Low income participation in voluntary health insurance schemes: a literature review

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Acronyms

CHI	Community (Based) Health insurance
DfID	The Department for International Development (UK)
FFS	Fee for Service
HMO	Health Maintenance Organisation
LMIC	Low and Middle Income Countries
OOP	Out of Pocket (expenditure on health care)
PHI	Private Health Insurance
SHI	Social Health insurance
THE	Total Health Expenditure
WHO	World Health Organisation

1. Objective

The purpose of this report is to review literature that discusses the provision of voluntary medical insurance coverage to low-income groups. The review aims to identify issues to be considered by the Government of South Africa in the development of policy options to increase low-income participation in medical schemes.

South Africa is one of the few countries in the category of low and middle income (LMIC) countries to have a well-developed and regulated private health insurance (PHI) market, and so whilst micro-insurance schemes may hold some lessons for the process, the main focus of the review is on the expansion of large-scale and formalised private health insurance. In particular, the review considers the demand side, supply side and regulatory challenges faced by countries that have attempted to expand health insurance coverage to low-income populations.

2. Method

The literature in this review was obtained through searches of a number of databases, focusing on health economics, social sciences and medicine. Web sites of organisations known for their work on health sector reform were also searched. In addition, a number of individuals undertaking research into health systems financing, both in South Africa and overseas, were approached for recommendations on health insurance schemes to be considered in the review.

The literature included in the review provides a broad overview of the status and characteristics of private health insurance in both developed and developing countries. National health insurance schemes in LMIC were reviewed first, which included countries from sub-Saharan Africa, south-east Asia and Latin America. This revealed that very few countries in this category had a well-developed or regulated health insurance market and that no developing country government had used private health insurance to promote health coverage for low-income groups. Whilst no models for extending private medical insurance to low-income groups were found in the developing world, this literature provides a wealth of examples of barriers to low-income population's participation in medical schemes.

The review was then extended to developed countries. In the majority of high income countries there is universal access to a public health care system, adequately funded through either general taxation or social insurance contributions. Where there is a functioning public system that meets the demand of the population for health care, there is little need for government to consider the expansion of PHI to low-income groups. The PHI market in such countries often plays only a supplementary role, filling 'gaps' in public provision for high income earners.

The United States is one notable exception. In the US public health care is restricted to the poor, with private health insurance being the primary form of coverage for the rest of the population. However, there is a gap between public funded health care and the

affordability of private health insurance, which has left many low-income families without coverage. As a result many state governments have attempted to find ways to reduce the cost of premiums and improve access to health insurance coverage for the uninsured. The multitude of schemes that have been designed to address this issue provide South Africa with a great deal of experience from which to draw.

3. Health system financing

Equity is a key objective of any health system (WHO, 2000). For a health care system to be equitable there must be a separation between financial contribution and use of health care services. Revenue for health systems can be collected from a variety of sources, including general taxation, mandatory health insurance contributions, voluntary health insurance contributions and out of pocket expenditure. The method by which funds are collected has a great impact on the equity of a health system. General taxation and health insurance are both represent forms of risk pooling and pre-payment, whilst out of pocket expenditure is the most regressive form of funding.

There are three prepaid funding methods available to policy makers as they consider how to make health care financing more equitable; general taxation, social insurance and private insurance. General taxation as a source of health system financing is a form of universal risk pooling, whereby all citizens make income related contributions to health care through payment of taxes. In many LMIC with a system of universal coverage, governments are unable to raise sufficient resources through taxation to adequately fund the health system. A country with high out of pocket (OOP) expenditure on health often signals the need for alternative forms of risk pooling.

In a number of countries additional resources for health have been generated through the establishment of social health insurance (SHI) systems. SHI uses mandatory contributions by the working population, state subsidies and income cross-subsidisation to provide affordable coverage to low-income groups. This paper is concerned with voluntary health insurance schemes and so SHI is not examined in detail. Despite this, the experience of countries with the design and implementation of SHI may hold lessons for South Africa, particularly with regard to the potential inequities that can arise as a result of providing differential access to public health care based on insurance status.

Private insurance can be divided in to community health insurance, not-for profit health insurance and for-profit commercial health insurance. There is a significant body of literature discussing the potential for community based health insurance (CHI) to improve access to health care for rural populations in developing countries (Jowett, 2004, Dror and Preker, 2002, Preker, Carrin and Dror 2002). In Ghana, for example, the Government is actively stimulating the creation of CHI schemes in order to enable low income and rural populations to risk-pool user fees for public health services (Okello and Feeley, 2004). CHI schemes face a number of challenges, such as financial instability, an inability to cover catastrophic risks and high co-payments, all of which work against the principle of financial protection (DfID, 2002). The World Bank has demonstrated how reinsurance can be used to promote the expansion of CHI by spreading the risk incurred by such schemes over a much larger risk pool (Dror and Preker, 2002).

Arhin-Tenkorang (2001) has developed a linear model of the development of financial protection against the cost of illness and supporting donor and government policies. In the first stage, OOP expenditure is dominant, succeeded by CHI schemes in which health risks are pooled. Mechanisms such as re-insurance and inter-pool subsidies enable smaller risk pools to be consolidated and this eventually leads to universal insurance coverage. With universal coverage, high-income households optimally subsidise the cost of health care of low-income households through income related contributions. According to Ahrin-Tenkorang's model, the role of government in South Africa can be judged to have moved beyond the support of small scale CHI.

There is a growing body of research and policy analysis that is actively investigating the development of private health insurance as a means of extending risk pooling and prepayment in developing countries (Preker, 2005, Dreschler and Jutting, 2005, Sekhri and Savedoff, 2005). In this context, PHI refers to either commercial or not-for-profit funds. Not-for-profit funds, as are found in South Africa, may be charities or medical aid societies and focus on the provision of service to members, rather than profit. PHI, it is argued, can provide access to financial protection and provide additional resources to the health sector, in settings where the collection of taxes or social security is difficult. (Sekhri and Savedoff, 2005). It is also suggested that by regulating PHI markets, developing country governments can build the capacity necessary to manage a public funded health insurance system (Evans, Carrin and Evans, 2005).

There is growing interest among analysts in the use of PHI as a means to overcome income related inequalities in access to health services (Preker, 2004). In most countries, PHI serves only the interests of high-income groups, but it is argued that appropriately regulated, PHI could be harnessed for the public good. It is suggested that PHI could be used to generate additional resources for health sector, to improve risk management and to target the poor through selective subsidies. Other cited potential benefits of an expansion of PHI in developing countries include greater consumer choice and satisfaction, the freeing up of public sector capacity, innovation, efficiency gains and the ability to maintain a professional health workforce in country (Bowie and Adams, 2005).

4. Private health insurance

The diversity of PHI schemes and non-exclusivity of particular features make it impossible to derive a strict classification of private risk-sharing arrangements. Jutting and Dreschler (2005) provide a useful overview of the various characteristics to be considered when reviewing PHI schemes (see table 1). This sets out features of PHI schemes including the type of supplier, extent and type of risk pooling arrangement, level of compulsion, type of cost sharing and degree of coverage.

Given the multitude of insurance arrangements around the world, the boundary between private and public insurance is often blurred. In many countries with SHI schemes, revenue is collected, pooled and used to purchase health care on behalf of the state by private insurance funds (Chile, Argentina, Czech Republic), but this does not result in a private health insurance system. Jutting and Dreschler (2005) define PHI as a private voluntary contract between insurer and clientele, whilst SHI is financed by a mandatory

tax or contribution. However, even this definition has exceptions, as in Switzerland, where the purchase of basic PHI is mandatory.

The Organisation of Economic Cooperation and Development (OECD) defines private health insurance on the basis of source of funds; "ultimately, all money comes from household or employer income, but in public insurance programmes, this money is channelled through the state via a general or social insurance tax, whereas in private insurance the money is paid directly to the risk-pooling entity" (Sekhri and Savedoff, 2005:128). In this paper the term private health insurance will be used to describe a medical insurance scheme where the premium is paid by the enrolee directly to the risk pooling entity. The 'enrolee' may be an individual (non-group insurance) or an employer acting on behalf of a group of employees (group insurance).

Table 1: Characteristics of private health insurance

Type of supplier	Public	Parastatal	Private
1. Level of compulsion	Mandatory	Mandatory, but choice between packages	Voluntary
2. Extent of risk pooling	Large pool	Small pool	None
3. Type of risk pooling arrangement	Community rated premiums	Group-specific premiums	Individual specific premiums
4. Form of insurance contract	Community	Group	Individual
5. Degree of coverage	Comprehensive	Supplementary	Complementary
6. Type of cost sharing	Co-payments	Deductibles	Co-insurance
7. Type of insurance business	Profit	Non-profit	Charity

Source: Dreschler and Jutting, 2005

The role of PHI will differ depending on a country's wealth and institutional development. In developed countries, PHI markets have generally developed around public coverage systems and so PHI often plays a supporting role to the public health care system (secondary coverage). Only in a few instances does PHI provide the primary form of coverage for significant population groups (USA, Netherlands, Switzerland, Uruguay). The function of PHI will also depend on how a country defines its responsibility towards financing health care coverage. PHI may be considered a long-term health care financing strategy for segments of the population (USA, Netherlands, Australia) or it may be viewed as a way of expanding risk pools as a step towards social health insurance or universal health care coverage.

In countries where universal coverage or social health insurance provides adequate services and meets consumer demand, there is no need for a government to prioritise improving access of low income populations to PHI. However, in the context of an under funded public health system, as is found in many developing countries, PHI may be the only form of risk pooling available and so provides primary coverage to those that can afford it.

The table below shows the countries with highest reliance on private insurance measured as a percentage of total health expenditure (THE).

Table 2: Countries with the highest reliance on PHI measured as a % of total health expenditure

Country	PHI as % of Total Health Expenditure
South Africa	44.3
Uruguay	36.8
USA	34.8
Namibia	32.1
Zimbabwe	26.7
Netherlands	24.9
Chile	23.1
Brazil	20.8
Canada	19.8
Switzerland	18.8

Source: World Health Report, 2002, quoted in Smith (2005)

Of the ten countries with the highest expenditure on PHI as a percentage of THE, only the USA, Netherlands, Switzerland and Uruguay rely on PHI as the primary form of coverage for significant segments of the population. In South Africa, Namibia, Zimbabwe and Brazil, PHI provides duplicate cover that is only affordable to high-income groups. In Chile, PHI provides substitutive cover for high-income groups that choose to opt out of the SHI system, whilst in Canada PHI is used to supplement public coverage. Out of these countries, only the United States uses PHI to provide health coverage for low-income groups. Consequently, the models for improving participation of low-income groups in medical insurance schemes discussed in this paper derive largely from the USA.

Three of the countries with the highest PHI expenditure as a percentage of THE are neighbouring African states. This is reflective of the low per capita expenditure on health in this region, in a context of extreme income inequality. According to Jutting and Dreschler (2005), in 2001 South Africa PHI represented 42.3 percent of THE, but only provided coverage to 18 percent of the population. The situation is similar in Zimbabwe where PHI expenditure was 26.7 percent of THE, but covered only 8 percent of the population. Given that these countries have universal health coverage, the high rate of PHI reflects the inability of the public system to meet demand for health care, and the quality of private health care for those people that can afford it.

In South Africa, PHI can be described as ‘gap’ insurance, filling the gap between what is provided by government and what is demanded by consumer (Bowie and Adams 2005). At present the PHI market in South Africa provides duplicate cover affordable only to high-income groups. Such cover enables enrolees to access health care delivered through privately financed providers that are separate from the public delivery system. Given the high levels of OOP expenditure on health in South Africa and widespread dissatisfaction with existing public services, there can be assumed to be additional demand for an alternative to existing public services. This suggests that there is potential to extend PHI coverage to a greater proportion of the population - if affordable premiums can be made available.

5. Demand for health insurance amongst low-income groups

Preker (2004) has demonstrated that the ability and willingness of households in developing countries to pay for health care is far greater than the capacity of governments to mobilise resources through taxation. In the majority of LMIC, the government cannot raise enough funds through general taxation to adequately finance the public health system, and also lack the institutional and organisational capacity to establish a functioning system of mandatory health insurance for the formally employed (Bowie and Adams, 2005). As a result OOP on health is highest in the developing world, accounting for two thirds of THE, compared with only one third in developed countries (Jutting and Dreschler, 2005). Given that OOP is the most regressive form of health care financing, low-income households within LMIC are likely to have to spend the greatest proportion of their income on health care. These findings clearly demonstrate that many households in developing countries, and in particular those in low-income groups, are exposed to severe levels of financial risk due to the cost of health care.

South Africa has the highest penetration of PHI in the world, at 44.7 percent of total health expenditure, yet coverage is only around 16 percent of the population (Jutting and Dreschler, 2005). High levels of OOP on health indicate that low and average income households would typically be willing and able to pay for health insurance, yet the high cost of premiums mean that PHI is only accessible to high-income earners. Given that PHI covers 80 percent of the highest two income quintiles in South Africa and only two percent of the lowest income quintile, it is apparent that there are a number of barriers to the participation of low-income groups in medical insurance schemes in South Africa.

Demand for health insurance is based on the ability and willingness of individuals to purchase premiums. Pauly (2005) states that high OOP on health care relative to income will create demand amongst low-income households for health insurance, arguing that 'in an intuitive sense the social value of insurance comes from the greater affordability of a small fixed periodic payment (the premium) relative to the rare but devastating high payment when illness strikes' (2005:1).

Zweifel and Pauly (2005) demonstrate that for the majority of households in developing countries, the premium charged would be lower than expected annual health expenditure. The key to stimulating demand, they argue, is to set premiums at a rate that is close to consumer's expected OOP expenses. As OOP varies strongly with income, there is a need to have lower premiums for lower income groups. To keep costs down and premiums affordable, usage by lower income groups must be prevented from expanding to the level of high-income counterparts.

The insurance products offered to low income groups must therefore have a limited scope, in order to contain costs. They recognise that governments are likely to have equity related concerns with such an approach. This is certainly the case in South Africa where the prescribed minimum benefits exist to provide a minimum standard of care for all those that are insured.

Table 3: Out of pocket payments as a percentage of national health expenditures, selected developing countries, 2001

Country	Percentage	Country	Percentage
Angola	36.9	Kenya	53.1
China	59.9	Lebanon	58.4
Cote d'Ivoire	75.4	Morocco	45.0
Dominican Republic	56.5	Pakistan	75.6
Egypt	47.1	Paraguay	44.2
El Salvador	50.6	Philippines	42.8
Ghana	40.4	Syria	56.1
India	82.1	Tanzania	44.3
Jamaica	42.5	Vietnam	62.6

Source: Neelam Sekhri and William Savedoff 'Private health insurance: implications for developing countries, WHO Bulletin, February, 2005.

In the absence of an adequately funded public health care system, PHI has the potential to provide financial protection to low-income groups. Yet despite the demonstrated need to improve financial protection against health care costs, the literature revealed few examples of large or formalised risk pooling schemes in developing countries. Dreschler and Jutter (2005) undertook one of the few reviews of PHI in developing countries, analysing the characteristics and significance of PHI region by region and concluded that PHI markets in the developing world were under developed, lacked adequate regulation and were unaffordable to the vast majority of the population.

In 2003, Sub-Saharan Africa accounted for just over one percent of the global health insurance premium income, with 82 percent of that share derived in South Africa (Jutting and Dreschler, 2005). In their review of PHI in LMIC, Jutting and Dreschler (2005:31) find that 'very few (health insurance) schemes in Africa operate on a regional or even national level'. The majority of risk pooling schemes are community based, whilst those that operate at a national level are restricted to urban centres and high income elites (Sudan, Kenya, Tanzania, Zimbabwe, Namibia). In the case of South Africa, however, the existence of a well developed PHI industry and supporting regulatory environment provides the opportunity to pursue a national strategy of expanding access to health insurance beyond high-income groups.

Sekhri and Savedoff (2005) and Dreschler and Jutter (2005) have shown that countries with high rates of PHI have generally lower levels of OOP expenditure on health. This suggests that PHI may substitute for OOP and assist in moving the health system towards more equitable financing. Sekhri and Savedoff (2005), recommend PHI as a method for moving towards universal coverage for countries with large informal sectors and limited taxation ability. Yet despite increasing interest in the role of PHI in developing countries, there are few formal published studies looking at this topic.

6. Strategies for increasing low-income participation in medical insurance schemes

Increases in the percentage of the population enrolled in PHI schemes in developed countries has been variously attributed to an increase in employer coverage associated with periods of economic growth (Ireland), gaps in or dissatisfaction with public sector health services (UK), and government policy towards and regulation of PHI markets (Australia, Netherlands, USA, Ireland). In all countries with significant levels of PHI, tax and monetary incentives have encouraged and shaped the development of PHI markets (Columbo and Tapay, 2004).

The literature review found very few examples of PHI providing health coverage for low-income groups or of cases where governments had chosen to promote PHI as a method of expanding risk pooling in order to improve access to health care. In developed countries, general taxation or social health insurance contributions fund a system of universal coverage, which meets the health care needs of average and low-income groups. Despite under funded public systems and a demand for alternative forms of risk pooling, PHI markets in LMIC are generally undeveloped and inadequately regulated. Only in the United States has government policy been focused on using PHI to provide primary health care coverage to low-income groups For this reason, the majority of the examples below are taken from the US.

Target groups

The Council for Medical Schemes in South Africa has identified a number of categories of uninsured people who could be targeted if a policy of expanding PHI coverage was to be adopted; these include high income earners who have chosen not to purchase insurance, average and low income earners for whom PHI may be unaffordable, dependants excluded from the policies of those presently insured, and pensioners (CMS, 2005)[1]. Dempkowski (2003) emphasises that the uninsured must be recognized as a 'significant and disparate population with varying insurance needs' and therefore a mix of strategies may be required in significantly extend health insurance coverage.

Entry points

Expanding access to health insurance for low-income groups raises the question of how such policies will be marketed and distributed. The South African PHI market consists of multiple insurance funds, distributed mainly through employer based group insurance policies. In the US more than 70 percent of the population is covered by private health insurance schemes, with 64 percent of premiums being purchased through employment based insurance plans (Docteur, Suppanz and Woo, 2003). While South Africa can learn from this experience, focusing solely on employer based insurance schemes will not be sufficient to provide access to health insurance for all low-income groups. The

[1] In a community rated market, the young and healthy are also increasingly likely to be uninsured due to the high cost of premiums relative to usage (Pauly, 2004). Without subsidisation from low risk to high risk, premiums will rise until the majority are priced out of the market. One method of avoiding this trap is for governments to introduce 'life-time community rating. Age related penalties are levied against those who do not purchase insurance before a given age, encouraging early uptake of health insurance. The introduction of life-time community rating, along with other reforms, contributed to a substantial incresae in the uptake of PHI in Australia in the early 1990s (Willcox, 2001).

informal sector, self-employed people and others that do not benefit from employer cover will also benefit from access to affordable health insurance. Additional mechanisms will be required to ensure that low-cost insurance products reach the target households. This could be achieved either through the marketing of individual policies or by utilising alternative structures to reach low-income groups, such as unions or cooperatives.

Employer based, or group, coverage is generally cheaper than individually bought, or non-group, insurance. This is due to the increased costs associated with marketing and distributing policies to individuals. Pauly and Nichols (2002) consider how the non-group market in the US would be affected by a dramatic increase in the number of enrolees, if this were brought about by the introduction of a government subsidy. They suggest that the selling costs associated with individual insurance would fall away and bring about a much less costly mass marketed product.

Group policies also provide insurers with economies of scale in marketing and enrolment, which further reduce costs compared with the non-group market (Tollen et al. 2002). Employers act as information brokers, helping consumers to select and use health coverage. Jutting and Dreschler (2005) suggest that in LMIC, information gaps on the side of both consumers and insurers may make group insurance through employers the only feasible way of expanding coverage. They suggest that LMIC that wish to expand PHI markets should focus efforts on developing better and more efficient ways to collect premiums.

A number of models of expanding access to medical insurance for low-income groups were identified in the literature. These are listed in figure two and discussed below.

Table 4: Strategies for increasing low-income participation in medical insurance schemes

Strategies for increasing low-income participation in medical insurance schemes	
Direct subsidies	Premium assistance to employers
	Premium assistance to individuals
Indirect subsidies	Tax deductibles
	Tax credits
	Reinsurance
Product design	Limited benefit
	Limited provider network/cost containment
	Major cost sharing
Health care purchasing pools	Business cooperatives

6.1 Direct subsidies: premium assistance to employers

As in South Africa, insurance premiums in the US are becoming unaffordable for low-income households due to above inflation cost increases. As employer based health

insurance is the primary form of health coverage in the US, states have needed to develop strategies to improve the access of small businesses and low income workers to PHI.

In a review of state activities relating to health insurance, Dempkowski (2003) found that small groups that wish to purchase PHI often find premiums too costly due to high marketing and administration costs passed on by the insurance funds, mandated benefit requirements and premium taxes. One policy response to this problem has been the use of direct subsidies to provide assistance to employers to purchase a group premium. Dempkowski finds that such direct assistance has not significantly increased the number of employers that offer insurance coverage and attributes this largely to the concerns of employers that subsidies would be only temporary.

Long and Marquis (2001) question whether employer subsidies are the most effective means of targeting low wage workers, as they argue that this group are less likely to work for an employer that offers group insurance and are less likely to be able to afford insurance if it is offered. Surveying small businesses in the US, they found that policies to target subsidies to selected employers were difficult to design as common employer characteristics, such as firm size, were poor indicators of a concentration of low wage workers. This highlights the need for government to obtain adequate data on the structure of the workforce and the location of low wage workers within it, before designing any policy to extend health insurance coverage amongst the formal sector.

The schemes reviewed by Dempkowski reveal that the majority of state- subsidised schemes only target extremely small proportions of workers relative to the total number in the state. In Michigan, for example, the Access Health scheme had enrolled 155 groups of workers, or 3,000 individuals, in its first year of operation. The size of such schemes is stated as being limited both by the cost of the programme to the state and the administrative burden of identifying and tracking eligible participants. Given the high number of uninsured workers in South Africa, employer targeted schemes, if established, would require significant human resources to be run effectively.

6.2 Direct subsidy: premium assistance to individuals

Given that health expenditure rises with income, it follows that for private health insurance to be affordable to low income households, there will need to be a differentiation of benefits offered to high and low income households. However, as previously discussed, regulating the provision of a less comprehensive insurance product for low-income groups is likely to pose a challenge for policy makers, despite the fact that such coverage is an improvement to the alternative of OOP expenses (Pauly 2004). One solution, suggested in the literature, is to provide subsidies to low-income groups to make premiums more affordable.

Zweifel and Pauly (2005) recommend three forms of insurance subsidy, each aimed at increasing the participation of low-income groups in medical insurance schemes. Although these recommendations have not been implemented at a country level, they provide an overview of the direct subsidy models that could be provided to individuals. The first recommendation is to provide a voucher for a minimum insurance package targeted at low-income groups. Eligible individuals would be given the option to make a financial contribution to increase the level of cover. In theory, take up of the minimum

insurance package should be a hundred percent as it comes at no cost to the beneficiary. Whilst this approach may be appropriate for countries where health insurance is the primary form of cover, the situation in South Africa does not call for a total subsidy on the cost of health insurance, but rather requires that premiums are made more affordable to those that can contribute to their health care costs.

The second recommended option is to provide a fixed amount subsidy voucher to low-income groups. The voucher would need to be 'topped up' in order to purchase insurance. By transferring some of the cost to the beneficiary, such a scheme would ensure that all those provided with cover had an adequate benefit package at a lower cost to government than found in option one. The combination of a subsidy, along side a specifically designed low-cost benefit package provides a possible approach that South Africa could use to promote greater risk pooling amongst low and average income households. This model also allows those purchasing subsidised health insurance to be restricted to low-cost policies, this may be necessary in order to demarcate the subsidised group and so avoid undermining the unsubsidised market.

The third option proposed by Zweifel and Pauly is offer a voucher proportional to the cost of chosen insurance. This was the approach taken by the government of Australia in offering a 30% rebate on the cost of insurance premiums. Such a scheme would provide targeted individuals with a greater choice as to the level of insurance cover required, but would not increase overall coverage levels if the cost of premium remained unaffordable to the target group in relation to income.

Case study: Australian government rebate

In Australia, social health insurance funds a system of universal coverage. The public health sector exists along side a duplicate PHI market, which is funded largely through the non-group market. By 1998, health insurance coverage in Australia had declined from 50 percent of the population in 1984 to a low of 30.1 percent. In 1997 the Australian Government introduced a means tested government subsidy of 30 percent of the cost of private health insurance premiums, with the aim encouraging the purchase of health insurance by uninsured low-income individuals.

This means tested rebate had little impact on coverage, perhaps because the cost of premiums relative to the income of low-income households was so high that the rebate had little impact on affordability (Willcox, 2001). To illustrate this point, Willcox quotes a 1993/4 study that found the cost of PHI premiums in Australia to be equivalent to 11% of household income for low-income groups, compared to only 2% for high income earners.

In 1999, the eligibility criteria for the rebate was removed, enabling all that purchased PHI, including those renewing policies, to benefit. Despite the rebate policy being intended to generate new health fund members, in its first year of operation only five percent of the rebate went towards new members. As a result, rather than benefiting the uninsured, the rebate was of greatest value to high income earners that had existing coverage.

The government's intention in promoting PHI was to reduce pressure on the public health sector, but Willcox questions whether the subsidy could have been used more efficiently if it had supported the public health sector directly. She finds that PHI funds in Australia use an average of 12.5 percent of premiums on administration, a percentage directly funded by the government subsidy, whilst the state health insurance scheme had administration costs of only 3.5 percent. In addition she claims that Australian public hospitals were able to treat patients at 91 percent of the cost incurred by private hospitals.

The lesson to be learnt by South Africa from this case study is the importance of evidence based policy reforms. Willcox argues that Australia's health insurance policy reforms were not evidence based, but heavily influenced by politics. As a result, the rebate policy did not meet its intended objective of increasing the affordability of PHI for low-income groups.

6.3 Indirect subsidies: tax incentives

Tax incentives are used to promote health insurance coverage in the nearly all countries with developed PHI markets. In Austria, Denmark, Ireland and the US, firms can deduct employer paid premiums from tax, whilst in France, Greece, Luxembourg and Spain, employees benefit from various tax deductions (Columbo and Tapay, 2005)[2].

[2] A comprehensive list of monetary and tax incentives of health insurance in OECD countries can be found in Columbo and Tapay, (2004)

Tax exemptions for employer based medical insurance contributions have been used in a number of countries to promote the purchase of PHI amongst the working population. In the US, tax incentives were the driving force behind the expansion of the employer based insurance market (Antos, 2003). A similar system is in operation in South Africa, whereby employee contributions to medical aid are exempt from tax. However, given the income inequality in South Africa, the medical aid tax subsidy system may need to be reviewed in order to achieve a more balanced distribution of income between both public and private sector health system users (Khunoane, 2003).

Tax deductibles

A tax deduction reduces the cost of purchasing insurance through a reduction in an individual's tax liability. The value of a tax deduction is dependant on the percentage of tax that an individual is liable for. For example, a 100 percent deduction for a premium of R5,000 would be worth R750 if the income tax rate was 20 percent. Therefore the financial incentive to purchase a premium based solely on the existence of a tax deduction is quite small.

In the US, as well as in South Africa, employer contributions for health benefits are excluded from a worker's taxable income, making the net cost to workers of employment based coverage well below the individual market (Antos, 2003). Soderland has argued that tax deductibility in South Africa should be extended to the individual market, in order to encourage the expansion of risk pools amongst the self-employed. At present, the individual, or non-group market, suffers from adverse selection as high risk individuals are more likely to purchase insurance. It has been argued that tax deductibility for the individual market would therefore have the added benefit of attracting low risk enrolees to the risk pool (Pauly and Nichols, 2002).

A tax deduction cannot encourage an individual to purchase insurance when it is not accessible due to the high cost of premiums. Any use of tax incentives in South Africa would therefore have to be combined with additional strategies for making PHI more affordable for low-income groups.

Tax credits

A tax credit is a reduction in tax liability of a specific amount and can be offered either to an individual or a firm. Under such a scheme, an individual or firm receives the credit even if it is in excess of his tax liability. Therefore a low-income person that owes no taxes could still benefit from a refundable tax credit. In the case of South Africa, a tax credit could only reach those individuals who are within the formal system and registered for tax purposes.

The advantage of a tax credit schemes in promoting PHI is that it requires no additional administration and can be built on to the existing tax system. The disadvantage is that tax credits rarely cover a significant proportion of the premium and therefore the effectiveness of such schemes in inducing new insurance purchases is doubtful. Experience in the US has shown that for firms that cannot afford to offer an employee health plan this approach is unlikely to provide a sufficient incentive to offer coverage.

Assessing whether small firms meet eligibility criteria can also be a difficult and time consuming task.

The literature on tax credits in the US is extensive with the main debate focusing on cost effectiveness. With any tax credit scheme there will be a trade off between cost and coverage. A larger credit will induce a higher level of coverage among the population than a small credit, but will come at a greater cost to government. A number of states in the US have targeted tax credits at low-income populations. In North Carolina, for example, a refundable credit of $300 was available to persons with incomes under 225 percent of the poverty line and a credit of $100 was available to persons with incomes over 225 percent of the poverty line (Dempkowski, 2003).

A challenge faced by a number of US states is that tax credits are generally issued at the end of the tax year and so provide no relief for low-income households at the time of purchase. Zelenak (2001) has proposed a system whereby most of the credit is available through advanced payment from the Internal Revenue Service (IRS), with final reconciliation at the end of the year. Meyer (2000) suggests that to avoid cash flow problems the state could pay the credit direct to the insurance fund. The ability of a revenue service to cope with such additional demands would have to be considered before implementation of such a system.

Whilst employer based insurance in the US is tax deductible, individually purchased insurance is not. Abbe (2002) argues that tax credits could address the regressive tax policies that discriminate against those who pay for their own insurance. This debate suggests that tax credits for PHI are better viewed as an instrument of tax policy, rather than as an effective means of increasing insurance levels (Dempkowski, 2003). Despite lively debate, no evidence of tax credits successfully expanding insurance coverage among low-income groups was found in the literature.

Given the limited financial value of tax deductions or tax credits relative to the cost of premiums, this is not a strategy that could be used on its own to increase the purchase of PHI in South Africa. It should also be noted that tax incentives are limited to those registered for tax purposes and so cannot benefit the large segment of the population working in the non-formal sector.

Indirect subsidies: re-insurance

Under stop loss provision, the state provides an indirect subsidy to groups of workers by providing reinsurance to the insurers. This approach was adopted by the Healthy New York scheme, a state run programme directed at increasing the level of health insurance coverage amongst small firms and low-income groups. Under the scheme, insurers were reimbursed by the state for 90 percent of enrolee claims between $30,000-100,000. This approach succeeded in reducing premiums by removing much of the insurer's risk of high cost claims. Further information on the Healthy New York scheme is found in the case study below.

6.4 Product Design

Monetary and tax incentives to increase health insurance coverage will not be successful if the cost of premiums remains too high for low-income households in relation to income. Zweifel and Pauly (2005) have shown that to meet demand, premiums must be set at a cost close to households expected OOP on health care. The high cost of PHI in an unregulated market is a direct result of the product design, which yields high premiums in relation to the income of the majority of population. For PHI to be made affordable to low-income households benefits must be limited and the costs of health care provision contained. An additional strategy, promoted by some schemes, is to introduce major cost sharing.

Product design: limited benefits

In regulating the low cost market, government faces a trade off between the affordability of premiums and comprehensiveness of cover. States in the US, as in South Africa, have established minimum benefit packages to ensure that insurance cover meets the needs of enrolees (Schwarz, 2001). This provides a regulatory barrier to designing low-income insurance products. The Healthy New York programme, targeted at low-income workers and small firms in New York, was exempted from certain components of the minimum benefit package in order to reduce the cost of premiums.

Case study: The Healthy New York programme

Healthy New York is a state run programme directed at increasing the level of health insurance coverage in the state. In addition to providing reinsurance to insurers, the scheme contains a number of other features designed to enable lower premiums to be set. All health maintenance organisations (HMOs) in the state are required to offer the Healthy New York policy, with the intention that managed care techniques would assist in containing health care costs. Costs were further reduced by exempting the scheme from state benefit mandates, including care for mental health and substance abuse. The third feature was that premiums were community rated jointly for individual and small group risk pools. This last innovation enabled low-income sole proprietors and low income uninsured workers to benefit from the cost efficiencies associated with group policies.

Dempkowski (2003:27) describes the criteria for small group participation in the scheme; 'To be eligible to participate, a group of less than 50 workers must not have provided health insurance in the last 12 months. In addition at least 30 percent of the work force must earn less than $31,000. Fifty percent of all eligible employees must enrol and at least one of them must earn less than $31,000 annually. The employer's contribution to the employee's premium must be at least 50 percent'. Well-defined eligibility criteria are necessary to prevent the commercial PHI market from being undermined, yet are likely to place an administrative burden on any scheme that attempts to target small businesses.

Healthy New York premiums were set at 15-20 percent less that in the small group market. Yet with regard to individuals, the premium still stood at more than five percent of before tax income of most low-income workers which Schwarz (2001) assessed as still being too high to encourage workers to join the scheme in large numbers.

Product design: limited provider network

Premium costs can be kept low by strictly controlling the cost of health care. One way for this to be achieved is through limited provider networks, whereby funds contract specific health care facilities to provide services to members. There are a number of ways in which insurance funds can purchase services from health care providers and a substantial body of literature exists on the topic.

Case study: Managed care in Zimbabwe

The simplest form of health care purchasing is Fee-for-service (FFS), whereby a health care provider charges an insurance fund for each service provided. FFS as a method of payment contains no incentive for medical professionals to provide preventative care or seek cost effective treatments and so can lead to a rapid increase in insurance claims.

The response to this problem in the US has been the development of Health Management Organisations (HMOs). The principle underlying managed care is shared risk for health care costs between the Fund and the service provider. Central to 'managed care' is the use of capitation payments, rather than FFS and a limited provider network. Health care providers are paid a per capita amount for providing care to fund members. Careful monitoring of providers is required to ensure that the quality of care is maintained under such as system.

This approach is now being followed by Zimbabwe, where the two largest medical aid societies are gradually adopting 'managed care' tools in an attempt to contain rapidly rising claims by health care providers (Campbell, 2000). While this approach was initially resisted by service providers, it has led to a stabilisation in the cost of claims.

Case study: social health insurance in Chile

Under the social health insurance system (FONASA) in Chile, workers receive differentiated access to health care depending on income level. SHI contributions for formal sector workers are set at seven percent of income. Workers can choose to opt out of the SHI system by putting the seven percent payroll tax towards the purchase of PHI. Those that remain within the SHI system are categorised in to four bands based on income level. The lowest income earners are eligible only to use the public health system, whilst the top two bands have the option of utilising private providers but must pay high co-payments (Barrientos and Lloyd-Sherlock, 2000).

By purchasing health care for low-income groups from the public sector, the cost to the state of providing health care is contained. Whilst this system may be cost effective, it has resulted in growing inequities in access to health care. Bitran (2005) found that in Chile the greatest financial protection was offered by PHI (ISAPREs) and to high earners within the SHI system. The package offered to low-income groups through FONASA did not necessarily provide adequate coverage and still exposed the insured to OOP and financial shocks.

Case study: Small business Health Insurance, New York

The Small Business Health Insurance programme in New York was designed by the state in order to provide low cost comprehensive health insurance to small businesses in selected areas of New York City. The scheme was jointly sponsored by an insurance fund and the public hospital system. Premiums were set at half the cost of commercial premiums and kept low through discounts provided by participating providers (New York Health and Hospital Corporation members).

Launched in 1999, the scheme suffered from low take up which was attributed to poor marketing and flaws in the product design. In particular, the geographically restricted network of providers did not meet the needs of business owners who did not live near to their business premises (Rosenburg, 2002 cited in Dempkowski, 2003)

Product design: major cost sharing

PHI insurance premiums can be made more affordable by introducing cost sharing for relatively low cost, high frequency treatments, whilst providing financial protection against catastrophic health costs. This is the objective of Medical Savings Accounts which, when combined with high-deductible insurance policies, enable extremely low-cost premiums to be offered.

In some cases, major cost sharing has been introduced by insurance schemes to compensate for increases in provider charges. In Korea, failure to control cost escalation within the SHI system led to higher co-payments rather than attempts to change the economic incentives for health care providers. As a result, more than half of total health expenditure in Korea is now funded by OOP Kwon (2003).

Case study: Medical Savings Accounts, United States

Medical savings accounts have been promoted in the US as a means of expanding health insurance coverage to low-income groups. Tax deductible savings accounts are combined with a high deductible policy to ensure coverage for catastrophic events. Funds in the medical savings account can only be used to meet the cost of the deductible in the case of a medical emergency. The aim of such schemes is to make premiums more affordable for the uninsured.

Whilst this approach results in extremely low premiums, it has been criticised in the US as exacerbating inequalities in access to health care. Davis, Doty and Ho (2005) have argued that such policies can undermine the purpose of health insurance, which is to 'reduce financial barriers to needed care and protect against financial hardship'. This is because households with high-deductible insurance policies are reliant on OOP expenditure for non-catastrophic health costs, making low-income groups less likely to seek care (Commonwealth Survey of Health Insurance, 2003). The World Health Organisation (2000) has also criticised the promotion of medical savings accounts on the basis that they are dependant on individual financing and do not pool risk. Medical saving accounts are therefore not recommended as a strategy for increasing medical insurance cover amongst low-income groups in South Africa.

6.5 Health care purchasing pools

Another strategy to make insurance premiums more affordable is to increase the purchasing power of small groups through pooled purchasing. A number of health care purchasing pools, or cooperatives, have been established in the US to enable employers to access more affordable products and therefore improve availability of insurance to workers in small firms. These cooperatives have often been led by business coalitions (Dempkowski, 2003).

After reviewing the outcomes of such schemes, Dempkowski (2003) concludes that cooperatives have not generally been successful in lowering the price of insurance for small groups, but have facilitated greater access to information about the benefits and quality of various schemes.

7. Supply of affordable health care to low-income groups

To maintain affordable premiums, schemes that target low-income groups must find ways of controlling provider payments in order to prevent cost escalations. Purchasing health care for low-income groups from the public sector is one strategy that can be adopted by insurance companies to contain costs.

Public hospitals can play a major role in reducing the cost of hospital care faced by the medical scheme industry. Where insurance coverage of low-income groups is a policy goal, government may choose to provide an in-kind subsidy to low-cost schemes by providing access to discounted services in the public sector. This was the approach adopted by the Healthy New York scheme which negotiated discounted services for members at public facilities. Even without the assistance of state providers, Zweifel and Pauly (2005) argue that where premium subsidies exist, market competition will motivate insurance funds to offer low-cost insurance packages by devising exclusive contracts for subsidised schemes with health care providers.

The Medical Schemes Act of South Africa (2000) requires all medical schemes to contract with specific service providers for the provision of the prescribed minimum benefits. In order to encourage medical schemes to designate public hospitals as preferred providers, the Ministry of Health has piloted 20 hospitals to act as designated service providers for selected schemes. The aim is for public hospitals to act as network of preferred providers for various medical schemes, including the civil service scheme and state sponsored low cost scheme. (Khunoane, 2003)

Bowie and Adams (2005) argue that there is a need to focus on building institutional capacity of service providers in developing countries to ensure that insurers that wish to actively purchase on behalf of members have partners to work with. This is particularly necessary for the public sector if it is to capture some of the additional financial resources generated by PHI. Significant improvements in the management and physical condition of public hospitals is required if demand for treatment by the insured in public sector facilities is to be created. Voluntary health insurance schemes that only provide members with access to state health care services already considered as ‘free’ are unlikely to be popular. This is a particular problem in the context of South Africa, where public facilities unable to retain user fees have little incentive to properly charge patients for the use of public services.

One aim of governments that have promoted PHI has been to divert demand to private hospitals, thereby reducing cost pressures on the public sector (UK, Australia, Ireland). The Government of South Africa has similarly stated that its goal is to reduce the burden on state services by enabling those who can afford to pay to access health care to do so, enabling limited public resources to be concentrated on the needy (Khunoane, 2003).

Examples in the literature show that in practice, government subsidies to PHI may offset any cost shifting from the public to private sector. Columbo and Tapay (2005), for example, found that PHI in OECD countries had not contributed to cost containment or cost shifting within the health system, but had rather led to an increase in health care costs and utilisation of health care services. Whether this will occur will depend on the

interaction between the public and private systems. For example, in Australia, the provision of prescription drugs to private patients by the state has meant that greater PHI coverage has increased, rather than contained, public sector costs. This demonstrates the need to carefully consider the possible impacts of any policy to subsidise PHI or to increase the use of public sector services by members of PHI funds.

Finally, there has been a great deal of debate as to the impact of PHI on the quality of public health care. A rapid expansion of the PHI market may attract health care professionals away from the public sector. Possible regulatory solutions are to set limits on charges for private practice or to restrict the hours that a public sector doctor can work in private practice (Columbo and Tapay, 2005). This is less likely to happen where private insurance funds purchase services from the public sector.

8. Lessons Learned

Despite the scarcity of practical examples of PHI being used to extend risk pooling to low-income groups, the literature provides a number of lessons for South Africa with regard to the regulation of private health insurance and its interaction with the public system.

Regulation is needed to promote equitable PHI markets

The goal of health care systems is to achieve equity in access to health care and fairness in financing (WHO, 2000). Yet most low and middle-income countries have not been able to provide the regulatory environment necessary for the development of an equitable PHI market. Experience has shown that, left unregulated, private health insurance markets will compete by discriminating against high risk patients or reduce administration costs by focusing only on the urban centres where premium collection is easy. Moral hazard may result in cost escalation as more insurance is offered than is required, whilst adverse selection may result in the low risk choosing not to take out cover (Jutting and Dreschler, 2005).

Without regulation, PHI markets will compete only for low risk members and 'dump' high risk on the public system. This is occurring in China where private health insurance explicitly excludes high risk individuals from cover and caps benefits. Without regulation, the PHI market in China will not provide equitable access to care or adequate financial protection from the cost of health care (Hu and Ying, 2005). Similarly in many countries in Latin America, the PHI market was allowed to expand without adequate regulation, resulting in increasing inequalities in access to health care and a market that served only the highest income groups (Jutting and Dreschler, 2005).

Where public and private delivery systems are linked to different funding sources, such as PHI or taxation, differences in access to care, choice levels and utilisation patterns will occur between those insured and not insured (Columbo and Tapay, 2004). The level of inequality that is viewed as acceptable will vary from country to country. However, all nations that have attempted to rely on private insurance to provide primary health coverage have found it necessary to establish extensive public regulatory and subsidy programmes to ensure consumer protection and equity (Jost, 2001, Sekhri and Savedoff, 2005, Jutting and Dreschler, 2005, WHO, 2000b).

WHO (2000b) supports PHI as a means of expanding financial protection and moving towards universal coverage, but warns that adequate regulation is required to ensure equitable access to health care and prevent cost escalation. This is also the conclusion reached by Jutting and Dreschler (2005) in their review of PHI market failures in LMIC. They find that countries that have been able to avoid increasing inequity in access to health care as a result of expanding PHI markets had already had a strong regulatory framework in place.

By comparison, Barrientos and Lloyd-Sherlock (2000) demonstrate that the expansion of PHI in Latin America has led to increased costs and greater inequity in access to health care. PHI markets in Latin America cater only to high income, low risk individuals, with the rest of the population served by SHI or under funded public facilities. In Brazil, for example, 22 percent of the population have private health insurance, with the greatest

coverage being in the highest income quintile (Jack, 2000). The situation is similar in Chile, Argentina and Columbia.

In Australia and Ireland, PHI can provide quicker access to care in public facilities. This has spurred the demand for PHI, whilst increasing financial resources available to the public sector. Public policies to support the development of PHI need therefore to be counter balanced with measures to ensure more equitable and less discriminatory access to health care coverage, in order to avoid the creation of two tiered access to care. In the Dutch system, both PHI and SHI members have same level of care and choice or provider irrespective of insurance status.

To be cost-effective subsidies must be carefully targeted

Policies that aim to stimulate demand for PHI amongst low-income groups do so by reducing the net price of take up. Regulation, including monetary incentives and subsidies, can be used to promote the purchase of PHI by those that were previously uninsured. In the majority of schemes under review, coverage of low-income populations was restricted by the cost of subsidy or incentive to government. To be cost-effective subsidies must therefore be carefully targeted.

As Columbo and Tapay (2004) note, regulations to address market failures and to promote equity have costs, both in terms of government resources (subsidies) and diminished insurer flexibility and innovation (minimum standards). Yet where publicly funded systems do not provide meaningful and adequate access to health services, such action by government may be essential.

Financial protection against the cost of illness

The extent to which PHI provides financial protection against illness is dependent on the design of the insurance product. A number of schemes have attempted to cut the cost of premiums for low-income groups by restricting the scope of benefits or introducing major cost sharing. The impact of such approaches on access to health care amongst the target groups must be carefully considered.

9. Data gaps

Whilst there is a growing body of research on the potential use of PHI to expand risk pooling in LMIC, there are few examples of this strategy being practically pursued by governments. Efforts to expand risk pooling in developing countries have instead focused on the establishment of mandatory social health insurance schemes. Developed countries generally provide health coverage for low-income groups through a health system funded by general taxation or social insurance contributions. As a result, using PHI as a method of risk pooling for low-income groups is a policy for which little comparative experience can be drawn.

Lack of adequate data on the financial and health situation of low-income groups is noted in the literature as hindering the expansion of insurance funds in to new markets (Bowie and Adams, 2004). Such data is required if funds are to provide customised schemes at affordable prices, but is often lacking in LMIC (Jutting and Dreschler, 2005). For example, before designing a policy to increase PHI coverage, government will need up to date information on the level and distribution of OOP expenditure relative to

income, as this will provide an estimate of 'financial vulnerability' and willingness to pay for health insurance (Pauly, 2004).

Other information requirements includes the location of low income groups in the workforce, as well as more qualitative information, such as knowledge of the attitude of low income groups to money. Jowett and Thompson (1997) suggest that such information would enable insurance funds to design more effective marketing strategies. Based on industry data, Bowie and Adams (2005) estimate it would take an insurance fund five years to fully understand and respond to the health status, needs and behaviour of a new target group.

Governments, as well as the insurance industry, require accurate and up to date information on PHI markets, in order to improve policy making in support of health goals. In reviewing existing PHI schemes in developing countries, Preker (2004) finds little evidence of the impact of private health insurance in terms of broad health system goals such as health, protection against impoverishment and combating social exclusion. Evidence that needs to be produced if it is to be argued that PHI can be harnessed as an equitable means of expanding access to health care.

10. Conclusion

PHI has been promoted in developed countries in pursuit of various policy objectives with regard to health. The desired policy goal for South Africa is to increase access to risk pooling for a significant segment of population, to enable those that are willing and able to do so to contribute to their health care costs. In targeting PHI coverage to low-income groups, the Government of South Africa will need to consider a number of criteria including targeting eligibility for participation in low-income schemes, the scope of benefits and how to ensure the provision of low-cost quality care.

The review did not find any country, other than the US, which had attempted to provide health care coverage to low-income groups through PHI and so the models from which South Africa can draw experience are limited. The review did however reveal a number of supply side, demand side and regulatory barriers, which have prevented PHI from serving the needs of those beyond the highest income groups. These barriers will need to be overcome through careful regulation if South Africa is to be successful in expanding a PHI market that provides equitable access to health care for low-income households.

11. Bibliography

	Author	Title	Year	Source
1.	Abbe, B	Using tax credits and state high risk pools to expand health insurance coverage	2002	Health Affairs (web exclusive) October 2002
2.	Antos	Reforming health insurance: realistic options and hard choices	2003	Health Affairs (web exclusive) April 2003
3.	Arhin-Tenkorang, D	Health insurance for the informal sector in Africa: design features, risk protection and resource mobilisation	2001	CMH Working Paper Series, Paper No WG3: 1, Commission on macroeconomics and health
4.	Barrientos and Lloyd-Sherlock	Reforming Health Insurance in Argentina and Chile	2000	Health Policy and Planning: 15(4)
5.	Barraza-Llorens, M, Bertozzi, S et al	Addressing Inequity in health and health care in Mexico	2002	Health Affairs, 21(2):47-56
6.	Bassett, M	Frameworks for analysing health systems, health financing and regulation of health insurance	2005	Background paper for Conference on Private Health Insurance in Developing Countries, Wharton Business School, March 2005
7.	Berman, P and Ahuja, R	Health Insurance Scenario in India		Presentation at Conference on private health insurance in developing countries, Wharton Business School, March 2005
8.	Blumberg, LF and Nichols, LM	First, Do no harm: developing health insurance market reform packages	1996	Health Affairs, Volume 15, no 3
9.	Bowie, R and Adams, G	Financial Management practice in a voluntary medical insurance company in the developed world	2004	Background paper for conference on private health insurance in developing countries, Wharton Business School, March 2005
10.	Buchmueller, T and Couffinhal, A	Private Health Insurance in France	2004	OECD Working Papers 12
11.	Campbell, P, Quigley, K et al	Applying managed care concepts and tools to middle and low income countries: the case of medical aid societies in Zimbabwe	?	Harvard School of Public Health

12.	Commonwealth Foundation	Commonwealth Survey of Health Insurance	2003	Commonwealth Foundation
13.	Davis, K, Doty, M and Ho A	How high is to high? Implications of high-deductible health plans	2005	The Commonwealth Fund (executive summary only)
14,	Dempkowski, A	Closing the Gap, insuring the uninsured in West Virginia: literature review on state activities related to individual insurance	2003	Report for WV State Planning Grant, April 2003
15.	Dempkowski, A	Closing the Gap, insuring the uninsured in West Virginia: literature review on state activities related to employer-sponsored insurance	2003	Report for WV State Planning Grant, February 2003
16.	Docteur, E, Suppanz, H and Woo, J	The US health system: an assessment and prospective directions for reform	2003	Economics Department Working Paper, N 350, Paris: OECD
17.	Dror, D and Preker, E	Social Reinsurance	2002	World Bank
18.	Edwards, J, How, S, Whitmore, H, Gabel, J, Hawkins, S and Pickreign, J	Employer sponsored health insurance in New York: findings from the 2002 Commonwealth Fund/HRET Survey	2004	Issue Brief, The Commonwealth Fund
19.	Evans, D, Carrin, G and Evans, T	The challenge of private insurance for public good	2005	Bulletin of the World Health Organisation, February 2005
20.	Fronstin P.	Sources of health insurance and characteristics of the uninsured: analysis of the March 2001 Current Population Survey.	2001	EBRI Issue Brief. 2001 Dec: (240):1-31 (abstract only)
21.	Hu and Ying	The role of Private Health Insurance in Health Care Financing in China	2005	Presentation at Conference on private health insurance in developing countries, Wharton Business School, March 2005
22.	Jost, TS	Private or public approaches to insuring the uninsured: lessons from international experience with private insurance	2001	Washington and Less Public Law Research Paper No 01-10, New York University Law Review, Spring 2001
23.	Jowett, M	Theoretical insights in to the development of health insurance in low income countries	2004	Centre for Health Economics, University of York
24.	Jutting, J and	Private health insurance in	2005	OECD Development Centre

	Dreschsler, D	low and middle income countries: scope, limitations and policy responses		
25.	Khunoane, B	Context for health care financing reform in South Africa	2003	Government of South Africa
26.	Lipson, DJ, Norton, SA, Dubay, L	Health Policy for low-income people in Florida	1997	Urban Institute
27.	Long, SH and Marquis, MS	Low wage workers and health insurance coverage: can policy makers target them through their employers?	2001	Inquiry. 2001 Fall; 38(3): 331-7 (abstract only)
28.	Meyer JA, Wicks EK.	A federal tax credit to encourage employers to offer health coverage	2001	Inquiry. 2001 Summer; 38(2):202-13
29.	Okello, F and Feeley, F	Socioeconomic characteristics of enrolees in community helath insurance schemes in Africa	2004	CMS Country Research Series, Number 15, March 2004
30.	Pauly, M	The demand for health insurance: insights from theory and voluntary markets in less developed countries	2004	Paper presented at Wharton Conference on Voluntary Health Insurance in Developing Countries, March 2005
31.	Pauly, M and Herring, B	Expanding coverage via tax credits: trade offs and outcomes	2001	Health Affairs, Volume 20, no 1
32.	Pauly, MV and Nichols, LM	The nongroup health insurance market: short on facts, long on opinions and policy disputes	2002	Health Affairs (web exclusive) October 2002
33.	Preker, A	Voluntary Health Insurance in Development: review of role in Africa region and other selected developing country experiences	2004	World Bank
34.	Preker, A, Carrin, G, Dror, D et al	Effectiveness of community health financing in meeting the cost of illness	2002	Bulletin of the World Health Organisation
35.	Rajan, S	Publicly subsidised health insurance: a typology of state approaches	1998	Health Affairs, May/June 1998
36.	Reschovsky JK, Hadley J.	Employer health insurance premium subsidies unlikely to enhance coverage significantly	2001	Issue Brief Centre of Studies of Health System Change, 2001, December; (46):1-4

37.	Saltman, RB and Figueras, J	Analysing the evidence on European Health Care Reforms	1998	Health Affairs, March/April 1998
38.	Sbarbaro, JA	Trade liberalisation in health insurance: opportunities and challenges: the potential impact of introducing or expanding the availability of privat e health insurance within low and middle income countries	2000	CMH Working Paper Series. Paper No. WG4:6, Commission on Macroconomics and Health
39.	Sekhri, N and Savedoff, W	Private Health Insurance: implications for developing countries	2005	Bulletin of the World Health Organisation, vol 83, no 2, Feb 2005
40.	Sheils, JF, Baxter, R and Haught, RA	The public cost of expanding coverage	?	?Datawatch
41.	Swartz, K	Health New York: making insurance more affordable to low-income workers	2001	The Commonwealth Fund
42.	Thiede, M	Private Health Insurance in South Africa- an impact study	2005	Presentation at Conference on private health insurance in developing countries, Wharton Business School, March 2005
43.	Tollen, L, Crane, RM, Liu, R and Zatkin, S	The nongroup market as one element of a broader coverage expansion strategy	2002	Health Affairs (web exclusive) October 2002
44.	Willcox, S	Promoting private health insurance in Australia	2001	Health Affairs, Volume 20, Number 3
45.	World Health Organisation	Equity in access to public health	2000	Working Paper SEA-HSD-240
46.	World Health Organisation	Who pays for health systems?	2000	WHO Annual Report
47.	Zelenak, L	A health insurance tax credit for uninsured workers	2001	Inquiry. 2001 Summer; 38(2):106-20
48.	Zweifel, P	Supply	2004	In Private Voluntary Health Insurance in Developing Countries, World Bank
49.	Zweifel, P and Pauly, M	Market outcomes, regulation and recommendations for policy	2004	In Private Voluntary Health Insurance in Developing Countries, World Bank