Introduction

The first Social Health Insurance (SHI) was introduced in Germany in 1883, when the government enacted legislation to make membership of a sickness fund compulsory for workers earning less than a specified amount (Ron et al. 1990) (see Box 1 for a definition of SHI and other relevant terms). Most European countries had introduced some form of SHI by the early 1930s, and it was introduced in a number of other high-income countries thereafter (e.g. Japan, Canada and Australia) (Roemer 1991). Within low- and middle-income countries (LMICs), Latin American countries have the most extensive experience of SHI, but SHI has also been introduced in Asia, North Africa and the Middle East (Ron et al. 1990). For example in Asia, in addition to the more well-known SHI experiences of Korea, Taiwan and Singapore, some form of SHI has been introduced in Indonesia, Malaysia, Mongolia, the Philippines, Thailand and Vietnam (Ensor 1995; Gertler 1998; Nitayarumphong and Mills 1998; Tangcharoensathien et al. 1999). The growing interest in SHI as a health care financing mechanism in LMICs has been especially evident since the mid-1980s (Abel-Smith 1986, 1992; Akin et al. 1987; Ron et al. 1990; Ron 1993; Normand and Weber 1994; WHO 1995). There has been a particular focus on its potential application in African countries since the 1990s (Abel-Smith and Rawal 1994; Shaw and Griffin 1995; Shaw and Ainsworth 1996). While a number of West African countries have some form of social security cover for health services, until recently Kenya was the only country in Southern or East Africa to have introduced any form of compulsory health insurance (Kraushaar 1997). Although a number of other African countries, such as South Africa and Zimbabwe, have considered introducing SHI (see for example Zigora 1998), only Tanzania has proceeded with SHI implementation to date.

In many countries, the major reason for considering implementation of SHI is to generate additional revenue, to compensate for declining tax-funded spending on health services (Kutzin 1998; Ensor 1999). In some instances, it is seen as a mechanism for improving the equity and efficiency of health care resource use, such as improving access to health care for more people and as a means of controlling the growth rate of health care expenditure (Kutzin 1998).

While there is sustained interest in introducing SHI across a wide range of country contexts, there is also growing concern about the potential impacts of SHI on health system equity and sustainability, two concepts that are routinely applied to the evaluation of alternative health care financing mechanisms in the international literature (Zschock 1979; Hoare and Mills 1986; WHO 1993). In this paper, equity is interpreted as the fairness of financial contributions towards health care as well as fairness in benefiting from health services.
Sustainability is multifaceted and includes financial sustainability, that is, the mobilization of resources combined with improvements in allocative and technical efficiency, as well as political acceptability and health system organizational capacity (Olsen 1998).

The equity and sustainability of any SHI scheme are critically dependent on its design. By considering SHI debates in South Africa since the late 1980s, and the associated changes over time in the proposed SHI design, as well as relevant international SHI experience, this paper sounds a cautionary note for LMICs considering embarking on this complex health care financing reform. It draws on a larger study of health financing reform in South Africa over the 1990s (Gilson et al. 1999) and is complemented by a companion article on the process of SHI policy development, which focuses on the role of key policy actors in shaping this process (Thomas and Gilson 2002).

**Background to the South African health system**

South Africa has a substantial, and growing, private health sector. In the early 1990s, approximately 60% of health care expenditure was funded from private sources despite less than a quarter of the population having routine access to private sector health care providers (McIntyre et al. 1995). The single largest category of financing intermediary in the private sector is that of medical schemes, which are non-profit associations funded primarily by contributions from employers and employees (although most schemes are operated by for-profit scheme administrators). There is a substantial government subsidy to medical schemes in the form of tax deductibility of employer contributions.

Since the late 1980s, medical scheme contributions and benefit expenditure have increased at between two and three times the annual inflation rate; this trend continued throughout the 1990s despite the introduction of managed care initiatives (Cornell et al. 2001). There have also been dramatic increases in co-payments by medical scheme members during this period (see Box 1 for definition of terms). As a result, scheme membership increased very slowly in the late 1980s and early 1990s, and is now declining in absolute terms and in relation to population coverage [e.g. the percentage of the population covered by schemes declined from 17% in 1996 to just over 16% in 1998 (ibid.)]. Schemes also began ‘risk rating’ (see Box 1) in the 1990s. This has led to substantial fragmentation of risk-pools within medical schemes, and to scheme cover becoming increasingly unaffordable for high-risk individuals.

In contrast, real public sector health care expenditure, which is funded through budget allocations, was stagnant through much of the 1980s and 1990s. At the same time, an increasing

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**Box 1.** Glossary of terms used

- **Community-rating**: an individual’s or group’s risk of illness is not taken into account in calculating contributions or premiums. Instead, contributions are based on the average expected cost of health-service use for the entire insured group and are only differentiated by income level (and sometimes the number of dependants).

- **Co-payments**: a payment that a health insurance member must pay ‘out-of-pocket’ for each service used.

- **Cross-subsidy**: two forms of cross-subsidies may occur within a health insurance scheme. Income cross-subsidies occur where insurance contributions are income-related; hence high-income earners pay more than low-income earners for the same benefit package. Health-related cross-subsidies occur when high-risk individuals use more services and claim more insurance benefits than low-risk individuals.

- **Financing intermediary**: an organization that receives funds (in the case of SHI, member contributions) and reimburses providers for services used.

- **Risk-equalization**: if a number of sick funds/insurance agencies/medical schemes act as the financing intermediaries for an SHI, contribution revenue is pooled and individual schemes allocated an amount which reflects the expected costs of that fund/agency/scheme given the illness risk of its membership (through a risk-adjusted capitation payment).

- **Risk-rating**: each person’s or group’s insurance contribution or premium is related to the risk of illness or the expected cost of service use.

- **Social Health Insurance**: this term is used in a range of different contexts and sometimes used interchangeably with the term ‘National Health Insurance’. In this paper, this term is interpreted as health insurance cover that, as a minimum:
  - is legislated by government and requires regular, compulsory contributions by specified population groups (usually initially covering those in formal employment and their dependants, and then gradually extending to other groups);
  - has an income-related contribution schedule (i.e. premiums are calculated according to ability to pay), which is uniform even if the SHI consists of a number of health funds serving as the financing intermediaries for the SHI; and
  - has a standardized, prescribed minimum benefit package.
proportion of the population, primarily the low- and middle-income groups, became dependent on public services through population growth, cost escalation and risk-rating in the private sector, and ‘dumping’ of insured patients on the public sector once their benefits had been consumed.

There are some similarities, but also differences, between the South African context and other LMICs. First, South Africa, like other countries, faces stagnant tax-funded expenditure. However, the situation is more severe in many other LMICs, where such expenditure is in fact declining in real terms. Secondly, while many LMIC governments are reluctant to acknowledge the extent of private health care spending, there is growing evidence that it is both already large and growing. A recent comparative analysis of National Health Accounts data for nine African countries, thus, found that private sources of finance accounted for an average of 53% of total health care financing (Nabyonga et al. 2002). However, South Africa is one of the few LMICs with a large voluntary private insurance sector. In most other LMICs, private health care finance primarily relates to out-of-pocket payments, including user fees, or community-based prepayment schemes.

Table 1 summarizes the considerable equity and sustainability challenges facing the South African health sector. Many of these challenges relate to the crisis in the private medical schemes and to the nature of the public–private mix. In addition, the initial proposals to introduce an SHI in South Africa were explicitly motivated as the most feasible funding mechanism for addressing these challenges. SHI was, thus, seen as a means of curtailing the medical schemes cost spiral and of redressing the disparities in resource availability in the public and private sectors relative to the population covered by each sector. It is important to bear in mind that these public–private health sector disparities are widely seen as one of the most serious impediments to an equitable health system in South Africa (McIntyre and Gilson 2000; McIntyre and Gilson 2002) and were identified as a major reason for the relatively poor performance of South Africa in the World Health Organization’s health system rankings (WHO 2000).

### The changing face of SHI proposals in South Africa

#### The first vision of SHI

A range of SHI proposals have been put forward in South Africa over the past decade. The key features of the different proposals are summarized in Table 2, using a framework proposed by Kutzin (2001). Kutzin argues that there are four main health system functions:

- **revenue collection** – recognizing that the flipside of

<table>
<thead>
<tr>
<th>Sustainability challenges</th>
<th>Equity challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Set 1:</strong></td>
<td><strong>Set 1:</strong></td>
</tr>
<tr>
<td>• Stagnant public sector resources, combined with</td>
<td>Tax funding:</td>
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<tr>
<td>• increase in number of people (especially high-risk individuals) dependent on public sector services</td>
<td>• Unclear whether tax system is progressive, neutral or regressive</td>
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<tr>
<td></td>
<td>• Benefits/health service use not distributed according to need</td>
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<tr>
<td></td>
<td>• Government pays 12 times more per civil servant in the form of medical scheme contributions from tax funds than per person dependent on public sector services</td>
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<tr>
<td><strong>Set 2:</strong></td>
<td><strong>Set 2:</strong></td>
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<tr>
<td>• Large annual increases in medical scheme contribution rates,</td>
<td>Public–private interface: government heavily subsidizes the private health sector through:</td>
</tr>
<tr>
<td>• declining benefit packages, and</td>
<td>• Tax exemptions on medical scheme contributions</td>
</tr>
<tr>
<td>• increased co-payments,</td>
<td>• Subsidized training of health workers, the majority of whom move into the private sector on completion of training</td>
</tr>
<tr>
<td>• resulting in membership declines</td>
<td>• Charging below cost-recovery fee levels to medical scheme members using public hospitals</td>
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<tr>
<td><strong>More resources for less services for fewer people</strong></td>
<td></td>
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<tr>
<td><strong>Set 3:</strong></td>
<td><strong>Set 3:</strong></td>
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<tr>
<td>• A quarter of medical scheme members are civil servants and their families</td>
<td>Cross-subsidies (see Box 1 for definition):</td>
</tr>
<tr>
<td>• Government incurring rapidly increasing cost as they pay two-thirds of civil servants’ medical scheme contributions, thus further depleting scarce government resources</td>
<td></td>
</tr>
<tr>
<td>• Medical schemes heavily dependent on civil servant members</td>
<td>• Income (high-income to low-income cross-subsidies): minimal as scheme contributions not income-related</td>
</tr>
<tr>
<td><strong>Set 4:</strong></td>
<td>• Health-related (low-risk to high-risk): declining due to risk-rating and fragmentation of risk pools within schemes (through offering a range of benefit options)</td>
</tr>
<tr>
<td>• Multiple benefit options, and</td>
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<tr>
<td>• fragmented risk pools,</td>
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<td>• creating greater instability within individual schemes</td>
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### Table 2. Summary of different SHI proposals in South Africa between 1994 and 1999

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<tr>
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<tr>
<td>Key objectives</td>
<td>• Improve overall health system equity • Address the cost-spiral in the private sector</td>
<td>• Improve health overall system equity • Address the cost-spiral in the private sector</td>
<td>• Generate additional revenue for the public health sector</td>
</tr>
<tr>
<td>Proposals by key health system functions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Collection: contributors</td>
<td>All formal sector employees (with part of the contribution being paid by employers)</td>
<td>All formal sector employees (with part of the contribution being paid by employers)</td>
<td>Formal sector employees who are above the income tax threshold and who are not members of medical schemes (with part of the contribution being paid by employers)</td>
</tr>
<tr>
<td>(3) Pooling: organization</td>
<td>Private insurers could be the financing intermediaries for SHI</td>
<td>Choice between state-sponsored SHI fund and private insurers</td>
<td>Separate state hospital fund, or could ‘opt out’ of this fund and choose a private insurer</td>
</tr>
<tr>
<td>(4) Pooling: allocation mechanism</td>
<td>Risk-adjusted allocation to individual insurer/risk-equalization mechanism</td>
<td>Risk adjusted allocation to state-sponsored fund and individual private insurers for the compulsory benefit package</td>
<td>No risk-equalization between state fund and private insurers. Allocation from state fund to hospitals through government budget process</td>
</tr>
<tr>
<td>(5) Purchasing organization</td>
<td>Individual insurers, but collectively negotiating provider payment rates</td>
<td>Individual insurers, but payment rates for hospitals set at the cost of service within a public hospital</td>
<td>State hospital fund</td>
</tr>
<tr>
<td>(6) Provision</td>
<td>Mainly public, but some role for private providers, particularly for primary care (unclear whether latter on a competitive or preferred provider basis)</td>
<td>Choice of provider, with competition between private and public hospitals</td>
<td>Public hospitals only for those covered by the state fund Choice for those privately insured</td>
</tr>
</tbody>
</table>


\(^a\) The Health Care Finance Committee considered three different potential SHI designs. The design that was supported by this Committee is presented in this table.
collecting revenue from different sources, such as households and employers, is what entitlement to services contributions confer on whom, see rows 1 and 2;

- pooling of funds, i.e. ‘the accumulation of prepaid health care revenues on behalf of a population’ (Kutzin 2001: 177), see rows 3 and 4;
- purchasing of services, i.e. ‘the transfer of pooled resources to service providers on behalf of the population for which the funds were pooled’ (Kutzin 2001: 180), see row 5; and

- provision of services – which type of providers and whether they operate on a competitive, preferred-provider or monopolistic basis, see row 6.

The possibility of introducing some form of compulsory health insurance in South Africa was first raised by progressive academics in the early 1990s (de Beer and Broomberg 1990; Picard and Beattie 1993). The African National Congress (ANC), which won a landslide victory in the first democratic elections in 1994, incorporated explicit recommendations for a Social Health Insurance (SHI) in its National Health Plan (African National Congress 1994). In relation to revenue collection and entitlements, these recommendations included the introduction of compulsory SHI contributions by all formal sector employees (and their employers), which would be used to cover a relatively comprehensive package of benefits (i.e. primary care services as well as hospital care) for contributors and their dependants. In terms of the pooling function, the ANC Health Plan indicated that medical schemes could serve as financial intermediaries for the SHI if an appropriate risk-equalization mechanism were implemented to accommodate the different risk profiles across schemes. In addition, medical schemes, or other forms of private health insurance, would have a role in offering ‘top-up’ cover for services not included in the SHI benefit package. Individual insurers would also act as purchasers, and private providers would mainly be involved in primary care provision.

Similar proposals were later put forward by two government policy committees, namely the 1994 Health Care Finance Committee (Department of Health 1994) and the 1995 Committee of Inquiry into a National Health Insurance System (South Africa 1995). The key difference between the Committee of Inquiry’s SHI proposals and the earlier proposals of the ANC and the Health Care Finance Committee related to the benefit package, that is the entitlement of contributors (see Table 2). The Committee of Inquiry recommended that only hospital care be covered, with reimbursement levels restricted to the cost of public hospitals, whereas the other two proposals included primary care services as well. The change in proposed benefit package was made in response to the government’s removal of fees for primary health care services at public facilities, which supposedly obviated the need to provide insurance for this category of care.

Despite this difference in benefit package design, the three sets of SHI proposals shared common objectives:

- to improve overall health system equity; and

- to address the cost-spiral crisis in the private sector (reflecting health system sustainability concerns).

Figure 1 provides a simplified representation of the vision underlying the proposals of how these objectives would be achieved through SHI. Health insurance coverage of the population would be substantially increased through compulsory SHI membership for all formal sector employees and their dependants. Based on formal sector employment levels and the labour dependency ratio, McIntyre (1997) estimated that SHI could result in coverage for almost half of the South African population, compared with the then medical scheme membership levels of less than 17%. This would mean that more South Africans would be able to cover the costs of the health services they use, through income-related contributions to the SHI that would in turn reimburse relevant public or private sector providers. As many of those who would be newly insured under the SHI would be relatively low-income earners, and given that the SHI benefit package would be sufficient only to cover the costs of public sector hospitals, the majority of the newly insured would continue to use the public sector but would now be able to pay cost-recovering fees. This would bring additional revenue into public hospitals that could be used, in combination with the existing tax funding of public health services, to improve

![Figure 1. Simplified diagram of how SHI, as it was conceived in the early 1990s, might improve equity and sustainability](Image)
health services for all public sector users, including the non-insured population. This approach has been successfully used in countries such as Korea, Costa Rica and Vietnam where SHI revenue was used to improve services in rural areas and to equip public hospitals (Peabody et al. 1995; WHO 1995). SHI members who chose to use private hospitals would have to pay any costs exceeding that which would have been charged at a public hospital, either out-of-pocket or through a ‘top-up’ private insurance.

Overall health system equity would be improved through the envisaged SHI in the following ways. First, tackling the third set of equity challenges identified in Table 1, cross-subsidies within the existing medical scheme environment would be improved. This improvement would be achieved by legislated uniform, community-rated, income-related contribution rates (achieving income cross-subsidies) for a mandatory minimum benefit package (achieving health-related cross-subsidies as everyone would have access to the same benefits and use of these benefits would be related to need). These cross-subsidies would also be complemented by a risk-equalization mechanism between individual schemes, if medical schemes were to be included as financial intermediaries for the SHI (see ‘pooling function’ rows in Table 2). By extending coverage to more middle- and low-income workers and their families, there would be cross-subsidies between existing medical scheme members and the newly insured (i.e. all would be included in the fund pooling process).

Secondly, tackling the second set of equity challenges identified in Table 1, scarce general tax resources could then be used primarily to fund the services provided to the uninsured, as SHI members using public services would be charged fees of at least cost recovery levels. Essentially, SHI was viewed as a mechanism for addressing the inequitable public–private health sector mix. It would reduce current government subsidies to the private sector and, instead, use resources located in the private sector to improve health services for those who were at that stage uninsured.

Thirdly, therefore, the additional resources drawn into the public sector through fee revenue at public hospitals, and from reduced government subsidies to the private sector, could be used to address current inequities in tax-funded health services (tackling the first set of equity challenges identified in Table 1).

Health system sustainability would also have been improved through this vision of SHI. The number of people dependent on tax-funded services would decline substantially, tackling the first set of sustainability challenges identified in Table 1. In addition, as outlined in the purchasing function row of Table 2, the effectively monopsonistic purchasing power of an SHI could yield considerable cost-containment benefits, in that the SHI would actively negotiate with providers to secure the lowest possible rates. However, it was recognized that additional measures were needed to promote overall health system sustainability. Some of the early SHI proposals recommended capitation reimbursement for private primary care providers to address the supplier-induced demand occurring under the medical schemes’ fee-for-service reimbursement system (Broomberg and Price 1990; McIntyre, Valentine and Cornell 1995). The 1995 Committee of Inquiry went further and proposed that primary care medicines on the Essential Drug List (EDL) be provided at state tender cost to accredited private providers1 and retail pharmacies (South Africa 1995). Given that medicine accounts for nearly a third of medical scheme benefit expenditure (McIntyre et al. 1995; Cornell et al. 2001), this would have contributed significantly to cost containment within the private health sector.

Together these strategies to arrest the cost spiral within medical schemes, and hence the rate of increase in insurance contributions, would address the second, third and fourth sets of sustainability challenges identified in Table 1 in two ways. First, if achieved, the significant cost-containment gains promoted through these mechanisms could partially offset the additional cost to high-income earners of cross-subsidizing SHI cover for newly insured low-income workers. Secondly, sustainability would be promoted through the creation of one large risk pool (although there would be a range of medical schemes participating in the SHI, the risk-equalization mechanism would integrate the risk pool) and by standardizing the benefit package.

The second, constrained vision of SHI

In the event, neither the Health Care Financing Committee’s, nor the Committee of Inquiry’s SHI proposals were taken forward. Instead, in 1997 a further committee (the SHI Working Group) was established by the national Department of Health. As Table 2 summarizes, this Working Group recommended limiting insurance coverage, and contributors, to formal sector employees above the income tax threshold, thus excluding all very low-income formal sector employees from the SHI (Department of Health 1997). In addition, it proposed that the pooling function be implemented through a newly created ‘state fund’ that would provide basic cover for a mandatory SHI benefit package. Medical schemes would have to cover this package, but could also offer additional benefits. While those for whom health insurance cover was mandatory could choose to belong to the state fund or a medical scheme, it was assumed that the high contribution rates in medical schemes would encourage the majority of lower-income workers and their families to join the state fund. Most importantly, the SHI Working Group envisaged a complete separation of this fund from the medical schemes, in that there would be no risk-equalization mechanism (see ‘pooling function: allocation mechanism’ row in Table 2). This separation reduces the potential for cross-subsidization between high- and low-income earners within an SHI structure. It also fragments the risk pool (into separate medical schemes and the state fund), thus limiting the extent to which health-related cross-subsidization can occur. One of the few equity challenges that these proposals addressed, but to a more limited extent than under the earlier vision of SHI, was the public subsidy to the private sector (second block, Table 1). The level of this subsidy would be reduced if medical scheme members used public sector hospitals and paid above cost-recovery levels for these services.
These SHI proposals went hand-in-hand with regulatory changes for the medical schemes industry through the Medical Schemes Act of 1998. An important reason for adopting this dual approach to reform was that Department of Health officials anticipated that it would take considerable time to implement an SHI, whereas it was judged feasible to improve regulation of medical schemes in the short term (Gilson et al. 1999). It was also envisaged that the new Act would itself partially tackle the third set of equity challenges facing the country (Table 1). By removing risk rating, it would improve health-related cross-subsidization within individual medical schemes, and limit the extent to which high-risk groups (such as the elderly) are excluded from medical scheme cover. In this way, it was hoped that medical scheme cover could be extended to a greater section of the employed population without making membership compulsory through an SHI. The Act also seeks to prevent ‘dumping’ of medical scheme members on public hospitals by requiring schemes to cover prescribed minimum (hospital) benefits for all members. If the Act is successful in this respect, it may also contribute in some way to improving health system sustainability (addressing the first set of sustainability challenges identified in Table 1).

When the Department of Health’s 1997 SHI proposals are compared with the objectives guiding the previous SHI proposals, it appears that the earlier vision for transforming the South African health system was lost over time. In particular, although there may be somewhat improved health-related cross-subsidization within individual schemes as a result of the Medical Schemes Act, the equity objectives of the pre-1997 SHI proposals are unlikely to be achieved to any great degree by the 1997 proposals. The uninsured population – which is also the poorest segment of the population – would reap particularly low benefits under the vision of these later proposals. In addition, achievement of the initial sustainability objectives of the early SHI proposals would be limited by the 1997 proposals’ failure to include an active purchasing function that could generate considerable cost-containment benefits. In fact, as Table 2 highlights, the primary stated objective of the 1997 proposals was to generate additional revenue for the public health sector (Department of Health 1997). However, examination of the South African situation against these proposals suggests that they would be unlikely to achieve even this objective – and would certainly not generate the revenue levels predicted under the pre-1997 SHI vision. First, those who would belong to the state fund were likely to be very low-income workers, and they would be part of a separate insurance contribution and risk pool to high-income earners (i.e. there would be limited income cross-subsidies). Secondly, as fee collection systems are notoriously poor at public hospitals, significant improvements in management would be required to ensure that the potential of increased revenue under SHI materialized. The third and final limiting factor on revenue generation through the 1997 proposals is whether workers would be willing to pay for services hitherto received free of charge. The acceptability of SHI contributions to future members is clearly of considerable importance in ensuring health system sustainability.

The impasse created by competing visions

Although a number of recent policy documents refer to government intentions to pursue SHI (South Africa 1997; African National Congress 1999; Department of Health 1999), its implementation seems far off. SHI options are, nonetheless, once again being debated, this time by the Committee of Inquiry into a Comprehensive Social Security System, which was set up in 2000. The fact that SHI is now being considered in the context of a range of other social security mechanisms may bode well for its future development, given that South Africa has a well-developed non-contributory pension system that could serve as a model of social solidarity in financing for other components of the social security package, including SHI. Despite lack of progress on this reform, the South African SHI debates over the past decade or more have highlighted some important lessons, both for the next stage of the debate within South Africa and for other LMICs considering implementing this health care financing reform. These are summarized in the next section.

Key lessons from the South African SHI debates

Issues to consider in designing SHI

Policy objectives

Kutzin (2001: 172) suggests that two simple principles should be used when considering changing health care financing arrangements: ‘First, reforms should be oriented to explicit policy objectives. Second, the starting point for change in any country is the existing organization and institutional arrangements of its health care system.’ In South Africa, the initial SHI vision and design explicitly recognized the challenges facing the country and established objectives to address these challenges in an integrated manner. In contrast, however, the 1997 SHI proposals were targeted at addressing only one of the sustainability challenges. Even together with the associated Medical Schemes Act, the 1997 SHI would not substantially address the full range of challenges facing the South African health system.

The revenue collection function: contributors

A key design issue debated in South Africa that affected the proposals’ potential to achieve their objectives was whether all formal sector employees should be required to contribute to the SHI or only those above the income tax threshold.

The latter position appears to have been adopted by the 1997 Department of Health SHI Working Group in response to concerns expressed by the National Treasury (formerly the Department of Finance) about the existing funding burden on high- and middle-income earners. A related factor influencing the Working Group’s position on contributors appears to have been the Treasury’s desire to avoid any increases in the overall tax burden in South Africa (Department of Finance 1996). Personal income tax rates are relatively high by international standards, given the small tax base. Over the past few years, income tax rates have been gradually reduced.
The Treasury has indicated that it would regard SHI contributions as merely another form of taxation, and that any SHI contributions would be taken into account in calculating the overall tax burden (Gilson et al. 1999).

Clearly, the greater the number of low-income earners included in the SHI (particularly those below the income tax threshold), the higher the contributions would be for high- and middle-income earners (under an income-based contribution system and if there was cross-subsidization among all SHI members). However, the smaller the pool of contributors the less cross-subsidization that can be achieved through an SHI scheme and hence the less the equity and sustainability impact on the health system. For effective implementation, design and objectives have to be aligned on this issue whilst also taking account of the political acceptability of the specified design.

The revenue collection function: benefit entitlement

The South African experience also provides a graphic example of how other financing reforms implemented while SHI policy is being developed can influence the design. Initial SHI proposals (particularly those in the ANC National Health Plan and the Health Care Finance Committee’s report) envisaged a relatively comprehensive package of primary care and hospital services. However, more recent proposals (namely the 1995 Committee of Inquiry and the 1997 SHI Working Group’s recommendations) focused exclusively on hospital cover, largely due to the introduction of free, publicly provided, primary care services in 1996.

The primary concern with restricting the SHI benefit package to hospital services is that it could limit cost-containment within the SHI and allocative efficiency in the overall health system. If SHI members have the option of attending a public sector primary care facility without charge, a private general practitioner by means of out-of-pocket payments or a hospital at the SHI’s expense, there may be excessive use of hospital care (particularly given the moral hazard effects of health insurance). Kutzin (1995) argues that the role of primary care providers as gatekeepers to hospital services is particularly important in promoting allocative efficiency and cost containment, which are critical to health system financial sustainability. In both the Brazilian SHI and the Egyptian School Health Insurance Program, primary care providers play a critical gatekeeper role in terms of access to specialist and hospital services (Kutzin and Barnum 1992; Nandakumar et al. 2000). If primary care and hospital services are funded through different mechanisms, the gatekeeper role of primary care providers will be reduced (Kutzin 1998).

In addition to these cost containment and allocative efficiency issues, an SHI scheme should offer considerable health service advantages over existing access if it is to be supported by those who will be obliged to belong to it (Normand and Weber 1994). As potential future SHI members in South Africa already have relatively good financial and geographic access to public sector hospital services, there are concerns that merely covering the costs of public sector hospitals will not be seen as offering significant service advantages. In fact, this was a key argument used by trade unions in opposing the 1997 SHI proposals. A senior official in the national Department of Health noted that: “COSATU [the largest trade union body] couldn’t convince themselves that members should pay for services that they haven’t paid for in the past” (interview data in Gilson et al. 1999). SHI cover for private sector primary care services may considerably enhance the acceptability of any SHI proposal, especially to those unionized workers who long fought for improved access to private care through negotiations with employers.

The fund pooling function

As with the revenue collection function, Treasury views played an important role in altering the design of the pooling function for the proposed South African SHI. The national Treasury was particularly concerned about the cross-subsidization that would occur if the contributions of current medical scheme members were pooled with the contributions of those who would be newly insured under the SHI through some form of risk-equalization mechanism, and if contributions were income related. While social solidarity and cross-subsidization are fundamental tenets of SHI, the Treasury was concerned that this would place an unacceptable burden on middle- and high-income groups when combined with their existing tax contributions. In the absence of an analysis of the actual tax burden faced by potential contributors, the 1997 SHI proposals explicitly attempted to address Treasury concerns through a design that excluded risk equalization between medical schemes and the proposed state SHI fund (Gilson et al. 1999).

The debate about the acceptable extent of cross-subsidization within the proposed SHI was integrally related to the existence of private health insurance (termed medical schemes) in South Africa. There was a concern that those who currently belong to medical schemes, mainly high-income and some middle-income earners, would object to moving to an SHI where they may have to contribute more for the benefits they personally receive relative to the contributions and benefits package under their existing medical scheme. However, experience in other countries has highlighted the importance of appropriately integrating private insurance and SHI contribution and risk pools in order to achieve health system equity and sustainability goals. For example, the risk-equalization mechanism between the sick funds in Israel, combined with uniform, income-related contribution rates and a prescribed minimum benefit package for these funds, were successful in promoting equity (Gross et al. 2001). In contrast, fragmentation between the sickness funds in Greece has contributed to considerable inequities (Matsaganis 1991). The dangers of separating private health insurance pools from SHI funds are also evident in Chile and Argentina. In both countries, there has been a move from an integrated SHI scheme to permit employed individuals to ‘opt out’ of the SHI and take private insurance cover, with no risk-adjustment mechanism. Barrientos and Lloyd-Sherlock (2000: 422) found that these changes ‘have reinforced segmentation in health insurance … [and] encouraged the migration of higher earning workers to private health
insurers. Social insurance and public healthcare providers cover low-income, high health-risk groups. In addition to reinforcing inequalities in access to healthcare, this segmentation limits social insurance’s capacity to pool risks.3

Thus, another key lesson arising from the South African experience, and substantiated by the experience of other LMICs, is that it is critical to integrate the contribution and risk pools of the SHI with existing private health insurance. There is likely to be opposition to this from high-income groups and private insurers, as well as, perhaps, Ministries of Finance.

The service purchasing function

Kutzin (2001) stresses the importance of active purchasing of health services, particularly to promote financial sustainability in a health system. Active purchasing was a key element of the early South African SHI proposals. Even though they envisaged that several medical schemes could act as financial intermediaries for the proposed SHI, it would still have been feasible for them to act together in establishing cost-effective purchasing arrangements. Indeed, it would be in their interests to do so if a risk-equalization mechanism operated between individual schemes, to ensure that the mandatory benefit package could be purchased within the confines of their risk-adjusted contribution revenue.

Information and other requirements to support an appropriate design

As already indicated, one of the key sticking points in the debate over alternative SHI models for South Africa is the burden on higher income groups that SHI would impose. Yet, at present, tax incidence is not well understood because the combined effect of personal income tax, Value Added Tax and other forms of taxation is unknown. In addition, the incidence of other health care financing mechanisms has not been documented. An information requirement for moving forward with an SHI which would properly address existing equity and sustainability challenges in South Africa, as in other countries, is that of comprehensive financing and benefit incidence data. Such information is critical in debating the Treasury’s perceptions that high- and middle-income groups are currently over-burdened with respect to health care financing, relative to the services from which they benefit. In addition, it could be used to tackle potential opposition from these income groups to a health care financing mechanism that would promote income cross-subsidization.

Collecting such information should be supplemented by public debate on whether progressivity in overall health care financing would be viewed as feasible and acceptable, and if so the extent of progressivity, given the massive income and social service inequities inherited from the apartheid era (McIntyre and Gilson 2000). It may be that the vision of the anti-apartheid health activists before and immediately after the first democratic elections, of an SHI with substantial income cross-subsidization, would be considered idealistic at this point in time. It may be that the current emphasis on promoting economic growth with relatively less emphasis on active redistribution measures, as alluded to in the government’s macro-economic policy document (Department of Finance 1996), means that the window of opportunity for introducing an equitable and sustainable SHI has passed. However, there has been little public debate of these issues to date and it would seem worthwhile to at least promote wider discussion of South African society’s views on equitable health care financing. This needs to be linked to a discussion of broad social objectives, in this case an understanding of what standard of health care should be accessible to all South Africans.

Policy process issues

Incremental implementation of SHI and associated financing reforms

The South African discussions have also highlighted that SHI should be seen as one element of a broader package of reforms (Gilson et al. 1999). It may be necessary to put some elements of the reform package in place before other elements of the package can feasibly be implemented, i.e. to sequence appropriately reform elements. Experience in LMICs with a range of health sector reforms have highlighted that it is particularly important to develop appropriate capacity within government to implement, monitor and evaluate all the components of the reform package (Mills et al. 2001).

For example, in South Africa is it essential to establish adequate fee-revenue generation mechanisms at hospital level before implementing SHI. At present, fee levels at public sector hospitals are relatively low and have not kept pace with inflation. In addition, they are not strictly enforced either in terms of rigorous means testing (to identify those who are employed and earning an income which would allow them to contribute to the costs of care), or in relation to collection of the fees that are levied. This is not surprising given that, in most South African provinces, there is no effective retention of fee revenue at facility level or even within the health sector. In many provinces, fee-revenue retention is not permitted at all (revenue is deposited in the provincial treasury account), while in some provinces fee revenue may be retained, but it is merely offset through reduced budgets. Effective revenue retention occurs in very few provinces at present.

Fee structures and billing systems also need to be improved for two key reasons. First, there is little incentive for those who are currently not covered by medical schemes but would be covered by an SHI (mainly low-income employees) to join an insurance scheme that covers the costs of public sector hospitals. Low-income formal sector employees have reasonably good access to public sector hospitals, given the concentration of these facilities in large urban areas. They currently pay little or nothing for these services and, thus, do not face the risk of incurring substantial costs when using public hospitals. This is supported by evidence from Kenya where low fees for hospital services reduced the incentive for potential contributors to enrol in the compulsory National Health Insurance Fund (Kraushaar 1997).
The second issue is related to the first: for insurance to be feasible it is not only necessary for there to be a risk of incurring substantial costs, but it is also usually necessary to offer improved quality of services. The international literature suggests that SHI coverage must offer significant advantages over existing services if it is to be acceptable to the potential payers (Normand and Weber 1994). Differences in the quality of clinical care between the insured and non-insured would clearly be inequitable. However, offering the insured group improved ‘hotel’ inpatient facilities (such as smaller wards, choice of food, access to telephones, etc.) and appointment systems or a ‘fast queue’ for non-emergency services in outpatient departments may be enough to attract their custom. A final conundrum for South Africa is, however, that the fee revenue required to initiate such quality improvements (and so pave the way for SHI) has to be generated in the face of significant constraints on public hospital budgets.

The importance of offering significant service advantages within an SHI scheme is well illustrated by the experience of Thailand. As there was low perceived quality of care in hospitals contracted to its SHI, SHI members continued to use, and pay out-of-pocket for, services at other hospitals, generating considerable dissatisfaction (Tangcharoensathien 1999). Lack of perceived benefit can also affect participation in SHI. For example, in Kazakhstan very few self-employed individuals registered with the SHI, despite there being a legal requirement to do so, due to a lack of perceived benefits of SHI coverage (Ensor 1999).

Parallel health sector reforms

Organizational reforms may also be necessary to support the successful implementation of health care financing reforms (such as improved user fee revenue generation at public sector hospitals accompanied by increased insurance coverage through SHI). For example, decentralization, in the form of increased hospital autonomy, may be seen as a mechanism for improving hospital management, and one which could have a profound effect on user fee revenue generation (Monitor Company et al. 1996). As already noted, improved billing and fee collection systems are critical to successful revenue generation initiatives in South Africa. In addition, overall improvements in financial and other management capacity in hospitals is seen in some South African provinces as a precondition to revenue retention at facility level. However, although there has been considerable decentralization of health services’ management to provinces within South Africa in recent years (Gilson et al. 1999), there has been almost no progress in delegation of authority to individual institutions (sometimes referred to as the creation of autonomous institutions). It is this form of decentralization that is urgently required to improve financial management and to introduce fee retention within public sector hospitals.

The inter-relationship between health service decentralization and financing reform, particularly SHI, has also been highlighted in Korea and the Philippines. In Korea, decentralization of the management of health service delivery was seen as important in achieving SHI objectives (Peabody et al. 1995). In the Philippines, health service decentralization to local government, on the one hand, had advantages in extending insurance coverage to low-income groups. However, it also posed challenges in that the National Health Insurance Program had not adequately developed a policy on how to interact with these local government-initiated schemes (Bautista et al. 1999).

The importance of process

Finally, the South African SHI policy development process graphically illustrates how the design of a reform may need to be altered to ensure that it is acceptable to key actors. In particular, the 1997 Department of Health SHI proposals were heavily influenced by attempts to accommodate the concerns of the national Treasury. Interestingly, the Ministry of Finance was also a key opponent of SHI reforms in Israel. Its imposition of specific resource constraints has contributed to financial sustainability problems in the Israeli SHI (Gross et al. 2001). Similarly, in Egypt compromises in the design of the school health insurance system were made in order to ensure that it was politically feasible and acceptable to key actors. Nandakumar et al. (2000: 155) note that: ‘while these trade-offs may yield short-term gains [in terms of political acceptability], the trade-offs in the long term may undermine the reform’s capacity to achieve the anticipated equity enhancements and can potentially undermine the financial sustainability of the reform’.

These experiences highlight the important impact that the policy development process can have on the ultimate design of a health financing reform and its ability to address health sector equity and sustainability challenges. A companion article considers the exact routes through which stakeholders influenced the process of SHI policy formulation in South Africa in more detail, particularly in relation to appropriate strategies for managing policy actors, which is critical to reduce negative impacts on design (Thomas and Gilson 2002).

Conclusions

Social Health Insurance can be a powerful mechanism for enhancing health system equity and financial sustainability, if appropriately designed. However, as with any health policy development process, SHI design can be compromised by the trade-offs made to enhance the acceptability of policy proposals to key actors. If, as in South Africa, the design changes generated by such compromises are likely to undermine the achievement of the SHI’s objectives, careful consideration should be given to whether or not to proceed with SHI. Alternatively, the design and sequencing of an SHI policy should continually be benchmarked against pre-determined objectives to ensure that its integrity is maintained.

From an equity perspective, SHI design should promote income and health-related cross-subsidization within, at least, the insured population. In countries with a large and powerful private insurance sector, such as South Africa, a common contribution and risk pool should be created across the SHI and private insurers, or between individual insurers who serve as the financial intermediaries for the SHI. At the
same time, policy designers need to review critically the extent to which scarce tax resources are being used to subsidize the private health sector, and to ensure that there is equitable use of tax resources for the uninsured population.

From a sustainability perspective, risks should be pooled among those who are mandated to purchase insurance cover. Once again, this points to the importance of integrating private insurers and other SHI financing intermediaries through a system of uniform contributions and benefit packages, combined with an appropriate risk-equalization mechanism. Mechanisms should also be established to ensure sustainable expenditure control, particularly through active purchasing arrangements and enhancing the role of primary care gatekeepers.

In addition, it is critical to pay careful attention to the policy development process, developing strategies for managing powerful actors (Thomas and Gilson 2002). In many countries, the Ministry of Finance plays an important role in either supporting or, more frequently, impeding appropriate SHI policy development. Opposition may also arise from private health insurance organizations and high-income groups currently covered by private insurance. Collation of data on the incidence of current health financing and health service benefits could be particularly valuable in debating Treasury, and other actors’, concerns.

Finally, SHI is a particularly extensive and complex financing reform, and is usually but one component of a broader package of health sector reforms that are necessary to achieve equity and sustainability objectives. It is, thus, important to sequence appropriately the different elements of the reform package in order to promote the likelihood of successful implementation.

**Endnote**

1 The Committee of Inquiry also recommended that private providers be accredited to provide services in the publicly funded PHC system on a contract basis. These accredited private providers were envisaged as health care teams including doctors, primary health care nurses and allied health personnel, and would be expected to provide at least the same defined, comprehensive range of personal services as public facilities.

**References**

Abel-Smith B. 1986. Funding health for all—is insurance the answer? *Health Policy and Planning* 7:3–32.


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