this nearly always involves a payroll tax on employers and employees in the formal sector of the economy. The difficulty and cost of doing this for people working in the informal and agricultural sectors means that social health insurance functions most easily when most of the population is working in the formal sector. In addition, given that a number of other payroll taxes, such as pensions, unemployment insurance, and workers' compensation, already exist in most countries, an important feasibility issue is the effect of an additional tax on employers' total wage bill. Thus an increase in unemployment that may be induced by the introduction of this tax constrains the feasibility of social insurance (Normand and Weber 1994).

A second set of administrative requirements for social insurance to be feasible relate to what might be called the national infrastructure. This includes the presence of a core of well-educated administrators who could be trained to run the system. Some of the needed training and skills include data collection, statistical analysis, claims handling, financial management, the economics of incentives and provider behavior, and negotiation. In addition to this need for people with specialized skills and training, the general population should be sufficiently literate and numerate to understand the scheme. Another element of the national infrastructure is the development of appropriate legislation to codify the scheme into law, coupled with an ability to enforce these new laws. Features of the system that should be specified in legislation include issues of membership and population coverage, the means by which the scheme will be financed, the nature of the social insurance fund or funds (organization, decisionmaking authority, responsibilities, and accountability), the relationship of the scheme with providers, and the definition of the benefit package to which those insured will be entitled. Finally, the country's health service infrastructure must be able to provide the

legislated benefits. To this end, the government should develop an overall plan for developing the health services that specifies responsibilities for covering the insured and uninsured parts of the population (ILO 1993; Normand and Weber 1994).

Governments in some African countries have not created a compulsory insurance scheme, but they do provide financial, that is, tax incentives for employers to purchase private health insurance on behalf of their employees rather than mandate employer contributions. In South Africa and Zimbabwe, for example, a percentage of employers' contributions to medical aid schemes are either tax deductible or tax exempt (Bennett and Ngalande-Banda 1994; Pillay 1995). In Tanzania, no information is available on the government's tax treatment of employer sponsored health coverage, but a survey of large, urban employers found that most provide some type of health coverage for their employees (Griffin and Shaw 1995).

For incentives to be effective at expanding insurance coverage, the government's will and capacity alone are insufficient. Where coverage is voluntary, individuals and employers must perceive the benefits of insurance as outweighing its costs. Thus premiums should be lower than the expected cost of using care, and those insured must perceive the quality of care as adequate. To achieve this, several conditions must be satisfied:

- User fees must exist. This is not generally an issue where the insurance would cover private providers, but the implementation of user fees in government health facilities is a prerequisite for using insurance as a way to help finance public facilities.
- The insured group must be large enough so that the risk of incurring high cost health events is sufficiently spread to keep premium levels down. The size of the group depends on the size of the formal sector and the number of insurers active in the market.
- The scheme should be designed in a way that keeps premiums low. Design features for improving the internal efficiency of health insurance schemes are discussed in more detail later, but an important point is that the services covered by insurance should initially focus on relatively high cost, low frequency events. Governments can affect benefit design directly if insurance is organized in a single government scheme, or through regulations or incentives for the benefit packages provided by private insurers.
- The organizers of the scheme need information on health spending and utilization and risk patterns to be able to set premiums at levels that would be self-financing.
- If insurance is a new development, the government can support its development by identifying funds to provide start-up capital to meets its initial operating costs.
- Insurance needs to be organized and managed in a manner that keeps administrative costs as low as possible (Griffin and Shaw 1995).

EXPANSION OF INSURANCE COVERAGE BEYOND THE FORMAL SECTOR. Equity is clearly related to the level of coverage health insurance schemes achieve. As people with lower incomes are brought into the insurance system, this reduces an important barrier to access for those who need coverage the most. Thus insurance can be a powerful mechanism for improving equity in the receipt of care within the covered population (Griffin and Shaw 1995). Based on the experience of both industrial and developing countries that have been able to achieve universal coverage with health insurance, one can identify a number of conditions for the expansion of coverage and improvement in equity. Some of these conditions are under the control of health sector decisionmakers, but others are largely outside their control (Kutzin 1995; WHO 1995). The conditions relate to the specifics of policy decisions, to a country's administrative capacity, to macroeconomic circumstances, and to broader issues of culture and historical development. The conditions are as follows:

- National policy should make universal coverage mandatory and establish a clear plan for moving in this direction. This requires that the government have in place administrative systems capable of organizing people in the nonformal sector of the economy, identifying people for whom insurance premiums will have to be subsidized, and targeting subsidies to these individuals.
- Levels of income and the percentage of the population employed in the formal sector of the economy must exhibit growth.

- The national banking system must be efficient, and a high level of administrative capacity to facilitate the flow of funds and information must be available. The population at large must be relatively literate and numerate, and specific skills and systems related to the business and management of insurance must also be present, for instance, negotiation, data analysis, auditing, and accounting.
- A high degree of integrity and probity in corporate and public affairs is needed, because the expansion of insurance schemes involves pooling an increasingly greater amount of funds.
- Countries that have achieved universal coverage also appear to have a history and culture conducive to social solidarity. As with integrity, this is difficult to measure, but is essential for insurance to be expanded successfully on a large scale. Patience and commitment to making the insurance scheme as extensive as possible are essential, especially because the initial groups to be covered will be powerful advocates for consolidating and expanding their own benefits, rather than for expanding the scheme in general.

This is a soberingly long list of conditions, and governments should seriously consider their commitment to national social insurance before proceeding down this path. In most countries that have achieved universal coverage, such as Costa Rica, the Czech Republic, Germany, and Japan, the transition from partial to full coverage of the population took between 40 and 100 years. The fastest country to make this transition was Korea, which did so in 12 years. This occurred in the context of a clear government commitment to universal coverage, a strong local government system able to implement regular means tests to identify those in need of subsidies, and an economic growth rate per capita that averaged more than 10 percent per year in real terms during this period (WHO 1995).

Perhaps more relevant to African countries is the need for the government to support the development of insurance schemes for the rural and urban informal sectors of the economy. While this is beyond the scope of this chapter (see chapter 4 in this volume), governments may have an important role to play in relation to these schemes, even though the limited number of examples for which good documentation exists only involve governments minimally (see, for example Moens and Carrin 1992 or Shepard, Vian, and Kleinau 1990 for a description of the prepayment scheme in the Bwamanda health zone of Zaire). Where prepayment and insurance schemes for people in the informal sector exist, governments should try to learn about them and try to coordinate them into the overall development of the health system. This might ultimately lead to a coordination of benefits and financing systems across schemes in a country, thereby expanding the overall pool of the insured population.

Desirability

If the government institutes policies to expand health insurance coverage for those in the formal sector, will the distribution of government subsidies for health become more or less equitable? And what will happen to access to care, not only for the insured, but for the entire population? The answers to these questions depend on a number of conditions, many of which can be affected by policy. The poorer, uninsured part of the population could benefit if the newly insured group self-finances the scheme, and if they move from public to private sources of care. This would allow government health funding to be focused more narrowly on those who would still use the public delivery system (Shaw and Griffin 1995). In other words, the technical conditions for equity improvements to result from expanding insurance for those working in the formal sector of the economy are as follows:

- Newly insured people must switch to privately financed care to such an extent that the sum of the public revenues liberated by this switching is greater than the government subsidies, for example, tax relief, used to expand insurance.
- For newly insured people who continue to use government health facilities, charges need to be set at rates high enough to recover costs fully, or possibly to allow for some cross-subsidization of services

for the uninsured. This requires government providers to determine the costs of care and to ensure that people covered by insurance are charged at a rate that is at least equal to that unit cost.
- Newly freed government resources must be retained in the health sector and be targeted to services used by the poor.

The limited available evidence indicates that countries have had difficulties in meeting these conditions, and therefore expanded coverage of the formal sector with health insurance has usually worsened inequities. For African countries a major constraint on equity is that the size of the formal sector is quite small and relatively well-off in economic terms. Promotion of insurance initially skews resources toward this part of the population, and governments have not demonstrated their willingness or ability to put the other conditions in place that would permit public resources to be refocused on the poor. Thus if expansion of insurance is to improve equity, this depends not only on how the scheme is financed, but also on the government's broader allocation policies governing health resources (Bennett and Ngalande-Banda 1994).

In Burundi, for example, a compulsory social insurance scheme for civil servants, members of the armed forces, employees of parastatals and universities, and their dependents was the cause of great inequities in the use of government subsidies for health. Employers, namely, the government or government-supported bodies, funded this scheme through a 7.5 percent payroll contribution, 3 percent of which was deducted from employees' salaries. In 1991 public expenditure on the services consumed (largely in the private sector) by this economically advantaged group, who made up about 6 percent of the population, came to about 30 percent of total government health expenditure (World Bank 1993). Even if this insurance scheme caused all its beneficiaries to move from public to private sources of care, which is an extreme assumption, the public resources freed by such a shift are unlikely to have offset the amount the government spent to provide insurance for them.

A compulsory insurance scheme for Indonesian civil servants provides further evidence of the inequities that can arise when governments create such schemes for their employees. This scheme has created additional equity concerns because the main benefit it provides is free use of public hospitals, and the reimbursement rates are actually below the cost of providing services. Thus in this scheme, the purchase of insurance is subsidized through the government's employer contribution and the use of services is also subsidized through below cost charges in public hospitals. A World Bank study found that the scheme used public hospitals at a rate that was five times the national average (Prescott 1991). This situation may be relevant for many African countries where reimbursement rates for private patients in public hospitals may recover less than the full costs of care, thereby leaving the government to pay the remainder for private patient services.

Inequities in the financing and receipt of care are also possible in countries that promote insurance through tax incentives. In South Africa, for example, employers' contributions to medical schemes are tax deductible and are a tax free benefit for employees. As in other countries, these tax benefits constitute government subsidies to a relatively well-off segment of the population. Health insurance schemes cover 19 percent of the population, but expenditures on behalf of this group represent nearly 50 percent of total health spending (Pillay 1995).

Given these examples, governments need to be cautious when considering expanding insurance for a relatively well-off segment of the population. Health insurance schemes in Africa and in countries elsewhere with relatively small formal sectors tend not to be self-financing. Instead, they usually involve a substantial element of subsidy. Why has this occurred? One answer to this question is that the countries have not met the technical conditions specified earlier. However, this leads to further questions of why they have not met these technical conditions. Evidence from country experience is insufficient to answer these questions conclusively, but the answers are probably not of a "technical" nature. Instead, the issues are likely to involve administrative capacity and the political power of well-organized interest groups.

For a health insurance scheme to free resources that the government can reallocate, the cost of the scheme must be minimized. This implies the need for strong administrative capacity. Where the insured use public

hospitals, governments must be able to calculate the costs of in-patient care, especially for "amenity" rooms that the insured population is likely to use, not just the average cost of a hospital stay, and routinely update this information so that they can set reimbursement rates at a level that will cross-subsidize the public sector.

From the perspective of power politics, the insured population, while relatively small, may be well organized given the important economic role of the formal sector. It may thus be in a position to put pressure on the government to expand insurance benefits, and possibly to have the government directly subsidize their contributions. Professional organizations of providers, such as medical associations, may also be a powerful force that pressures the government to increase the level of reimbursements the insurance fund pays them.

Any of these factors would limit the possibility that insurance could generate a surplus for redistribution to the uninsured. If the government is truly committed to using insurance for the formal sector to increase the resources available to the uninsured, it will need to use political skills to support its technical objectives. This might involve launching public education campaigns and building strategic alliances with other organized groups, such as employers and possibly associations of private insurers, that are interested in keeping down the costs of providing insurance.

The lesson from experience is not that expanding insurance is certain to worsen equity, but rather that the methods chosen to promote such an expansion must be part of an overall strategy to establish the conditions needed to improve equity. Expanding insurance coverage could be part of a broader program to reduce inequities, but by itself, it could easily make things worse. As those who have promoted the expansion of insurance for the formal sector in Africa correctly note, however, substantial inequities already characterize existing health systems (Griffin and Shaw 1995). Governments need to consider their options for improving equity in the financing and receipt of care and determine if measures to expand insurance coverage for the formal sector constitute the best policy choice. As part of this assessment, they need to determine the likelihood that they will be able to meet the technical conditions required for insurance expansion to improve equity. Meeting these conditions will likely demand investments in administrative capacity and attention to the politics of policy implementation.

Retaining Scarce Health Personnel to Serve "Public" Patients

Even if the government puts policies in place to promote expanded insurance coverage in a way that should yield a net increase in revenues available to serve the noninsured, poorer segment of the population, the expansion of the private sector induced through growth in insurance is likely to induce a shift in human resources from the public to the private sector. This could prevent insurance from improving equity in the receipt of services, as fewer skilled providers per capita are likely to remain in the public service. Thus policymakers should ask what the impact of expanded insurance is likely to be on the distribution of skilled human resources in the health sector, and whether they can identify and implement policies to stem the brain drain from the public to the private sector.

Evidence on the distribution of staff in the public and private sectors and how it relates to insurance coverage suggests that this distribution may be even more inequitable in terms of urban-rural differentials than that of overall resources (WHO 1995). In South Africa, for example, the relative growth of the private sector during the last decade has resulted in there being four times as many people per doctor in the public sector as in the private sector (Pillay 1995). Thus one can assume that expanding insurance coverage will expand private provision, including the development of private for-profit hospitals. Private facilities are likely to be more attractive to providers, because they offer the possibility of greater earnings (funded by insurance) and better working conditions. As formal sector employees tend to be concentrated in urban areas, an expansion of insurance coverage for this group may exacerbate urban-rural differences in the availability of skilled health providers. The growth in private sources of care would probably mean a movement of human resources from the public to the private sectors within urban areas, and would also attract public providers from other parts of the country.

No empirical work is available to illustrate the impact of expanding health insurance on the distribution of skilled health personnel. Thus, identifying with confidence the conditions needed to limit the potentially harmful consequences of such expansion for equity in the availability of providers is difficult. In technical terms, a sufficient quantity of skilled providers is needed to provide services to the insured population without absorbing staff who previously served the uninsured. Related to this, the income that insurance provides to private providers should not be so great that it diminishes the ability of the government health services to attract staff (WHO 1995). African governments have tried to introduce policies to retain skilled staff in the public delivery system. For example, Lesotho and Zimbabwe have implemented bonding, whereby workers are obliged to stay in their positions for an agreed length of time, and Nigeria and Zimbabwe have raised public sector salaries. However, these policies do not seem to have been effective. Another option that has been used in Malawi and Zimbabwe is to allow private sector physicians to practice in public hospitals in return for them agreeing to treat public patients free of charge (Bennett and Ngalande-Banda 1994). The problem of staff retention in the public sector is not specific to health insurance expansion, but can clearly be exacerbated by it.

The question of how to retain staff in the public sector in the context of an expanded private sector has no obvious answer. Governments need to develop more policy options, including internal reforms to improve salaries and working conditions in the public sector, and other measures involving agreements or contracts with private providers to serve public patients. In any event, policymakers need to be aware of the likelihood that policies to expand insurance coverage for the formal sector are likely to skew the availability of services further, because of the drain of skilled providers from the public to the private sector and increased concentration of service providers in urban areas.

Encouraging Efficiency Within Insurance Schemes

The issues addressed in the preceding sections of this chapter dealt primarily with equity. Governments should also be concerned with the efficiency of insurance schemes for the formal sector for two broad reasons. First, efficiency is an objective in its own right, and governments should try and promote this in all parts of the sector to improve social welfare. Second, where insurance schemes cover a relatively small and privileged part of the population, internally efficient schemes are essential to the government's ability to promote overall sectoral equity. The reason for this is that if the costs of the insurance scheme are kept under control, the pressure for the government to increase subsidies to the insured population via the employer contribution to social insurance for civil servants or tax relief for the voluntary purchase of insurance is reduced. This, in turn, means that the insurance scheme is more likely to free up resources that the government can target to the uninsured. Thus efficiency in the insurance subsector is essential for achieving overall equity in health resource allocation.

As Shaw and Griffin (1995) noted, risks must be pooled on a large scale for insurance to be efficient, and thus for premium levels to be kept as low as possible. Government policies to encourage large groups to form may facilitate this for existing systems of health insurance. If a country has a limited or no private health insurance market, a large group can be created through a single government-run scheme or a single scheme managed by an autonomous government agency or a not-for-profit firm. In some countries existing legislation needs to be changed for risk pools to be increased. In Senegal, for example, legislation requires each private firm with more than 100 employees to form its own insurance group. This results in several groups that are exceedingly small from the perspective of insurance, and caused the Senegalese social health insurance system to run into financial difficulties (Vogel 1988). Where such legislation exists, the government should revise it to facilitate the amalgamation of employer-funded groups into larger risk pools.

Governments can affect the efficiency of health insurance arrangements in several other ways. These include incentives and regulations for private insurers and providers or the government directly acting as the insurance fund. Key elements of the tools available include regulating or defining the benefit packages, the means by which services are accessed, and the methods by which insurance schemes pay providers.

Irrespective of whether they are publicly or privately administered, the aspect of health insurance schemes that appears to have the most important implications for efficiency is the role of the insuring, that is, fund holding, institution. Where it acts simply as a financial intermediary that collects premium payments and reimburses claims, as in public insurance schemes in China and unmanaged private schemes in South Africa, the United States, and Zimbabwe, the volume of services consumed tends to rise dramatically, increasing total costs. In systems where the insurer functions as an active purchaser of services in pursuit of savings and efficiency, as with fund holding arrangements, cost increases have been limited (Kutzin 1995; Kutzin and Barnum 1992).

Abundant evidence from around the world, for example, China, the Czech Republic, Korea, South Africa, and the United States, demonstrates that fee-for-service reimbursement of providers by insurers causes rapidly rising costs, because of the incentives generated to provide excess services. Because patients depend on providers for information as to their treatment needs, and because fee-for-service payment creates an incentive to increase the volume of services to increase providers' incomes, this payment mechanism leads providers to "induce" demand for referral services. Thus policymakers should avoid unregulated fee-for-service reimbursement (Barnum, Kutzin, and Saxenian 1995; WHO 1995). Governments can define other forms of provider payments for social insurance schemes, such as capitation. Where private insurance exists, governments should encourage insurers to use alternatives to fee-for-service, perhaps through tax incentives that limit the deductibility of premium payments for insurance using fee-for-service, while maintaining deductibility for insurance that uses other methods of paying providers.

Prospective and retrospective controls on the volume of care can limit the risk of inefficiency from fee-for-service systems to some extent, but implementing these effectively requires substantial administrative capacity and a highly developed information infrastructure. Case-based retrospective reimbursement, such as hospital payment for diagnosis-related groups, is, from a technical perspective, an improvement over fee-for-service systems, because it pays for outputs rather than inputs. Such systems require sophisticated and expensive methods to monitor providers and update payment rates, and therefore are probably not feasible in poor countries (Kutzin 1995).

An important function that is essential for cost containment is that of the gatekeeper who controls access to more expensive referral services. This function is an important element of the health systems in many industrial countries, such as Denmark, Finland, Ireland, New Zealand, Portugal, Sweden, and the United Kingdom. Thus it is used in many nations that have effective national health systems or social insurance systems. In these countries, a general practitioner with whom the covered person is affiliated generally performs the gatekeeper function. In many other countries, gatekeepers are a feature of private insurance schemes. They exist, for example, in the private health maintenance organizations that are found in Chile, the Philippines, South Africa, the United States, and elsewhere. The power of the gatekeeper function is strengthened in systems where gatekeepers are at financial risk for their clinical decisions (Kutzin 1995).

Another way to reduce insurance costs is to limit the benefits these schemes cover to high cost, low frequency health events. These events are often referred to as catastrophic, and catastrophic insurance coverage protects individuals against these costs. If the insurance pool is large enough, catastrophic coverage can be inexpensive, because the risks are spread over a large number of people. This approach can be effective for financing hospital care for the insured population (Griffin and Shaw 1995). Although it might not seem appropriate to leave primary care uncovered, formal sector employees probably can and will pay for their ambulatory care out-of-pocket. Nevertheless, this approach may entail some problems. Unless effective administrative procedures, such as gatekeeping, mandatory second opinions, or the insurance fund's approval of admissions are in place, this type of insurance might cause overuse of hospitals and a greater concentration of resources at this level, because those insured will have a strong incentive to ask their providers to treat them in a way that minimizes their out-of-pocket costs. Alternatively, limiting the benefits to catastrophic coverage might prove difficult politically. Experience from several countries such as the Czech Republic and Thailand suggests that the formal sector and civil servants will fight to expand their benefits in such programs, and their demands can prove difficult for governments to resist. Indeed, expansion of benefits may be more likely than expansion of the population being covered (WHO 1995).

The same political obstacles cited previously as hindrances to generating a surplus from the insured population that can be reallocated to the health services used by the uninsured are likely to limit the government's ability to encourage efficiency within insurance schemes. For example, physicians will resist attempts to change from a system of fee-for-service reimbursement, and the insured population is likely to resist other changes, such as the introduction of gatekeepers, that will limit their choice of service providers. However, governments may well share a common interest with employers in keeping the costs of insurance schemes under control, and should actively collaborate with them to push for efficiency-oriented reforms.

Conclusions

Irrespective of whether or not a government should attempt to expand insurance coverage for the formal sector, many countries already have health insurance schemes in place that need major reforms. Many of the measures suggested to improve equity apply to existing as well as to new or expanded schemes, and should be considered as possible areas of government action. In addition, governments can act to reduce existing inefficiencies in the insurance sector.

In theory, gains in equity and efficiency can arise from the promotion of expanded insurance coverage for the small, formal sector, but the conditions needed to achieve them are stringent and require strong government commitment. Unless these conditions are met, this type of insurance promotion will worsen existing inequities by causing a greater share of government funds to be absorbed by wealthier population groups and not freeing up resources for the poor, and by exacerbating inequities in the distribution of health human resources, especially physicians' services. In addition, expanding insurance will not improve allocative efficiency, and might even make it worse through a greater concentration on urban, tertiary care. Evidence reveals a large gap between the desired effects of insurance expansion and actual observed effects. The reasons for this probably have a lot to do with the impact of powerful interest groups on the design of government policies.

Government policy choices and priorities should be rooted in the existing realities of institutional and economic development and oriented toward the pursuit of the broad policy objectives of equity and efficiency. When considering any policy option, such as policy with respect to health insurance in the context of a relatively small formal sector, the general question that policymakers should ask is, "What are the priority problems facing the sector, and will this option, that is, expanding insurance, help or make things worse?" Each country must find its own answers to this question.

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