

## Unaffordable medical scheme contributions: A barrier to access to private health cover in South Africa

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The purpose of the Medical Schemes Act, No. 131 of 1998 was *inter alia* to 'promote non-discriminatory access to privately funded health care'. A number of reforms were proposed as steps on a path to Social Health Insurance (SHI) with the ultimate goal of the reforms being to increase the number of people contributing to a private financing mechanism, thereby reducing the burden on the public sector.

The increase in health care costs over time has been the focal point of industry discussions regarding affordability. In recent years the industry has responded positively to the affordability challenge by developing new products aimed at the lower end of the market. With medical inflation as a significant challenge, this paper argues that in 2003 the cost of entry-level medical scheme options was largely unaffordable and that this state of affairs has not improved over time. The proportion of the population covered by medical schemes declined marginally during the time period under review (2003 – 2006), despite the regulatory environment.

The analysis, done from the perspective of a prospective medical scheme member, aims to identify the proportion of medical scheme options affordable to each of four 'benchmark' families.

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### Introduction

South Africa has a well organised and regulated formal private health insurance system, with contributions to private prepaid plans in 2003 comprising 77,7% of private expenditure on health (World Health Organisation, 2006: 179). The private health insurance market is divided into two classes of product: medical schemes (regulated by the Medical Schemes Act, No. 131 of 1998) and what is termed 'health insurance' (regulated by the Long- and Short-term Insurance Acts of 1998). The environment is dominated by medical schemes, with 'health insurance' premiums comprising less than 1,5% of private health expenditure (McLeod, 2005: 141). This paper focuses on the medical scheme component of private coverage.

According to figures published by the Council for Medical Schemes, the absolute number of people covered by registered medical schemes increased slightly from 6,71m in

2002 (Council for Medical Schemes, 2003a: 44) to 6,84m in 2005 (Council for Medical Schemes, 2006: 47). The proportion of the population covered declined marginally from 14,76% to 14,59% during this period, despite regulatory changes aimed at facilitating greater access to medical schemes by members of the public and efforts by the medical schemes themselves. These estimates are based on the mid-year population estimates determined by Statistics South Africa (Statistics South Africa, 2002b: 2; 2005a: 1).

It is frequently stated that it is the escalation in medical scheme contributions that has resulted in private cover being unaffordable. At the Risk Equalisation International Review Panel Workshop, the Minister of Health (2004) stated that the '...costs in the private sector have been increasing more rapidly than the inflation rate. This escalation of costs has caused medical aid cover to be unaffordable to many people'. This paper will argue that, in addition to the annual

increases in contributions impacting negatively on affordability, the lowest cost options available to potential members are themselves unaffordable. Social health insurance reforms have to date not impacted positively on this minimum cost of cover.

The analysis, done from the perspective of a prospective medical scheme member, aims to identify what proportion of medical scheme options was affordable to each of four 'benchmark' families, during the period 2003 to 2006. In the context of this paper, affordability is considered in terms of the cost of medical scheme contributions relative to the individual income of members.

## Background

After the first democratic elections in 1994, there was a major shift in government policy with a return to the principles of social solidarity in the financing of health care. The Medical Schemes Act came into effect in February 1999 and key regulations to the Act on 1 January 2000. The purpose of the Medical Schemes Act was *inter alia* to 'promote non-discriminatory access to privately funded health care' (Council for Medical Schemes, 2003b: 2) through mechanisms such as open enrolment, community rating (as opposed to risk-rating by age and state of health), and the re-introduction of a set of minimum benefits to be provided by all medical schemes.

These reforms are interim steps on a path to SHI and ultimately National Health Insurance. The remaining reforms required for SHI are risk-related cross-subsidies (in the form of a Risk Equalisation Fund), income related cross-subsidies and mandatory cover.

The ultimate goal of the SHI reforms in their entirety is to increase the number of people contributing to a financing mechanism, thereby reducing the burden on the public sector. An aspect of improved access which has not been directly addressed by the reforms to date is that of affordability.

Other changes to the environment that could have reasonably been expected to improve affordability include medicine pricing regulation aimed at improving the affordability of medicines and changes to the tax subsidy for medical scheme contributions. In the 2006/7 tax year, the tax subsidy for contributions moved from a two-thirds tax-free provision and was replaced by a monthly monetary cap that takes into account the number of beneficiaries covered by medical scheme membership. The stated intention of the tax reform was to encourage broader medical scheme coverage (National Treasury South Africa, 2005: 1).

## Access to and affordability of cover

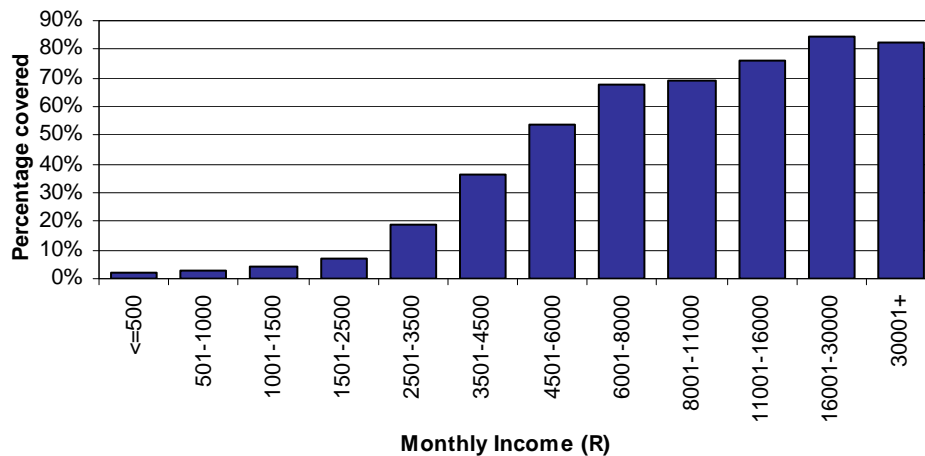
The Health Charter (Department of Health, 2005: 7) defines access as "having the capacity and means to obtain and use an affordable package of health care services in South Africa in a manner that is equitable". The nature of medical schemes facilitates access to private health care by allowing for pre-payment, risk pooling, risk cross subsidies and access to financial protection (LIMS Process, 2006: 17-18). Access to medical schemes, in turn, is influenced by amongst other things, the affordability of cover. The affordability of cover depends on the level of the contributions relative to member income, and is affected by the tax structure and by the extent to which employers subsidise contributions.

If the assumption is made that the extent of coverage fairly represents access to the private health insurance mechanism, then the marginal decline in coverage over time may indicate a decline in the level of access. Figures from the annual reports published by the Council for Medical Schemes indicate that the average size of the insured family (i.e. beneficiaries per principal member) declined from 2,53 in 2002 (Council for Medical Schemes, 2003b: 45) to 2,43 in 2005 (Council for Medical Schemes, 2006: 47). This does not necessarily reflect a decline in actual family size, but is rather related to the existence of partially covered households (LIMS Process, 2006: 53).

In a community rated environment without mandatory membership the young and healthy can be expected to opt out of the system (LIMS Process, 2006: 61). While the declining proportion of the population covered by medical schemes may indicate decreasing levels of affordability, there is also the possibility that some people who can afford membership, choose to self-insure. The extent of the link between affordability and the decision to self-insure is not clear.

The General Household Survey (GHS) conducted by Statistics South Africa provides data on medical scheme access on both an individual and household level. The extent of coverage (Statistics South Africa, 2006) varies according to the individual income of the head of the household (Figure 1).

Although household income may be a better measure of affordability (and hence access), the analysis in this paper is based on the individual income of the principal member as this is the basis upon which medical scheme contributions are calculated. The assumption is made that the head of the household (as defined in the GHS) is the principal member of the scheme.



**Figure 1: Comparison of the percentage of heads of household covered (by income group) in 2005**

## Methodology

The analysis was based on data for open membership schemes. By definition, restricted membership schemes are only accessible to new entrants to the medical scheme market who are employees of companies offering restricted scheme membership and not to the general public (as is the case for open membership schemes). Of the 50 open medical schemes registered in 2003, 48 were used in the sampling for this paper<sup>1</sup>. The schemes were stratified according to scheme size<sup>2</sup> and administrator type (self- or third party administered) as these factors impact on scheme pricing. Scheme size was used as smaller risk pools are exposed to a higher level of variability in claims experience, and administrator type was used to allow for the effect of third party influence on scheme benefit design and operations.

25 percent of schemes in each stratum were sampled proportionately, based on the number of beneficiaries<sup>3</sup> in each scheme in 2003. The 12 schemes in the sample (Table 1) represent 65.72% of beneficiaries in 2003.

The analysis was based on the publicly available<sup>4</sup> contribution tables of the schemes, for the years 2003 to 2006. Average contributions collected by schemes are influenced by family size and composition, and income levels of principal members. Therefore, to compare options from the perspective of a prospective medical scheme

<sup>1</sup>Of the two schemes omitted, one was liquidated and the other amalgamated with another scheme.

<sup>2</sup>Based on the definition of scheme size used by the Council for Medical Schemes.

<sup>3</sup>These data were obtained from the Council for Medical Schemes Annual Report 2004.

<sup>4</sup>Where possible, contributions tables were obtained from electronic brochures available from the scheme websites. Where contributions tables could not be obtained, scheme rules submitted to the Council for Medical Schemes were used. Data could not be reliably obtained for one of the schemes in the sample which was subsequently excluded.

member, it was necessary to calculate the contributions for each of the options being compared without taking the profile of existing membership into account. Four benchmark families (based on family size and the income level of the principal member) were defined to enable the comparison of contribution levels across options and across time.

Initial work using a benchmark family (Ranchod, McLeod & Adams, 2001) focused on a family consisting of a principal member, one adult dependant and two child dependants. This was based on data from the 1999 October GHS. An analysis of 2004 GHS data (Beheshty, 2006: 34) revealed that 19.22% of covered households with a working head of household had this structure. This was the second most common structure; the most common being the principal member only. The four benchmark families were therefore defined using the former family structure.

The four benchmark families were differentiated from each other by the income level of the principal member. This was necessary to measure the impact of the level of contributions on families with different levels of affordability. The four levels of income were labelled as 'very low', 'low', 'average' and 'high' (Table 3).

**Table 1: Sampling framework**

Scheme size	Administrator type	Number of schemes (2003)	Number of schemes in sample	Number of beneficiaries in sample
Large	Third party	19	5	2,628,912
Large	Self-administered	6	2	358,196
Medium	Third party	7	2	54,570
Medium	Self-administered	0	0	-
Small	Third party	15	3	40,993
Small	Self-administered	1	0	-
Total		48	12	3,082,671

Source: Council for Medical Schemes, 2004

Each medical scheme may offer more than one benefit option. The number of benefit options offered by the sampled schemes varied from year to year (Table 2).

**Table 2: Number of benefit options analysed**

Year	Number of benefit options
2003	63
2004	74
2005	81
2006	74

Source: Own data

**Table 3: Income levels of benchmark families (in Rands)**

	2001 terms	2003 terms (rounded down)	2004 terms (rounded down)	2005 terms (rounded down)	2006 terms (rounded down)
Very Low	1,700	2,000	2,210	2,400	2,500
Low	2,000	3,200	3,530	3,840	4,010
Average	4,667	5,700	6,300	6,850	7,160
High	7,732	9,500	10,500	11,430	11,950

Source: McLeod, personal communication, 2005, inflated using earnings statistics from Statistics South Africa<sup>5</sup> (2003a; 2003b; 2004; 2005b; 2005c).

For each option in the sample the monthly contribution was calculated separately for each of the four benchmark families for the years 2003 to 2006. The analysis was based upon an assumed employer contribution subsidy of 50%. This assumption was based on the results of the Old Mutual Healthcare Survey (Old Mutual, 2005: 10) and the employer survey conducted as part of the Consultative Investigation into Low Income Medical Schemes (LIMS Process, 2006: 72), both of which found this to be the most common level of employer subsidy for working employees. The expenditure on private health care was defined as the monthly medical scheme contribution net of employer subsidy. This assumes that there is no other out-of-pocket expenditure on health care. In reality there may be benefits not covered by the scheme, co-payments or deductibles.

Accurate data regarding the proportion of income that principal members spend on medical scheme contributions are not available. The Income and Expenditure Survey (IES) provides data on the proportion of income spent by households on health care (including medical scheme contributions and out-of-pocket expenditure). Based on the IES conducted in 2000 (Statistics South Africa, 2002a) fully covered households (where all members of the household are covered by the medical scheme), spent on average 6.1% of their income on health care (Melzer, 2005: 45). However, the proportion of income spent on health care varied according to income, with lower income groups spending a higher proportion.

Even though this figure includes out-of-pocket expenditure, the proportion of principal member income spent on medical scheme contributions during the study period was likely to be higher than 6.1% for the following reasons:

- Medical inflation exceeded consumer price inflation during the study period (Statistics South Africa, 2007)
- The principal member's income is at most equal to household income.
- The rand amounts provided in the IES for medical scheme contributions are lower than figures suggested by other industry sources.

Four levels of expenditure relative to income were tested, namely a monthly contribution of 5%, 10%, 15% or 20% of the principal member's income. A realistic level is likely to lie somewhere between 5% and 10%. For the purposes of this paper the 10% level was used as a proxy for affordability.

## Results

The results are illustrated in Figures 2, 3 and 4. Figure 2 illustrates the proportion of options accessible to the various benchmark families based on the four levels of expenditure defined above. Results are presented for the 4-year period under review.

It is instructive to examine the distribution of the contributions for the available options. To do this the options are ranked by monthly contribution and split into quartiles (Figures 3 and 4). As contributions vary by income, this is done for each benchmark family and for comparative purposes the distributions are illustrated for the years 2003 and 2006. Each quartile is represented by the shading of the bars. The dashed line indicates the contribution payable if employees were to contribute 10% of their income and receive a 50% subsidy. The options above the dashed line can be considered affordable based on this definition, while those below the line can be considered unaffordable.

With an employee contribution of 5% of monthly income and an employer subsidy of 50%, it is only the high income group that has access, albeit to a limited choice of options (between 4.05% and 9.88% of options) (Figure 2). For the very low income group, options only become accessible if employees contribute 20% of income and even then, only between 1.4% and 4.1% of options are accessible. At this high level of expenditure, there is a significant difference (at least 10-fold) in access between the very low and low income groups (Figure 3). The high income group is the only group where more than half of all options are accessible if at least 10% of income is spent on contributions. However, there are options that are not accessible even at the 20% level of income.

It is clear from Figures 3 and 4 that there has been almost no improvement in access at this 10% level. Access has only improved for the high income group, which may be due to a

<sup>5</sup>2001-2003: 23.61%; 2003-2004: 10.55%; 2004-2005: 8.87%; 2005-2006: 4.55%

reduction in the use of income bands over time. The removal of income bands benefits high-income members of schemes as they no longer cross subsidise lower-income members.

The use of income bands to determine contributions does have some positive impact on access for the lower income families. In 2003 there were more options costing less than R 1 100 for the ‘very low’ and ‘low’ income families as compared to the ‘average’ and ‘high’. In 2006 there were no options costing less than R 1 000 for the ‘average’ and ‘high’ income groups – i.e. access to lower cost options is

restricted to those earning a lower income. Despite industry responses to a clear need for lower cost options, the absolute level of contributions remains at too high a level to facilitate access.

As expected, access to medical scheme coverage improves with increased income (Figure 2), but contrary to expectations there has been no clear improvement in access over time despite a regulatory framework which purports to improve access.

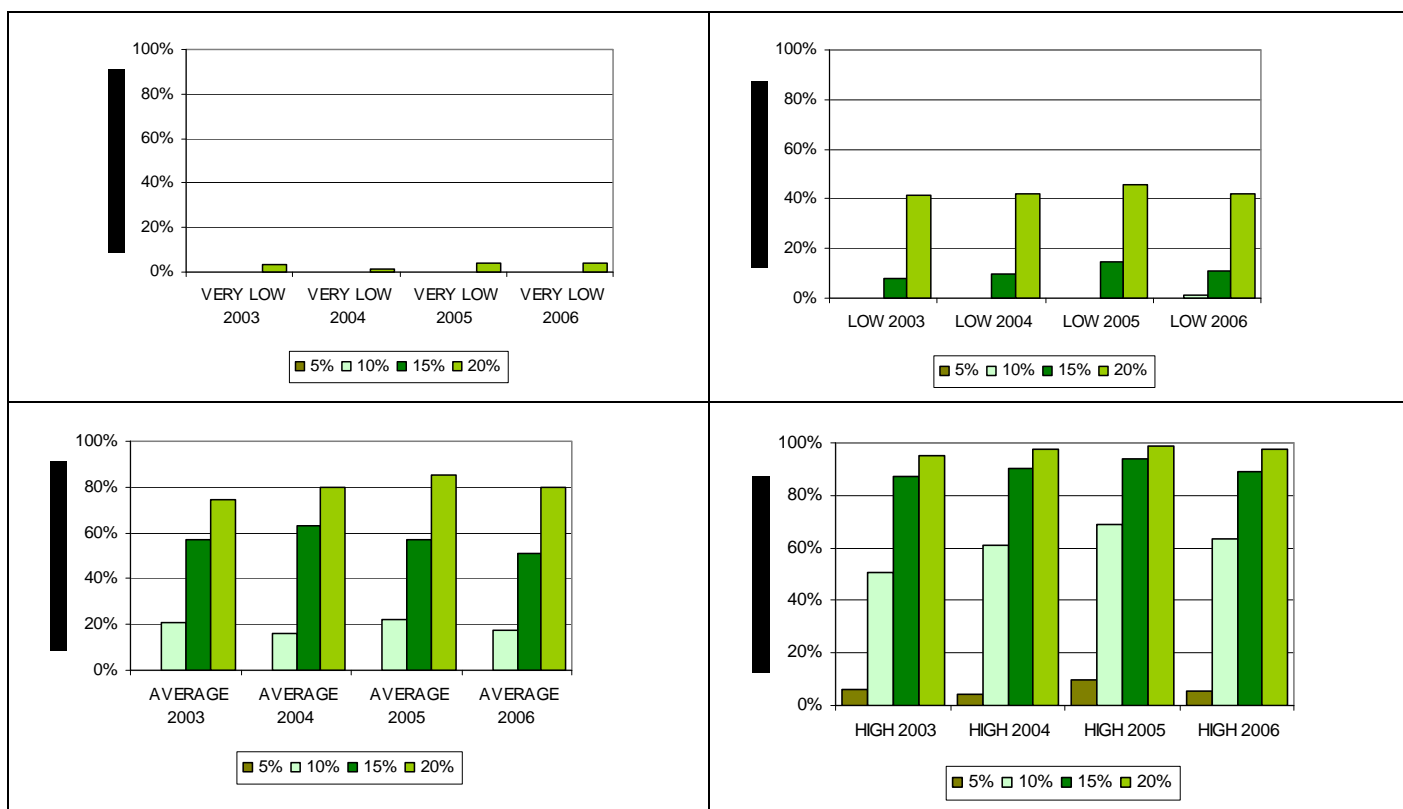


Figure 2: Proportions of options for the four benchmark families which are affordable over the four year period

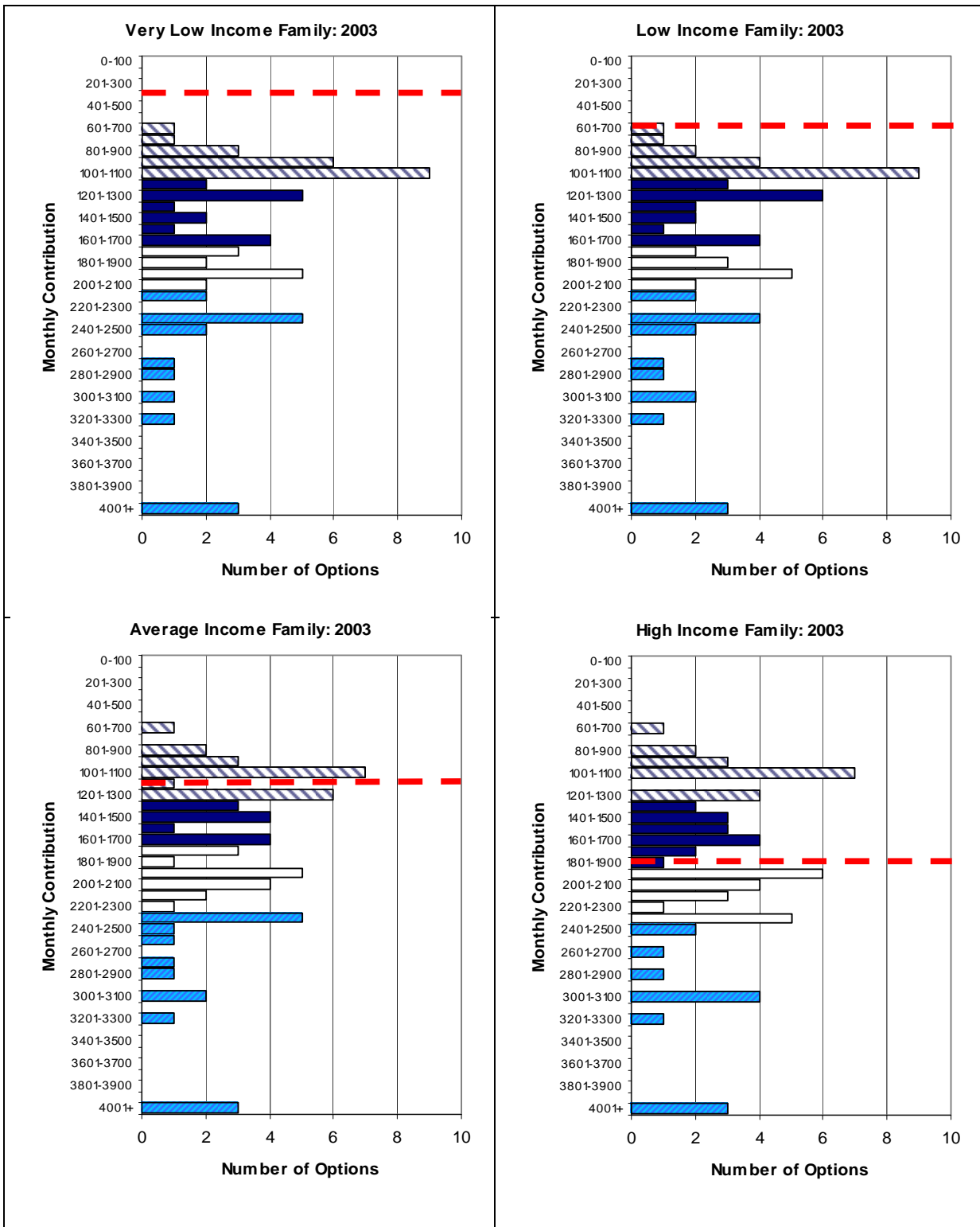


Figure 3: Distribution of contributions for the Benchmark Families: 2003

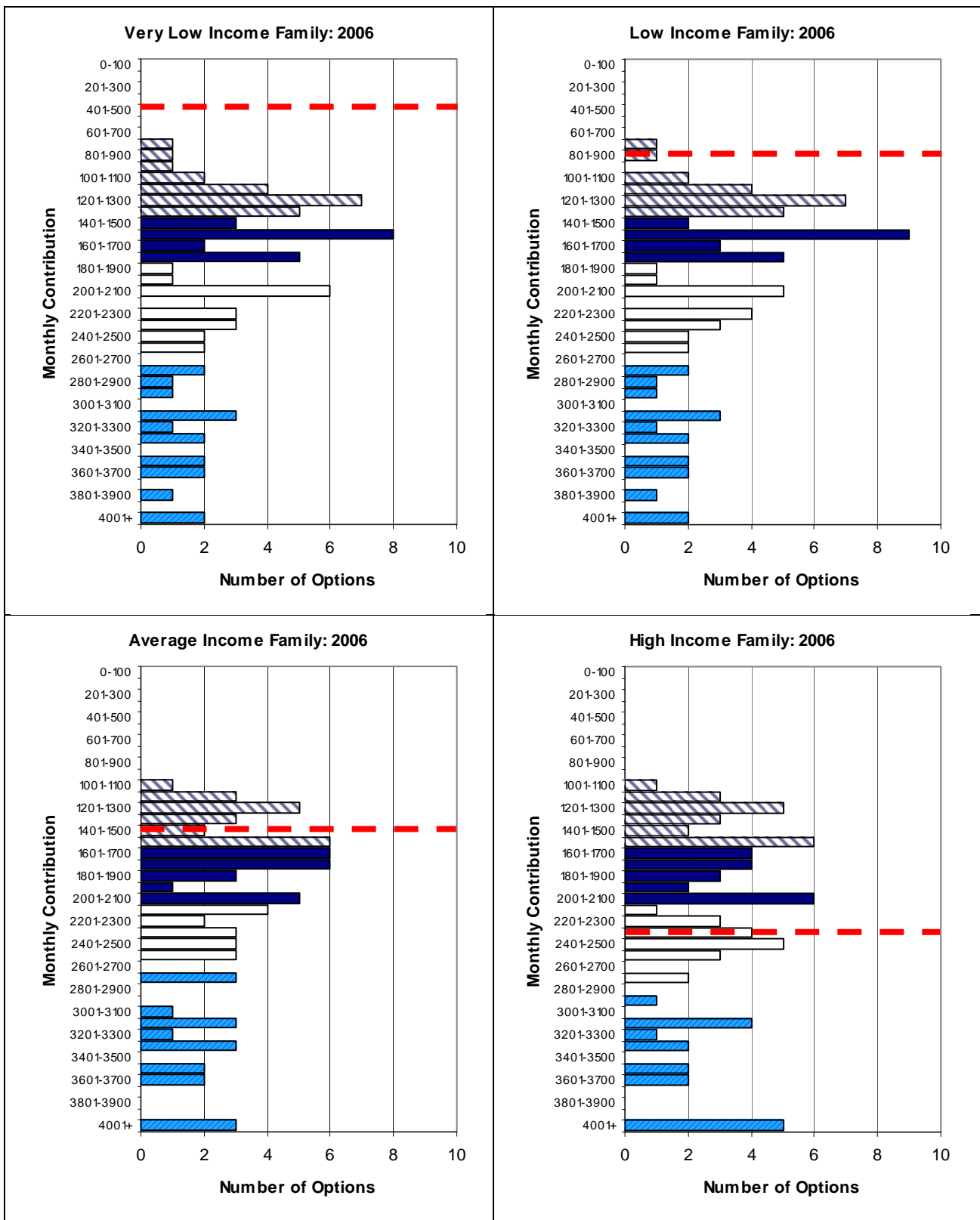


Figure 4: Distribution of contributions for the Benchmark Families: 2006

## Conclusion

The ultimate goal of the SHI reforms is to improve access to health care, and some of the changes to the regulatory environment that have been implemented to date have, had positive spin-offs. However, one of the unintended consequences of the reforms has been a failure to improve affordability and thereby to ensure access. This may be due to the significant delays between the various components of SHI being implemented and the absence of any income cross-subsidy component.

The negative impact has been greatest on lower income members of medical schemes, exacerbating the inequitable nature of the system. This increasing income inequity is referred to in the Health Charter: 'In the private sector membership of medical schemes has become increasingly unaffordable thus widening the gap between the high-income group and the middle-income group in terms of equitable access to health care' (Department of Health 2005: 39).

The increase in health care costs over time has been the focal point of industry discussions around affordability. While medical inflation is a significant challenge, the paper argues that in 2003 the cost of entry-level medical scheme options was largely unaffordable and this has not improved over time.

In recent years the industry has responded positively to the affordability challenge by developing new products aimed at the lower end of the market. The cost of entry-level products may be lower than historical product offerings in absolute terms. However, it is necessary to view the cost in relation to the proportion of income that can realistically be spent on health care. The methodology used in this paper illustrates that the majority of products available are still unaffordable. This has been recognised in the LIMS process which has advocated further regulatory change.

## Recommendations

Mandatory contributions are an integral part of the envisioned SHI system. The current lack of affordability of entry-level products needs to be addressed in order to ensure the feasibility of mandatory contributions.

Considerable work still needs to be done within the South African setting to determine what the maximum proportion of income is that people are willing (and able) to spend on health care. It is likely that this proportion varies by income. The process of determining the price of an affordable package and then rationing benefits accordingly needs to be weighed against the need for an appropriate set of minimum benefits.

Affordability concerns are expected to be addressed through regulatory and structural changes such as those advocated by the LIMS process and income cross subsidies. In the interim, Industry needs to consider whether there is scope to reduce the cost of entry-level packages. This may be

through the creative use of alternative delivery modes as well as through innovative benefit design.

Regardless of the changes made to the environment to improve access, a monitoring and evaluation process needs to be implemented. The methodology used in this paper could be applied at regular intervals.

Other areas of further research that would contribute to the debate and which were not included in this paper include the link between household and individual income, and the implications of recent tax reforms. The methodology suggested here can be further refined by taking into account alternative scenarios for employer subsidies, and the differences in benefit design between options. The methodology presented here does not consider working members and pensioners separately. In reality there are a number of factors that impact on affordability that affect these two groups separately (e.g. tax treatment and employer subsidies).

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