

Authors:

Heather McLeod<sup>i</sup>

Shivani Ramjee<sup>ii</sup>

# Medical Schemes

## Abstract

*Not-for-profit medical schemes are the dominant vehicles for providing insurance for health care in the private sector in South Africa. This chapter critically evaluates the role of medical schemes in revenue collection, pooling of contributions and purchasing of health care.*

*Revenue is collected by medical schemes from employers and households on a voluntary basis. Some employees are supported by their employers but the nature of employer subsidies, particularly for those in retirement, has been changing. Revenue collection costs are very high and broker activity has a negative effect on risk pool stability. The trend away from restricted to open schemes has been arrested by the creation of a new single restricted scheme for public sector workers.*

*Protections for members have been implemented in the form of open enrolment, community rating and minimum benefits. Community rating is currently in fragmented risk pools and the reforms underway to introduce a Risk Equalisation Fund will bring community rating across the entire industry. Freedom to design benefits is being curbed but there is still substantial use of benefit design for effective risk-rating of members.*

*Medical schemes tend to be passive purchasers of health care and few schemes have become strategic purchasers of health care on behalf of their members. The lack of engagement by medical schemes with the delivery of health care, together with constraints in the provider environment is preventing the development of more efficient and cost-effective solutions.*

<sup>i</sup> Department of Public Health and Family Medicine, University of Cape Town and Department of Statistics and Actuarial Science, University of Stellenbosch

<sup>ii</sup> Department of Commerce, University of Cape Town

# Policy and legislative framework

## Introduction

Medical schemes are the dominant vehicles for providing insurance for health care in the private sector in South Africa. Medical schemes reimburse their members for actual expenditure on health. They operate on a not-for-profit basis and are essentially mutual societies, governed under the Medical Schemes Act (Act 131 of 1998) and managed by boards of trustees.<sup>a,1</sup> They are however, surrounded by a number of for-profit entities that provide administration, marketing, managed care, consulting and advisory services. In the minds of consumers there is often confusion between the not-for-profit medical schemes and the high-profile listed companies that act as administrators.

The Medical Schemes Act defines the 'business of a medical scheme' as the business of undertaking liability in return for a contribution in order to make provision for obtaining any 'relevant health service'.<sup>b</sup> Medical schemes can grant monetary assistance to meet expenditure on a health service or can provide the relevant health service directly or by agreement with health care providers. Most medical schemes pay the account from the health care provider chosen by the member; some have attempted contracts with providers and very few offer health care services directly. Schemes may choose to be 'restricted' membership schemes if attached to a large employer, union or other defined group, but all others are open schemes that must freely admit anyone who applies.

## Revised legislative framework

The history of medical schemes in South Africa began in 1889 and their status was formalised initially under the Friendly Societies Act (Act 25 of 1956) and later the Medical Schemes Act (Act 72 of 1967).<sup>2</sup> Reforms during the 1980s and early 1990s led to the increasing use of 'mutuality' as opposed to 'solidarity' principles.<sup>c</sup> The democratic govern-

ment inherited a system in 1994 that had substantially turned in the direction of mutuality, with members being risk-rated and charged according to their age and state of health. This produced adverse results in terms of health care equity and access with the elderly and those with chronic disease being most vulnerable.

Since 1994 there has been a substantial return to solidarity principles although medical schemes still operate in a voluntary environment. The fully re-written Medical Schemes Act, No. 131 of 1998, which has been applicable since 1 January 2000 has prepared the environment for Social Health Insurance, as discussed in detail in Chapter 5. Doherty and McLeod documented the stormy re-introduction of three key principles under the revised Medical Schemes Act of 1998.<sup>3</sup>

- **Open enrolment:** Open schemes have to accept anyone who wants to become a member at standard rates.
- **Community-rating:** Everyone must be charged the same standard rate, regardless of age or state of health. However, the current implementation applies to each benefit option in each medical scheme rather than the industry as a whole.
- **Prescribed Minimum Benefits (PMBs):** A minimum package that must be offered by all schemes. Beneficiaries must be covered in full for these conditions<sup>d</sup> with no limits or co-payments. Schemes may insist on the use of a contracted network of providers and formularies of drugs to manage care.

These three principles enhance the risk-pooling function within medical schemes. The Medical Schemes Act also provided for some protections for schemes against anti-selection by members by allowing the imposition of waiting periods and late-joiner penalties under defined circumstances. Any funding arrangement, which is intended to assist in meeting the actual costs of medical services must satisfy the requirements of the Medical Schemes Act. These requirements include being registered under the jurisdiction of the Council for Medical Schemes (CMS), having financial guaran-

a 50% of the board of trustees must be elected by the members.

b A 'relevant health service' is any examination, diagnosis, treatment, prevention or advice; prescription or supply of medicine, appliance or apparatus; ambulance service, accommodation in hospital, maternity or nursing home; for a physical or mental defect, illness, deficiency; or pregnancy.

c Voluntary insurance operates on 'mutuality' principles where members are assessed or underwritten on application and pay according to their risk. Social systems operate on 'solidarity' principles where contributions are not linked to risk. Contributions may be paid equally (as under community-rating) or according to ability to pay. Solidarity, when fully implemented, requires that contributions are mandatory for defined groups.

d The Prescribed Minimum Benefit package is a list of some 270 diagnosis and treatment pairs (PMB-DTP) primarily offered in hospital (introduced 1 January 2000); all emergency medical conditions (clarified from 1 January 2003); diagnosis, treatment and medicine according to therapeutic algorithms for 25 defined chronic conditions on the Chronic Disease List (PMB-CDL) (introduced 1 January 2004).

tees, maintaining prescribed solvency levels, having at least 6 000 members,<sup>e</sup> adhering to product design requirements and regular reporting to the Registrar of Medical Schemes. The Medical Schemes Act codified the duties of trustees and provided for much improved governance of medical schemes and the industry as a whole.

The revised Medical Schemes Act tasked the CMS with the protection of members of medical schemes, rather than the protection of the industry. The executive arm, the office of the Registrar of Medical Schemes, has grown substantially from being a small deputy directorate within the Department of Health (DoH) to being a statutory body with considerably expanded powers to regulate. The office is funded by a levy on medical schemes members and is staffed by a professional team including accountants, lawyers, health economists and medical professionals. The CMS is responsible for regulating medical schemes as well as accrediting brokers, administrators and managed care organisations that provide services to medical schemes. An amendment to the Medical Schemes Act in 2007 is expected to expand the role of the CMS to take responsibility for the operation of the Risk Equalisation Fund (REF), which will further enhance the risk-pooling function by creating an industry-wide risk pool and an industry-wide community rate for the PMBs.

## Demarcation with other health insurance

Medical schemes reimburse their members for actual expenditure on health (known as indemnity business). Health insurance policies are provided by short-term insurers and life offices and supervised by the Financial Services Board. The demarcation of health insurance was re-defined in the Long-Term Insurance Act (Act 52 of 1998) and Short-Term Insurance Act (Act 53 of 1998), together with the Medical Schemes Act of 1998.<sup>4,5</sup> Health insurance policies may not indemnify policy holders against actual medical expenses, must offer a sum assured defined in advance of any health care provision and may not directly reimburse health care providers.

The insurance industry, particularly short-term insurers, continued with the sale of products in defiance of the Medical Schemes Act of 1998 and the revised Insurance Acts. The insurance industry was reluctant to close the products as the Insurance Acts allowed risk-rating and the payment of much

higher commissions.<sup>f</sup> In a High Court judgement in December 2006, two products sold by Guardrisk, a short-term insurer, were found to be doing the 'business of a medical scheme'. The products, 'Admed Gap' and 'Admed Pulse' were designed to offer cover for the difference between the amount actually charged by a health care provider and the National Health Reference Price List (NHRPL), which is commonly used as the standard for payment by medical schemes. The judge found that the policies were clearly for the purpose of defraying expenditure in connection with the rendering of any relevant health service and as such, fell under the Medical Schemes Act. Guardrisk was interdicted and restrained from marketing, promoting, advertising or concluding any further policies. The judgement required the company to terminate the policies of all 130 000 existing beneficiaries within three months but leave to appeal has been granted, effectively suspending operation of the judgement.

This judgement in favour of the CMS and Registrar of Medical Schemes is significant as it confirms the view long-held by the Council that these products were doing 'the business of a medical scheme'. Any remaining recalcitrant insurers will now be aware that the CMS will pursue the matter in the courts. The clear demarcation of products is important to ensure that the risk-rated insurance environment does not attract only the young and healthy and hence dilute the solidarity of the medical schemes environment.

It is not possible to get an estimate from the Financial Services Board of health insurance sold under their jurisdiction and much of the legitimate health insurance business is sold as riders to life policies. The total premium for health insurance in 1999 was estimated by the CMS to be R0.482 billion per annum with cover of some 1.2 million people, although with substantial overlap to those in medical schemes. A revised estimate made in 2005 using the National Health Accounts for 2000 suggests that health insurance might account for R0.762 billion per annum or 0.6% of total health expenditure in South Africa.<sup>6</sup> This would translate to 1.1% of private health expenditure.

e 'Members' refers to principal members, or those paying the contribution. 'Beneficiaries' are all those with cover on the medical scheme, including families of the principal members.

f Some 25% of contributions on short-term insurance products, compared to a maximum of 3% of contributions for medical schemes, limited to a maximum of R60.70 per month plus VAT.

## Medical schemes and revenue collection

Revenue is collected by medical schemes from employers and households on a voluntary basis. Some employees are supported by their employers but the nature of employer subsidies has been changing. Subsidies for those in retirement have undergone the greatest changes in recent years. Brokers have been legalised and are paid commissions for bringing members to open schemes. The trend away from restricted to open schemes since 1995 has been arrested by the creation of the Government Employees Medical Scheme (GEMS), the new single restricted scheme for public sector workers.

## Medical scheme coverage

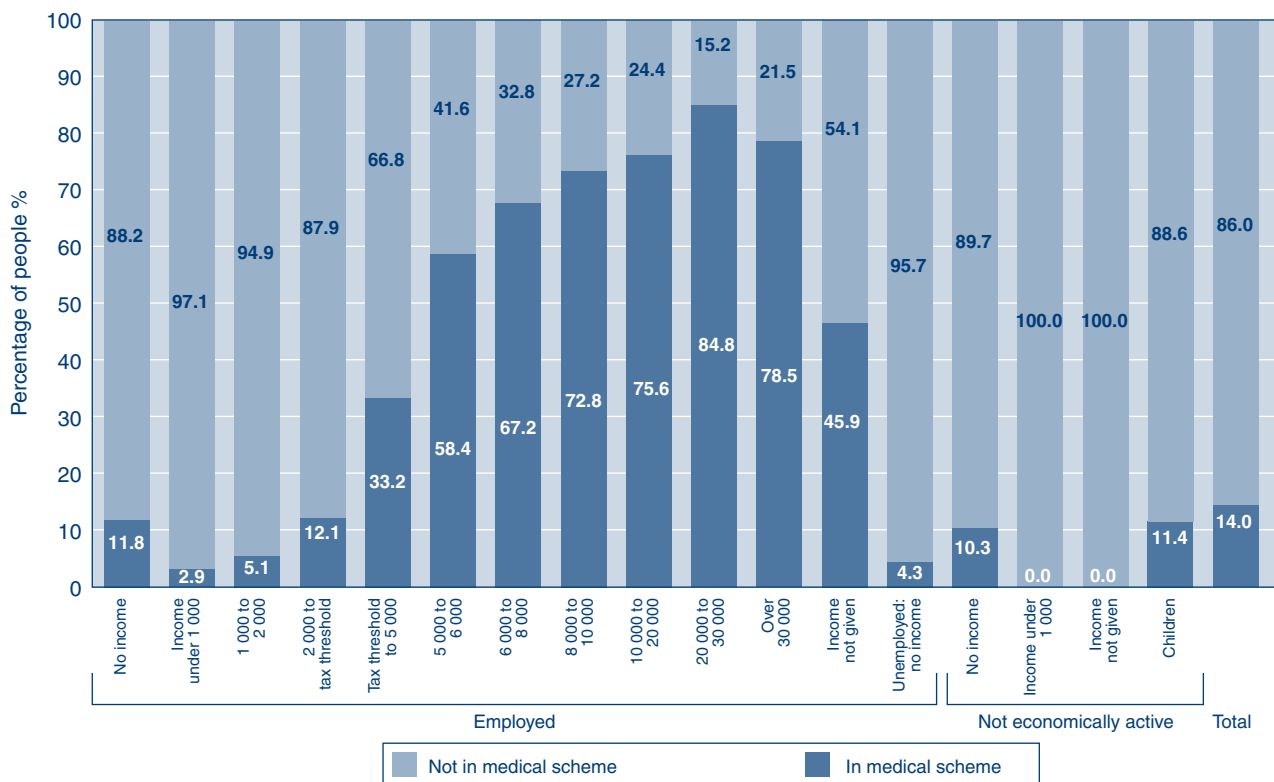
Between 1994 and 2006 the number of registered schemes declined from 170 to 124. There were a further 31 'exempt' schemes in 1994, reducing to 12 Bargaining Council schemes

in 2004.<sup>9</sup> Over the 11-year period there was initial growth in membership numbers followed by a long plateau with new growth finally apparent from 2005. The total number of members reported has increased by 20% over the period 1994 to 2006, from 2 487 to 2 985 million. The number of beneficiaries has grown more slowly by 8.8% from 6 548 to 7 127 million.<sup>h</sup> The increase in members at a faster pace than the increase in beneficiaries is not attributed to real changes in family size but a response to affordability problems in medical schemes. The latest official figures from the 2006/07 CMS Annual Report show two years of increase in beneficiary numbers after four years of stagnation and decline.<sup>7</sup> This increase has been long-awaited as formal non-agricultural employment has increased sharply since 2001 after drifting downwards throughout the 1990s.<sup>8</sup> The increase in beneficiaries is in part due to previously uncovered lives being brought into GEMS, which has been in operation since January 2006.

g The analysis is complicated by changes in the definition of registered schemes during the period. Schemes like Transnet and Polmed were previously 'exempt' and only included as registered schemes from the year 2000. The reporting by Bargaining Council schemes is not consistent from year to year and the Registrar did not give the number of these schemes in 2005 or 2006, or members of these schemes in 2006.

h Over the period from 1994 to 2006 the number of principal members of registered schemes has increased from 1 972 to 2 985 million (51.3%). The number of beneficiaries in these schemes has increased from 5 303 to 7 127 million (28.9%).

Figure I: Medical scheme coverage by individual income (Rands per month)



Source: Derived using StatsSA, 2006.<sup>10</sup>

**Table 1: Medical scheme coverage by household income (Rands per month) and employment status**

	Personal Income (per month)		Highest Household Income (per month)				
	Employed	Self-employed	Children under age 20	Unemployed	Not economically active	Pensioners over age 65	Total population
Total number (population)	10 475 543	925 948	20 075 422	7 187 419	5 877 926	2 330 921	46 873 178
Total number on medical schemes	2 847 385	124 940	2 279 090	283 317	706 548	310 342	6 551 621
Percentage on medical schemes	27.2	13.5	11.4	3.9	12.0	13.3	14.0
<b>Percentage on medical schemes by income</b>							
No income	12.6	38.8	4.6	1.9	8.5	13.6	6.9
Income under 1 000pm	2.7	3.0	1.5	0.4	1.2	1.0	1.4
1 000 to 2 000pm	5.1	4.4	3.2	1.6	3.5	4.0	3.2
2 000 to tax threshold	12.4	6.7	5.9	3.1	5.5	4.8	6.3
Tax threshold to 5 000pm	34.0	13.7	17.9	9.3	15.3	10.1	18.9
5 000 to 6 000pm	59.4	32.2	43.6	21.3	40.4	29.9	44.0
6 000 to 8 000pm	68.2	37.0	51.9	28.7	32.9	21.5	51.4
8 000 to 10 000pm	74.7	39.6	64.9	45.3	43.4	52.7	62.4
10 000 to 20 000pm	79.8	49.7	64.6	45.7	54.9	47.6	67.0
20 000 to 30 000pm	88.2	67.1	83.6	38.8	76.7	46.0	81.2
Over 30 000pm	79.9	67.6	80.9	36.4	89.0	100.0	78.3
Income not given	46.1	37.4	19.0	8.5	0.0	38.3	55.1

Source: Derived using StatsSA, 2006.<sup>10</sup>

A more meaningful measure of coverage is to relate the number of beneficiaries covered by medical schemes to the total population. Based on mid-year population estimates from Statistics South Africa (StatsSA), this figure has declined from 17.0% in 1994 to 14.9% in 2005.<sup>9</sup> In 2005, open schemes<sup>i</sup> were in the minority at 35.9% by number. These schemes tend to be larger with open schemes making up 19.7% of small schemes, 28.0% of medium schemes and 67.5% of large schemes. Thus the majority of beneficiaries (71.8%) were covered in open schemes and the bulk of revenue collection (72.3%) occurred through open schemes.

Total contributions to medical schemes have increased from R11.299 billion in 1994 (R21.869 billion in 2005 Rand terms) to R54.193 billion in 2005. Total contributions are reported to be R57.568 billion in 2006.<sup>7</sup> The average amount contributed per beneficiary per month has increased from R343.67 in 1994 (2005 Rand terms) to R660.66 in 2005. This represents nearly a doubling of the real price of medical schemes

over the 11-year period or 6.1% per annum increase above the Consumer Price Index (CPI) increases.<sup>j</sup>

The problem of affordability of medical schemes is considered to be the greatest obstacle to growth in the industry. The effect of affordability on medical scheme demographics manifests in the patterns of coverage by income and employment status, the number of beneficiaries covered per family and the ethnicity profile of schemes. Figure 1, using the 2005 General Household Survey (GHS), shows that there is a very strong pattern of coverage by employment and income level.<sup>10</sup>

Table 1 illustrates the strong relationship between household income and coverage. This relationship applies to the unemployed, children and those not economically active, supporting that access to cover occurs through either being employed or being financially dependant on an employed person.

i Open schemes are required to admit any person who applies. Restricted schemes can be formed on the basis of employment or other grouping, such as an industry or profession.

j CPIX has only been published since 1997 so CPI is used for long-term calculations.

There is evidence that when faced with affordability problems, children are left off the medical scheme. Between 1994 and 2005 the beneficiary ratio in registered schemes fell from 2.69 beneficiaries per member to 2.43 due to households increasingly not covering all members of the household. Helmbold investigated the characteristics of these partially covered households using data from the GHS.<sup>11</sup> He estimated that there are more than 1.5 million uncovered people residing in partially covered households. The size of a household has a significant effect on whether a household is fully covered, uncovered or partially covered. This is largely because household income does not increase in line with household size and resources are thus spread more thinly.

In a voluntary environment people can move onto medical schemes when they believe they will need cover, despite the existence of waiting periods and late-joiner penalties.

Table 2 summarises the interplay between income, age and gender to show the anti-selection that occurs in the voluntary environment. The proportion of eligible children covered is much lower than the proportion of people over age 35. There is a noticeable decline in membership in the age group 20 to 35 as young working adults and those still studying remain out of schemes. A significant feature is that more women than men choose to become members in the childbearing years. The PMBs ensure almost complete coverage of pregnancy and childbirth costs and medical schemes have seen a pronounced increase in the number of maternity cases in recent years.<sup>k</sup>

**Table 2: Anti-selection in medical schemes, 2005**

Highest household income	Tax threshold of R2 917 per month in 2005		R1 000 per month in 2005	
	Male	Female	Male	Female
Under 20	49.4	49.2	29.7	9.3
Age 20-35	37.6	44.1	19.2	25.6
Age 35-65	54.9	62.1	36.1	42.8
Age 65+	66.1	65.2	53.5	53.0

Source: Derived using StatsSA, 2006;<sup>10</sup> CMS, 2007.<sup>12</sup>

## Employer subsidy of medical scheme membership

The effects of low income on access can be off-set if there is a significant employer subsidy for health care. In the absence of a mandated social security system for health care, there is a range of positions an employer can choose to adopt with regard to funding health care. These range from “seeing health care as an aggravating and potentially ruinous cost of doing business” to being “an investment in business success” where “healthy people deliver healthy profits”.<sup>13</sup> Companies that choose the former position might meet legislated occupational health standards, to provide a fixed subsidy for health care to all workers and allow for contributions to be collected from the payroll, but not involve themselves further in health care issues. Companies that choose the latter position seek to invest in employee health care in order to improve worker performance and satisfaction. They might become active purchasers of health care and seek to integrate all company health-related initiatives, as most frequently seen by the mining houses and major retailers.

The role of employers in medical schemes has been declining for some time. Employers have increasingly chosen to restrict their involvement with medical schemes to paying contributions to open medical schemes. This is partly due to the changing nature of employment with people no longer spending their entire working life with one employer. Changes in remuneration philosophy to cost-to-company principles and increased focus on employment equity have meant that medical scheme membership is seldom offered as an additional benefit but it is costed as part of total remuneration. The role of brokers in facilitating this shift is examined later.

The 2003 Old Mutual Survey documented how employers have engineered a fairly constant employer cost of health care over the past 10 years (as a percentage of payroll).<sup>14</sup> This has been achieved by increasingly passing the risk of escalation in health care costs to employees. In recent years many employers have moved to fixing the medical scheme subsidy as Rand amount or in terms of subsidising only a basic set of benefits. Whereas 75% of employers in 1999 paid a fixed percentage of medical scheme contributions, only 41% of employers did so with no limit and a further 18% did so with a limit in 2003. Employees thus bear the brunt of the increase in the cost of health care.

<sup>k</sup> The REF Grids submitted each month have shown higher numbers of maternities than expected in the REF pricing each year. Unpublished scheme investigations show substantially higher maternities than expected as well as evidence of increasing numbers of women who join schemes before giving birth and leave schemes thereafter.

Although companies may notionally make subsidies available to all workers, the 2005 Old Mutual Survey found many individuals cannot make use of the subsidy because it is too small in relation to the total contribution.<sup>15</sup> This results in a significant percentage of the workforce buying down to cheaper options, deregistering some of their dependants or being unable to continue to afford medical scheme cover. The Survey found that the average employer subsidy was R883 per employee per month, but a very wide variation was observed.

### Contribution increases and buying down

Medical scheme contributions increase on an annual basis, with increases monitored by the Office of the Registrar. The average increase in contributions per option is compared to a benchmark of CPIX + 3%, and options which reflect increases greater than this benchmark are requested to provide further motivation for their increase.<sup>16</sup>

The nominal increase in average risk contributions per beneficiary (as per scheme financials) from 2004 to 2005 was 2.72%.<sup>17</sup> This figure does not reflect the average contribution increase implemented by schemes as it includes the effects of movements that occurred between options and schemes as well as the effects of changes in family profile. The industry average contribution increase estimated by the Office of the Registrar for the same period was 6.86%. This is an unweighted average of all options and schemes and does not allow for differences in profile between schemes.<sup>18</sup> An independent estimate based on index methodology estimates the average increase at 5.95% (see Table 3).<sup>19</sup> The considerable difference between these estimated contribution increases and the increase in the average contribution income of schemes indicates that some beneficiaries bought down from more comprehensive options to cheaper options with the consequent dampening effect on contributions.

**Table 3: Estimated and actual increases in nominal risk contributions by percentage**

	2004/05	2005/06
Office of the Registrar estimate	6.8	5.9
Index methodology estimate	5.9	5.2
Average risk contribution per beneficiary per month	2.7	3.8

Source: CMS, 2005;<sup>17</sup> CMS, 2006;<sup>18</sup> Ramjee, unpublished.<sup>19</sup>

For the period 2002 to 2006 average contribution increases (as estimated by the Office of the Registrar) have been declining. They have however still been consistently higher than the CPIX.<sup>16</sup> Increases in excess of the CPIX create a significant affordability challenge as medical scheme contributions comprise a larger proportion of household expenditure over time. This explains the downward migration of beneficiaries to cheaper options. This gradual movement is expected as a high proportion of major medical benefits are the same across all options due to the minimum benefits. This extent of buy-down depends on member awareness of their benefits.

### Income cross-subsidies in medical schemes

Another way to deal with affordability for low income workers in a voluntary environment is for the employer to guide a restricted medical scheme to create income cross-subsidies within the scheme itself. This 'social engineering' of contributions is usually deliberate and agreed by all groups covered by the scheme. For example, the trustees of a restricted scheme may deliberately set contributions so that single elderly people (typically widows, as women live longer than men) only pay perhaps R20 per person per month. Contributions for other groups (employed or high income bands) are then adjusted upwards to provide the total needed by the scheme. There are no restrictions on the degree of 'social engineering' within a restricted medical scheme.

The proportion of options in restricted schemes making use of income bands has declined significantly over time, from 83.9% in 2004 to 61.0% in 2006. Despite this decline, restricted schemes still make greater use of income bands than open schemes. Amongst the options making use of income bands, the average number of income bands used by options in restricted schemes (6.52 in 2006) is greater than the average number used by options in open schemes (3.52 in 2006). The average number of income bands used has decreased for options in both open and restricted schemes.

A decline in the use of income bands disadvantages the low income members of medical schemes by reducing the extent of income cross-subsidies. As pensioners tend to have lower incomes they are included in the group that tend to benefit from income-based contribution tables. Options with income bands will thus be more attractive to pensioner members, which impacts negatively on a scheme's risk profile. The competitive pressure and incentive to risk select

are thus contributing factors to the decline in the use of income bands. Income cross-subsidies in open schemes and across schemes are only possible if government implements a deliberate income cross-subsidy policy as part of mandatory membership.

## Employer subsidies for pensioners

In the period since 1994 there has been a substantial change in employer policy with respect to subsidies for medical scheme membership in retirement, driven by changes in the accounting treatment of costs for retired workers. Since the 1980s there has been a worldwide movement in accounting circles to account for costs in retirement during the working life of the employee. In principle, a company must account for any promises in retirement while a worker is still employed.<sup>l</sup> This requires additional expenditure to be recorded on the income statement and additional liabilities to be placed on the balance sheet.

The Old Mutual Survey conducted since 1994 has documented a significant movement towards excluding pensioners from company funding for health care. In 1995, 89% of companies surveyed were providing funding of health benefits for pensioners, falling to 43% in 2003 and only 29% offering some form of post-retirement subsidy in 2005.

Old Mutual found that employers had employed the following strategies to deal with the additional liability imposed by the accounting standards:

- ▶ excluding health care benefits in retirement from the employment contracts of all new employees. The percentage of companies not offering health care subsidies in retirement to new employees was estimated to be between 85% and 95% in 2005;<sup>m</sup>
- ▶ capping employer contributions for all future as well as existing pensioners;
- ▶ offering cash or other benefits in lieu of continuing to cover the liability of post-retirement medical scheme

contributions;<sup>n</sup> and

- ▶ re-designing the medical scheme benefit structure or imposing limitations on benefits.

The drive to lower the impact of health care subsidies on the company balance sheet typically has a feedback loop to the way in which subsidies are organised for workers and on the design of benefits. Employers have been remarkably successful at reducing the risk of health care inflation to themselves and ensuring that workers and pensioners carry that risk. This was accomplished with almost no response from unions, who in many cases welcomed the move from defined benefit to defined contribution retirement schemes that accompanied this change in employment conditions.

The full effect of transferring investment risk and medical inflation risk to the elderly and future retirees will also take some years to unfold. In 2002, McLeod et al. described the subsidy issue as 'a future time bomb', warning that this issue will impact the industry when those joining companies from around the year 2000 onwards reach retirement age.<sup>20</sup> This will become apparent some 10 years to 30 years into the future but if this practice does not receive serious policy attention then the impact on affordability of medical schemes for those future pensioners is described as devastating.

The issue is now beginning to receive attention by the Department of Social Development as part of the evaluation of retirement reform proposals that could set up a mandatory Social Security System for retirement.<sup>21,22</sup>

The coverage of pensioners in medical schemes is 13.3%, slightly lower than the 14.0% coverage of the total population. Rohman showed that the proportion covered declines with age which may be evidence of the affordability problem as medical scheme contributions increase much faster than pensions.<sup>23</sup> The proportion of beneficiaries over the age of 65 is still considerably higher in restricted schemes than in open schemes (7.73% compared to 5.85%) although this gap has narrowed considerably since 2000.

<sup>l</sup> The applicable standard for South African companies is International Accounting Standard 19 on Employee Benefits (IAS19). This incorporates accounting for retirement funds and post employment benefits from a company perspective. The standard was previously known as AC116 and all South African companies, whether listed or otherwise, have been required to comply with AC116 since 1 January 2001.

<sup>m</sup> Personal communication, Old Mutual Healthcare Survey staff, February 2007.

<sup>n</sup> The strategy of giving extra cash or benefits in retirement in lieu of medical scheme subsidies for existing pensioners ran into significant legal challenges between 2003 and 2005 and hence no employers indicated using this strategy in the 2005 Survey. However this approach had already run a substantial, if disastrous, course in South Africa. Retirement funds have been accused of misusing retirement fund surplus for this purpose.



## Single restricted scheme for the public sector: Government Employees Medical Scheme

One positive development has been the return by government to a restricted scheme for public sector workers. In the apartheid years the public sector had restricted schemes by racial group but during the 1990s public sector workers were allocated an employer subsidy for medical schemes and could use this to join any open medical scheme of their choice. The growth of the role of brokers in the 1990s was fuelled by this subsidy approach.

The restructuring of medical scheme subsidies in the public sector was placed on the agenda in December 1999. The 1999 Remuneration Policy Review had identified major shortcomings, including inequality in access to medical scheme cover, affordability concerns, lack of value for money, spending inefficiencies and little integration with public sector health care.<sup>24</sup> Despite a relatively generous medical scheme subsidy,<sup>o</sup> there were only some 450 000 people, half of the one million employees, using the subsidy.

In 2002, Cabinet approved a framework policy for a restricted medical scheme, only for public sector employees, centred on the principles of:

- equity, where employees have equal access to the most extensive set of equal basic benefits under equitable remuneration structures, subject to affordability;
- efficiency in respect of costs and delivery of benefits; and
- differentiation, where employees opting for more extensive cover have equal access to such higher benefits subject to their needs.

The GEMS was registered in January 2005 and became operational in January 2006. Government has used the lure of a higher medical scheme subsidy within GEMS,<sup>p</sup> as well as insisting that all new employees may only join GEMS. It was reported in July 2007 that GEMS had reached 150 000 prin-

cipal members or some 400 000 lives, making it the largest restricted scheme and the third largest medical scheme in South Africa.<sup>25</sup>

The combination of high subsidies for low income workers, income-related contribution tables and the bargaining power of the new scheme have been significant. A low-wage-earning civil servant and family is able to join the lowest cost option, Sapphire, without making an out-of-pocket contribution. There are some 325 000 people eligible for the 100% subsidy, 191 000 (nearly 60%) of whom were not previously medical scheme members. It is estimated that the Sapphire option alone could bring about 600 000 new lives into the medical scheme market and that GEMS may ultimately see the enrolment of an additional 1 million medical scheme beneficiaries (an increase of some 14% from current industry levels).

The implementation of GEMS sets an example to other employers by demonstrating that it is possible to develop packages of benefits that can be made affordable to all employees. Initial vociferous concerns by open schemes that they might lose up to 25% of their collective membership have become muted. However, there are specific schemes that had very high proportions of public service employees that might need to amalgamate with GEMS or close as their risk pools reduce in size. GEMS provide an important role model for large employers in its design of subsidies and the benefits of returning to a restricted scheme for all its workers. GEMS is also a role model for other medical schemes in terms of benefit design.

### The costs of acquiring members

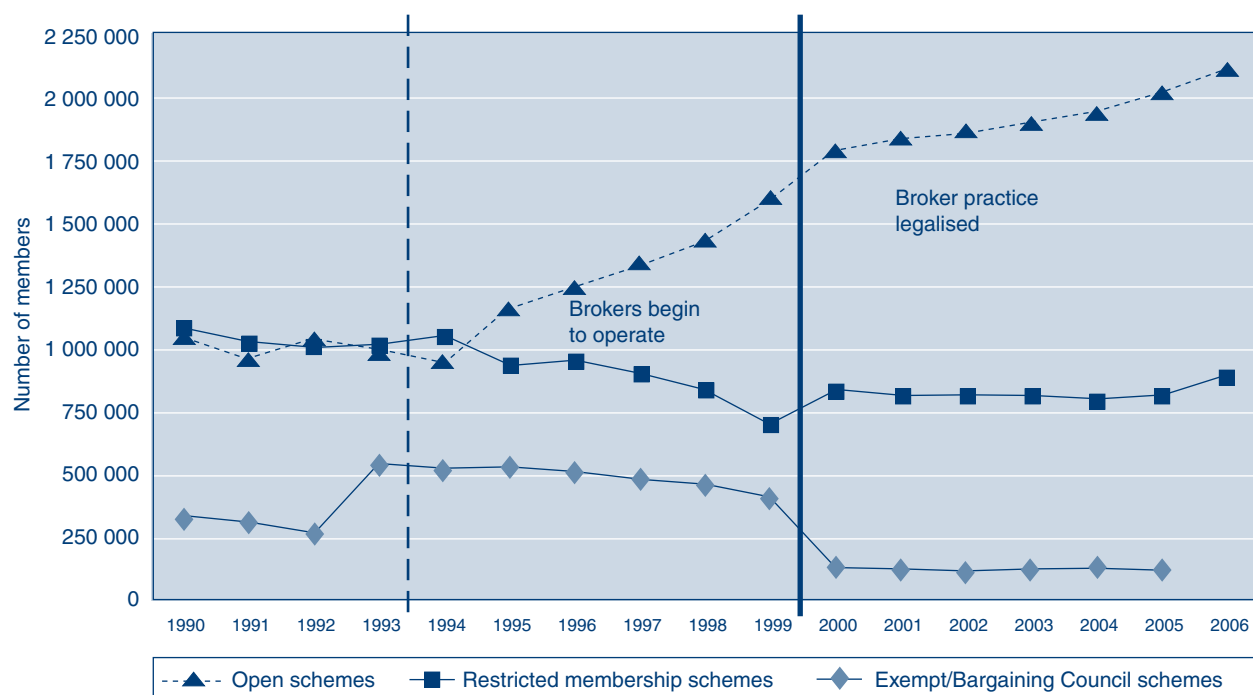
A notable feature since 1994 has been the growth of open schemes at the expense of restricted schemes. Figure 2 shows that in the early 1990s the number of members in open and restricted schemes was approximately equal, but has since strongly diverged.

Since brokers began to operate in the market they have aggressively moved people to open schemes, often leaving the older members behind in a closed restricted scheme. Although movement out of restricted schemes has slowed, open schemes covered 71.8% of registered scheme beneficiaries and 69.6% of all beneficiaries by 2005. The proportion in restricted schemes has begun to increase again as public sector workers and their families move from open schemes to GEMS.

<sup>o</sup> Government paid two-thirds of any medical scheme contribution, to a maximum of R1 014 per month per employee. This was generous by industry standards where 50% was a common percentage subsidy.

<sup>p</sup> A revised and improved employer subsidy regime was negotiated and implemented from 1 July 2006. A 75% subsidy of monthly contributions was provided, capped at R1 900 per month per employee. Workers on the lowest salary bands (earning less than about R60 000 a year) received a 100% subsidy capped at R1 900. Those remaining on open schemes received the lower original subsidy of up to two-thirds of contributions, capped at R1 014 per month. The issue formed part of acrimonious bargaining during the June 2007 public sector strike. There were calls by labour for the subsidy to be used across other schemes. A revised subsidy of R2 020 per month was offered by Government, still restricted for use in GEMS.

**Figure 2: Historic membership of medical schemes by type of scheme, 1990-2006**



Source: CMS Annual Reports.<sup>9</sup>

Brokers in medical schemes were only legally recognised in 2000 and 5 867 brokers had received accreditation by December 2002. In recent years broker fees paid by open schemes have been accelerating resulting in increases in broker fees now far exceeding increase in the number of members.<sup>16</sup> The Registrar of Medical Schemes is rightly worried about this problem. It is instructive to reflect that by March 2007 there were 9 742 individual health brokers accredited with the CMS.<sup>7</sup> The number of general practitioners is estimated to be of the order of only some 7 000 individual doctors.

Open schemes, by using brokers to attract new members, thus incur an additional layer of non-health care costs for marketing and acquisition that most restricted schemes do not incur. The total acquisition costs (included marketing and advertising) incurred by open schemes was R930 million or 2.7% of gross contribution income in 2005. There were five restricted schemes that paid brokerage but these operate in markets where public sector workers at lower tiers of government can still choose which scheme to join. Total acquisition costs were 21.8% of gross administration expenses for open schemes and only 0.7% for restricted schemes. If the five schemes paying brokerage are excluded, then there were no acquisition costs recorded for any other registered

schemes. Marketing and advertising expenditure was five times greater in open schemes at 3.0% of gross administration expenses, compared to 0.6% for restricted schemes.

The per member per month (pmpm) expenditure on brokers, for open schemes, was found to be 41.1% higher for the four largest schemes than for the other schemes making use of brokers. The expenditure per scheme on marketing and advertising was also found to vary strongly by scheme size with the four largest open schemes incurring 30.1% of the total open scheme expenditure in this category.

The presence of brokers in the open scheme market is intimately connected to the competitive dynamics between open schemes and the short-term nature of the industry. Because broker commission is limited in percentage terms there is also no incentive for brokers to encourage growth at the low end of the market. The Low Income Medical Schemes (LIMS) report, resulting from the consultative process around developing financing products for low income households, recommended that the current broker business model be altered to enable distribution in the low income market.<sup>26</sup> It also suggested that distribution could be effected via employers and trade unions.

<sup>9</sup> Figure 2 represents data derived from the CMS Annual Reports since 1990.

## Medical schemes and risk-pooling

### The size of risk pools

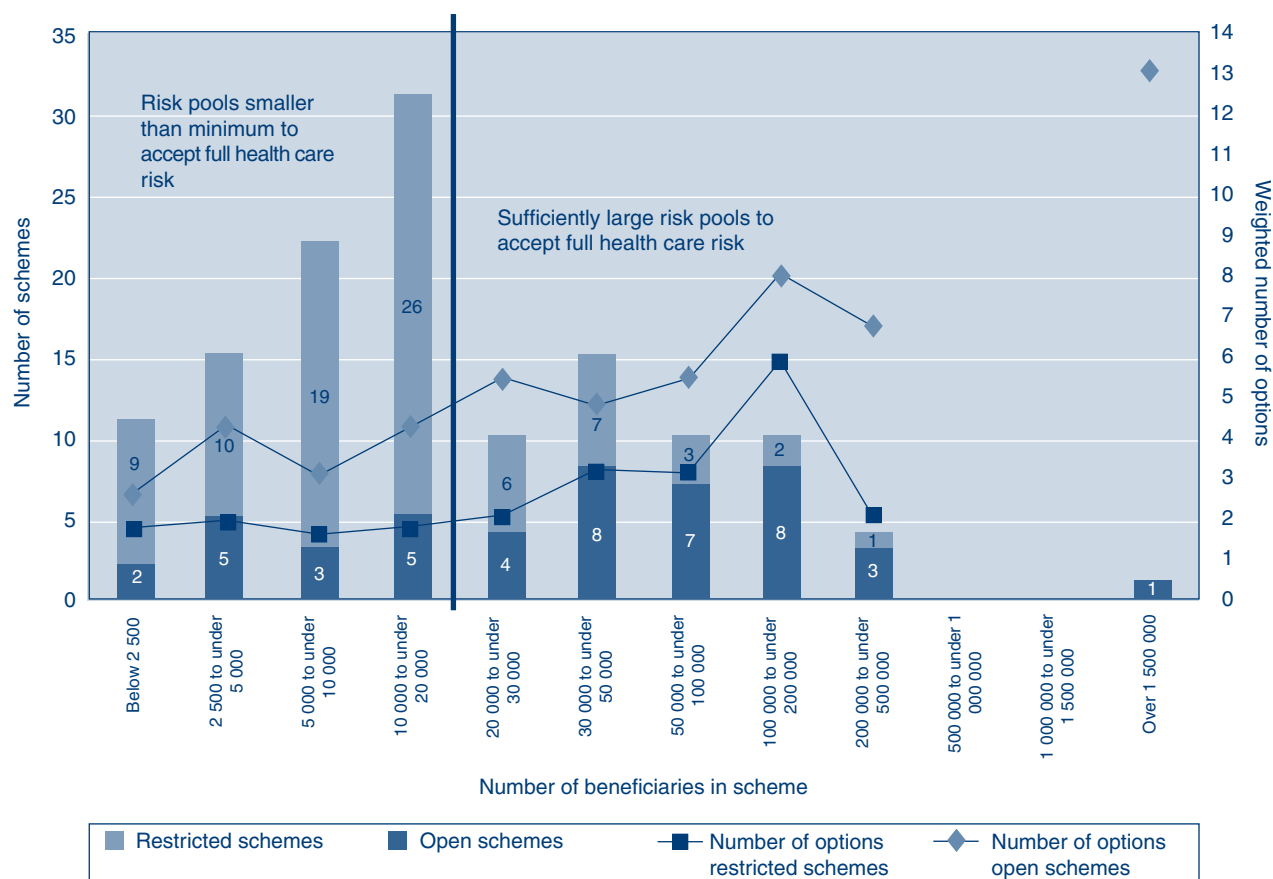
The number of medical schemes has been in a long decline since 1974 since the Registrar began record keeping. There were 252 registered schemes and a further 53 exempt schemes for a total of 305 schemes in 1974. The number of registered schemes has fallen from 170 in 1994 to 124 at the end of December 2006. Since 1974, the number of beneficiaries in medical schemes has roughly doubled from 3.5 million to 7 million. This is excellent news for risk-pooling as it means that risk pools are becoming larger.

Of the 146 schemes registered in 2000, only 117 (80.1%) were still registered at the end of 2005. Twelve of these schemes had liquidated and 17 had amalgamated with other schemes, with the majority of the activity occurring within the restricted scheme market. Consolidation activity in the market is likely to increase in the next year given that schemes losing a large proportion of their members to GEMS will be left with smaller risk pools and higher claiming profiles.

The larger the risk pool the more stable and predictable the results and the lower the risk of insolvency. The average registered scheme size was under 10 000 beneficiaries in 1974, growing to some 31 000 by 1994 and 52 000 by 2005. However, average figures are very misleading as there are substantial differences in sizes of schemes. Figure 3 shows scheme size at the end of 2005 and shows that open medical schemes are generally much larger than restricted schemes.

One open scheme, Discovery Health Medical Scheme, now dominates the market having grown from its inception in 1993 to 1.855 million beneficiaries by September 2006.<sup>12</sup> This scheme is more than three times the size of its nearest competitor and alone accounts for over 35% of the open scheme market and 25% of all medical scheme beneficiaries. Optimum health risk pool size has not yet been studied in South Africa but in the United States of America the minimum size to accept full health care risk is considered to be 20 000 beneficiaries.<sup>27</sup> At the end of 2005 only 23% of restricted schemes exceeded 20 000 beneficiaries while 67% of open schemes did so.

**Figure 3: Size of medical schemes and number of options, 2005**



Source: CMS, 2007.<sup>12</sup>

Solvency of the risk pools has become less of an issue since 2000 with the greater capacity in the Registrar's office. There is now detailed quarterly monitoring of all schemes and monthly review of schemes identified to be in financial difficulty. In 2000, some 3.22 million beneficiaries were members of medical schemes with a solvency protection of less than 10% of contributions. By December 2005, this number had reduced to only 111 759 beneficiaries – an improvement of 97%. Some 4 million beneficiaries are currently in schemes with a solvency level greater than 25%, compared to the 1.4 million who enjoyed such protection in 2000. This represents a 170% improvement.

Overall, the solvency level was at 39.1% of total contributions by the end of December 2005, substantially higher than the statutory required level of 25% of contributions. This represents a net asset value of R3 060 per beneficiary in the industry. Restricted schemes tend to maintain higher solvency levels and only six schemes did not meet the minimum solvency at the end of 2005. Open schemes are more problematic and are wary of taking interim increases in contributions or posting high contribution increases as brokers may persuade members to leave. Schemes that are growing fast also suffer strain on their reserves and find it more difficult to maintain solvency. Despite active engagement by the Registrar there were 18 open schemes that failed to meet minimum solvency at the end 2005 and these covered 57% of open scheme beneficiaries.

A further fragmentation of risk pools occurs in South Africa because schemes are able to design benefit options and are required to treat each option as a separate risk pool for community-rating. Each benefit option is required by law to be self-sustaining, thus forcing risk-pooling to occur at an option level resulting in fragmented risk pools.

Half of all restricted schemes have only one option and only 11% have more than three options. Open schemes, in attempting to provide a wider choice for competitive reasons, typically have four to five or even more options. On average restricted schemes had 1.95 options per scheme in 2005 compared to 5.28 options per scheme for open schemes. The highest number of options in one scheme was 21 in 2005, reducing to 16 in the same open scheme in 2006. Figure 3 shows that among scheme sizes, open schemes have more options than restricted schemes.

The Registrar is increasingly refusing to register minor variations in benefit package as separate options. There were 381 options registered in medical schemes in 2006, slightly down from 401 options in 2005. The very high number of

options is of concern as each represents a separate distinct package of benefits.

## Trends in benefit design

Benefit design fulfils three (sometimes conflicting) functions for a medical scheme. Benefit design decisions influence the marketability and competitiveness of a scheme, the extent of risk-pooling within a scheme, and the manner in which benefits are rationed and delivered. The emphasis differs considerably between open schemes and restricted membership schemes largely due to the differences in competitive dynamics. In a community rated environment without a REF, open schemes with a lower-risk profile will be more competitive. There is thus a strong incentive to use benefit design to 'cherry-pick' healthy members.

In the absence of mechanisms such as the REF to address these incentives, the regulatory challenge shifts to limiting the extent to which schemes can use benefit design to risk select members and influence their risk pool. The PMB package defined for use in 2000 was interpreted by many schemes to exclude coverage out-of-hospital for chronic conditions. The initial response to PMBs by some schemes was to substantially reduce chronic medicine benefits and hence be seen as less attractive to older and less healthy members. The PMB package was revised with effect from January 2004 to include cover for 25 defined Chronic Disease List (CDL) conditions. The benefits must include cover for diagnosis, management and medicine according to therapeutic algorithms published in the Government Gazette. With the incentives for schemes to compete on the basis of their risk profile, and to use benefit options to split their risk pool, benefits for chronic conditions had become an effective tool for risk-selection.<sup>28</sup> Prior to the implementation of the CDL the majority of beneficiaries in open schemes belonged to options with very limited chronic benefits. The aim of the CDL was to ensure that all beneficiaries have access to benefits for certain common chronic conditions.

However, the underlying competitive dynamics and incentives have remained unchanged. As a consequence schemes have moved away from providing cover in excess of the CDL to avoid attracting older and sicker members, and the differentiation between options on the basis of chronic benefits has continued albeit in a more subtle form. This dynamic has materialised as a decline in the coverage of non-CDL conditions, with even top options moving away from open disease lists, and a higher level of self-funding for non-CDL conditions than for CDL conditions.

Without the competitive pressures that open schemes are subject to, restricted schemes have historically been able to provide more generous chronic benefits. Restricted schemes make more use of the cross-subsidies between young and old members in the same option and in this way can offer more extensive chronic benefits for the same community rate.

The most recent manifestation of the regulatory challenge is the refusal of the Registrar to register the rules of Genesis medical scheme. Genesis applied to register three benefit options for 2006, all of which offer limited risk-pooling for out-of-hospital benefits. The Registrar contended that the benefit options offered by Genesis are designed such that they are unlikely to be attractive to the aged and sickly, thus causing these members to *“be systematically excluded from the scheme on bases directly related to their age and health status.”*<sup>29</sup> The argument presented by the Registrar does not require all options to offer benefits in excess of the PMBs, but does require that schemes offer at least one comprehensive option that addresses the needs of older and sicker members. This argument relates to the way in which schemes compete for members and the competitive advantage that would arise for a scheme that attracts only young and healthy members.<sup>30</sup>

There were 208 options in open schemes and this represents a vast array of choice for consumers. A clear understanding of the product offerings and effective comparisons between options are impeded by the complexity of the information presented. It would be close to impossible for a consumer to weigh up various benefit categories, financial limits, co-payments and deductibles without some sense of the likely claim frequencies and severities.

### Savings accounts, deductibles and other self-funding

Prior to 2006 many options allowed members to choose their level of medical savings account contribution (subject to the regulatory maximum) or annual routine benefit. This effectively allowed members to tailor their benefits according to their health needs and to pay different premiums. This was seen to be a means of risk-rating members because part of the premium paid by members reflected their health needs and consequently this practice was disallowed. Savings contributions had been increasing as a proportion of gross contributions but this has been reversed in interim results in 2006 when savings contributions declined to 10.8% of gross

contributions, from 11.7% in 2005.

Although in contravention of the law, some schemes do cross-subsidise between options thereby lessening the effect of risk-pool segmentation. In 2005, in both open and restricted schemes the age profile of options generating operational deficits was older than in those options generating operational surpluses. While options should be self-sustaining, the Registrar’s office appears to tolerate this ongoing cross-subsidisation until a solution to the option design issue can be found. Circular 8 of 2006 published by the CMS suggests reforms to more substantially address the underlying issue of risk pool fragmentation.<sup>31</sup> In particular, it allows for the pooling of certain benefits to occur across the scheme as a whole. Younger and healthier members will face increased contributions to the extent that they have benefited from fragmented risk pools. In a voluntary environment this may result in these members exiting the medical scheme environment and driving up the current community rate.

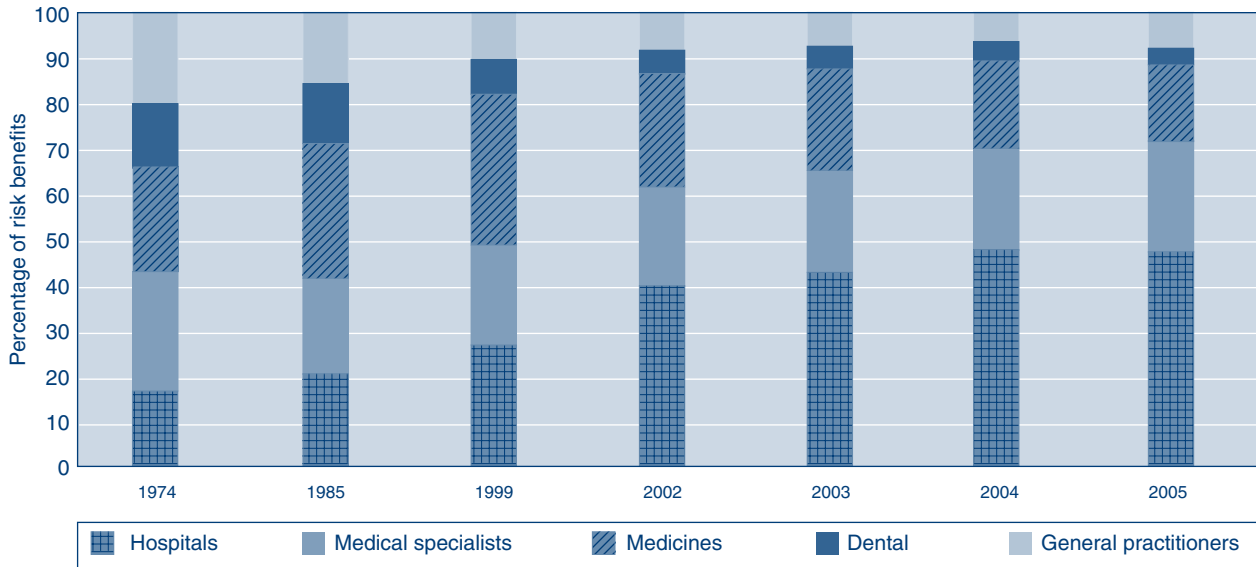
Figure 4 shows the changing emphasis in risk benefits since 1974. It is clear that the emphasis in medical schemes has shifted away from covering both major medical and out-of-hospital benefits to primarily covering major medical benefits (hospitals and specialists). Major medical expenditure accounted for only 42.5% of pooled funds in 1974 but 71.4% by 2005. This shift has been driven partly by the strong increases in hospital expenditure and the shifting of out-of-hospital expenses to medical savings accounts, and is underpinned by the PMBs emphasis on major medical benefits.

Whilst the PMBs do provide some cover for out-of-hospital costs, the awareness of these benefits is relatively low and the impact on overall benefit expenditure trends has been negligible. The effect of the introduction of the CDL in 2004 on increasing chronic medicine benefits is masked by the decline in medicine prices that occurred over the same period.

The increases in hospital expenditure have led to an increasing use of deductibles by schemes as a means of discouraging elective hospital admissions and some expensive diagnostic procedures. Deductibles require that members pay the first portion of the account up to a stated amount. They are inherently regressive in nature and adversely affect affordability for low income members.

Mediscor found that the extent of member self-funding (measured as the patient pay per item) for pharmaceutical benefits increased significantly from 2002 to 2003, but

**Figure 4: Proportion of risk benefits by provider category**



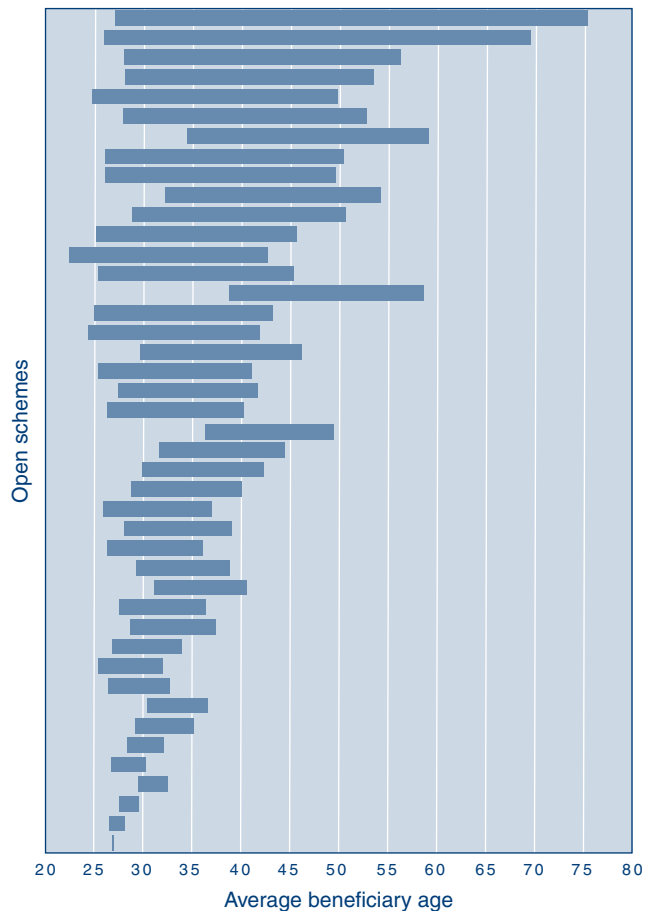
Source: CMS Annual Reports.<sup>r</sup>

subsequently declined in the next two years.<sup>32,33,34</sup> The shift of the cost of acute pharmaceutical benefits to medical savings accounts initially was influenced by the increased popularity of savings account options and the inclusion of the CDL in PMBs. Subsequent declines are influenced by the decline in pharmaceutical prices due to the medicine pricing regulations and the increasing use of generic medicines.

### Continued risk-rating through benefit design

The most important risk factor in the cost of health care is age. The prevalence of chronic disease is strongly related to age, with diseases of lifestyle impacting substantially on health care costs from about age 40 onwards. By offering different benefit options that appeal to particular risk groups, medical schemes can split the risk pool into smaller more homogenous groups, effectively risk-rating by age and chronic disease. Figure 5 considers all open schemes in 2005 and illustrates the range in average age between the option with the youngest profile and the option with the oldest profile.

**Figure 5: Range of average beneficiary age between the youngest option and the oldest option in each open scheme, 2005**



Source: Ramjee, unpublished.<sup>19</sup>

<sup>r</sup> Figure 4 represents data derived from the CMS Annual Reports.

This splitting of the risk pool into homogenous groups is not desirable as it reduces the extent of cross-subsidisation between beneficiaries. The existence of the PMBs limits to some extent the ability of schemes to use benefit design to segment members on the basis of health status. It was hoped that the CDL legislation would improve the cross-subsidy between the healthy and those with chronic conditions within each option. However, the segmentation of members according to chronic status has continued due to other differences in chronic benefits, both perceived and real. Chronic benefits are still differentiated between options based on factors such as benefits for non-CDL conditions, designated service provider (network) arrangements and differing levels of benefit management such as drug formularies. This continued segmentation is evidenced by the variation between options in the proportion of chronic claiming beneficiaries, as well as the price and utilisation of chronic medicine.

Despite legislation providing for community-rating within schemes since 2000, older members and those with chronic disease will still experience higher contributions on average than younger members. The effects in restricted schemes are less pronounced as membership within a company may have a degree of compulsion and hence greater pooling between age groups and between healthy and sick may occur.

### **Risk Equalisation Fund for industry-wide risk-pooling**

The implementation of a REF using age and chronic disease as risk factors will reduce the incentive for schemes to 'cherry-pick' members. The purpose of the REF is to ensure that community-rating occurs across all medical schemes and not only by option. Every beneficiary will thus be charged a similar amount for the common package of benefits, the PMBs, and not an amount depending on the age and disease profile of the option or scheme they join.

The Formula Consultative Task Team was established by the DoH in July 2003 and reported on the design of the REF to government in January 2004. An International Review Panel of experts from six countries supported the findings and suggested that the introduction of REF was urgent, suggesting that implementation should be attempted by 2005. The DoH formally adopted the REF as policy in September 2004 and the testing phase of the REF was approved by Cabinet in January 2005. The DoH embarked on a shadow process

for REF (with no money changing hands) during 2005. This allows for a careful process of preparing and testing the REF systems. While the industry initially expected the full implementation of REF from 1 January 2007, the legislative and capacity building process is taking longer than expected. The draft Bill for an amendment to the Medical Schemes Act of 1998, which would establish the REF, was gazetted in November 2006.<sup>35</sup> It now seems unlikely that REF could begin financial transfers before 2010.

This long period to implementation of the REF has very adverse consequences for schemes with high average age profiles. Figure 6 shows the expected impact on all schemes in the industry using age data from March 2006. One restricted scheme would expect to receive R612 per beneficiary per month (pbpm) from REF while the highest net payment to REF was R77 pbpm. Some open schemes are net recipients from REF while others are net payors to REF, with the same being true of restricted schemes. It was shown using data from June 2006 that there is expected to be a net transfer from open to restricted schemes of R5.86 per beneficiary per month or some R11.4 million per month.<sup>36</sup>

With the delay in the implementation of risk-adjusted transfers through the REF, some schemes that would be net contributors to REF have become more vociferous in lobbying to be excluded from REF. The legislators have been urged to ignore special pleadings on this issue as if any schemes are granted exclusion, then all other participants will bear the cost.<sup>37</sup> The stakeholder group advising on the REF showed using data from June 2006 that if Polmed and GEMS, two large government medical schemes, were to be excluded from REF, then the community rate for the remaining schemes would go up: the 6 427 000 beneficiaries in other schemes would have to pay R4.05 per person per month for the 434 000 people in Polmed and GEMS to be able to continue to enjoy lower community rates because of their younger age profile.<sup>36</sup> This would be unfair as it would amount to an extra tax on all other members of medical schemes to allow these two schemes to continue their lower community rates by having an exemption from REF. The same principle applies to any scheme getting a permanent or even temporary exemption from REF. Social solidarity requires that all schemes participate equally in the REF.

It is intended that as a result of the REF, schemes will no longer compete on the basis of risk selection (the age and health profile of the beneficiaries they attract). Instead, competition will be on the basis of cost-effective health care delivery. Schemes that are successful at reducing the cost of delivery

will retain that benefit for their members and will thus be able to lower their contributions for the basic package. However, because equalisation can only technically be done on common benefits, only the PMBs can be equalised. The expenditure on PMBs is roughly half of total expenditure on health care by medical schemes and thus the positive effects of REF will be substantially diluted. Schemes will still be able to use benefit design for the elements above PMBs to attract particular risk groups.

During the shadow period, schemes submit the data in the form of highly summarised REF Grids. However, this form of data submission is not readily auditable and before actual transfers occur there is a need to establish a more secure way in which data is collected and stored. The CMS recommended that a registry of all people on medical schemes be developed for the REF to fulfil its future role as the institutional vehicle for Social Health Insurance (SHI). The registry would contain unique identifying information to ensure that a person could not simultaneously be a member of two medical schemes. This ensures that per capita subsidies and risk-adjusted payments are correctly allocated to medical schemes depending on their validated beneficiaries. The REF would separately hold detailed information relative to the REF risk factors to be able to calculate the risk adjusted payments. A key issue in process design is the care being taken to ensure member confidentiality.

The systems have been developed but cannot be fully tested and implemented without the enabling legislation and Regulations that will allow for the collection of industry data.<sup>35</sup> Detailed testing has thus been delayed from 2007 to an unknown future date. Extensive consultation on the design of the REF and its formula for operation occurred in conjunction with stakeholders and the process was thus initially particularly cooperative and was welcomed by industry. Delays in implementation and problems associated with the planning and testing phase have led to a cooling of sentiment.

### **Affordability for low income workers: the LIMS process**

The Low Income Medical Schemes process was a formal consultative process initiated by the Ministerial Task Team on SHI.<sup>26</sup> The process was born out of the recognition that the implementation of income cross-subsidies as part of the SHI framework will take significantly longer than was originally envisaged. The objective was thus to find ways of extending risk-pooling in the low income market in the interim. Low

income was defined broadly as income of R2 000 to R6 000 per month. Modelled on the REF design process, the LIMS process drew strong industry involvement and engaged with a broad range of stakeholders.

The LIMS process contributed significantly to the market's understanding of affordability and the challenges that need to be overcome in addressing the needs of low income individuals.

Significant progress was made in understanding the barriers to coverage which include high levels of unemployment, the lack of affordability of current premiums and the relatively high cost of the PMB package. Significant work was undertaken in assessing willingness to pay and preferred benefit designs in the LIMS market.

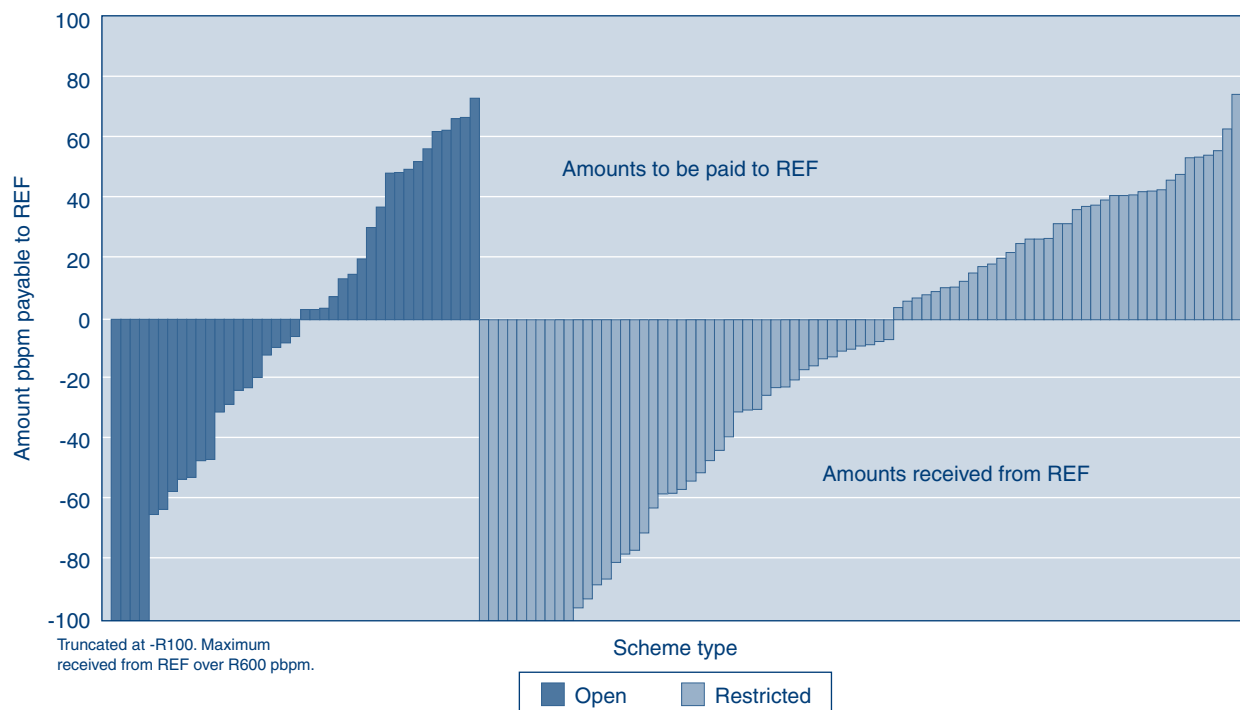
The process highlighted the absence of true low cost options in the current medical scheme environment. Many of the lower cost options available in the current market are competitively priced because of their risk profiles (combined with lower benefits or aggressive managed care interventions). If common benefits are to be pooled at a scheme level (and not at option level, as is currently the case) these options will experience a considerable increase in contributions.

The LIMS recommendations centred on the establishment and demarcation of LIMS schemes or options, including a recommended income threshold and rules to prevent adverse selection against LIMS schemes and current schemes. A revised set of PMBs for the new class of LIMS schemes or options was also proposed which would see a greater focus on primary care with the public sector remaining responsible for hospitalisation and major medical care. It was envisaged that LIMS options would be risk equalised but would participate in a separate REF risk pool.

Whilst the proposals made in early 2006 appeared to be positively received, there is little clarity a year later about which, if any, of the proposals will be implemented. There was a single enabling line in the draft Medical Schemes Amendment Bill but draft Regulations have not yet been published.<sup>35</sup> There is a sense that LIMS is seen by policy makers as fragmenting industry risk pools when other voices are arguing for a single equitable national system. The lack of feedback from the DoH on the LIMS proposals has frustrated many medical scheme industry participants.



**Figure 6: Expected payments by schemes to and from REF, 2006**



Source: Derived using REF data quarter 1 of 2006 and age only tables.

### Risk-pooling in a voluntary environment

In the voluntary environment for medical schemes members can leave and join at will. To ameliorate this, schemes have been allowed to impose age-related late-joiner penalties after an initial amnesty period that was extended and expired on 31 March 2001. People who had no medical cover were encouraged to join during the amnesty period. Once a late-joiner penalty is imposed, the consumer carries that penalty for the rest of his / her life.

These penalties (similar to those implemented in Australia) aim to encourage people to join schemes while they are young and to remain in the system. Their effectiveness in doing so relies on public awareness of the penalties for joining late. To the extent that late-joiner penalties are not effective in encouraging membership, their role becomes punitive in preventing people from joining the system late in life. The justification for the punitive effect that these penalties have on those joining late in life is based on the assumption that people staying out of the system are only doing so to select against the schemes.

In South Africa, where affordability is a major issue, this assumption is not entirely correct and late-joiner penalties have the negative effect of penalising those who could not afford medical schemes in the past. This creates a double

barrier of affordability as not only does the person have to meet the medical scheme contribution but also additional penalties of between 10% and 75%. The late-joiner penalty also penalises those people who were in exile and have returned to South Africa and those who work overseas for several years to gain skills to bring back to South Africa. In a mandatory system there would be no need for late-joiner penalties.

Medical schemes have increasingly developed loyalty reward systems to attempt to keep the young and healthy in the system in the voluntary environment. These are not legally part of the medical scheme and have to be set up in separate companies or by the administrator. The most prominent loyalty scheme has been Vitality from Discovery Health but many other open schemes have now produced similar products. Consumers often pay a joining fee and regular monthly fees to have access to reward systems that may have some wellness focus. Increasingly these programmes have tied up with retail stores and banks issuing credit cards in order to provide rewards such as flights and discounts for use of a suite of financial products. Consumers are often unaware that these systems are not part of the medical scheme and that membership is voluntary. The add-on fee is often used to pay increased brokerage and the amount can be substantial: Medihelp’s loyalty programme costs R100 a month for a family.

There is a general sense (but often poor evidence) that there has been an aging in the medical scheme population in recent years, thus explaining the price inflation in medical schemes. Data on the age profiles in medical schemes has been captured and published by the CMS since 2000 but the earliest data is extremely poor.<sup>s</sup> Since 2000 the actuarial science department at the University of Cape Town and the pricing team working on REF have systematically cleaned the Statutory Return (SR) and REF age data to enable a definitive comparison, shown in Figure 7.

There is evidence that the proportion of children in medical schemes has reduced substantially. The industry has also lost membership in the young adult years with a commensurate increase in membership from age 35 upwards. The effect from 2000 to 2007 is estimated to be an increase of only 3.4% in the industry price of PMBs with the effect from 2002 to 2007 being slightly higher at 3.8% of PMBs.

The greater impact by far on the price of PMBs is the effect of younger and healthier people who have remained outside the system. The degree of age and gender anti-selection is illustrated in Table 2. If all people in households where someone is earning above the tax threshold were covered in medical schemes, then the price of PMBs would fall to 93.2% of the voluntary market level.<sup>22</sup>

There is evidence that more women of childbearing years have entered medical schemes than would be expected in a mandatory system and thus a large proportion of maternity costs are probably already being covered in medical schemes. There is evidence in the REF data and the LIMS process that those with chronic disease are already more likely to be on medical schemes.<sup>26</sup> Taking into account these effects could result in the PMBs being 81.7% of the voluntary prescribed minimum benefit price if all people in households above the tax threshold became members. If mandatory membership were to extend to the households of people earning over R2 000 per month, then many younger people would be included and the price for PMBs could fall to 78.3% of the voluntary levels. Another way to look at this phenomenon is that prices of PMBs in the voluntary environment are some 20 to 30% more expensive in the voluntary environment than they could be at various stages of mandatory cover.<sup>22</sup>

## Medical schemes and the purchasing and delivery of health care

### The cost of delivery of health care

Non-health care costs are made up of gross administration expenses, managed care management services, acquisition costs, net impairment losses and net reinsurance cost, with the first three categories accounting for 97.4% of non-health care costs in 2005. Administration expenses and the cost of managed care management services are costs that are incurred in the delivery of health care by medical schemes.

These costs are considerably lower for restricted schemes than for open schemes. In restricted schemes non-health care costs vary by scheme size with larger schemes having lower per beneficiary costs. This is less clear for open schemes; medium sized schemes have higher expenses than small schemes and schemes with more than 200 000 members have higher expenses than large schemes.

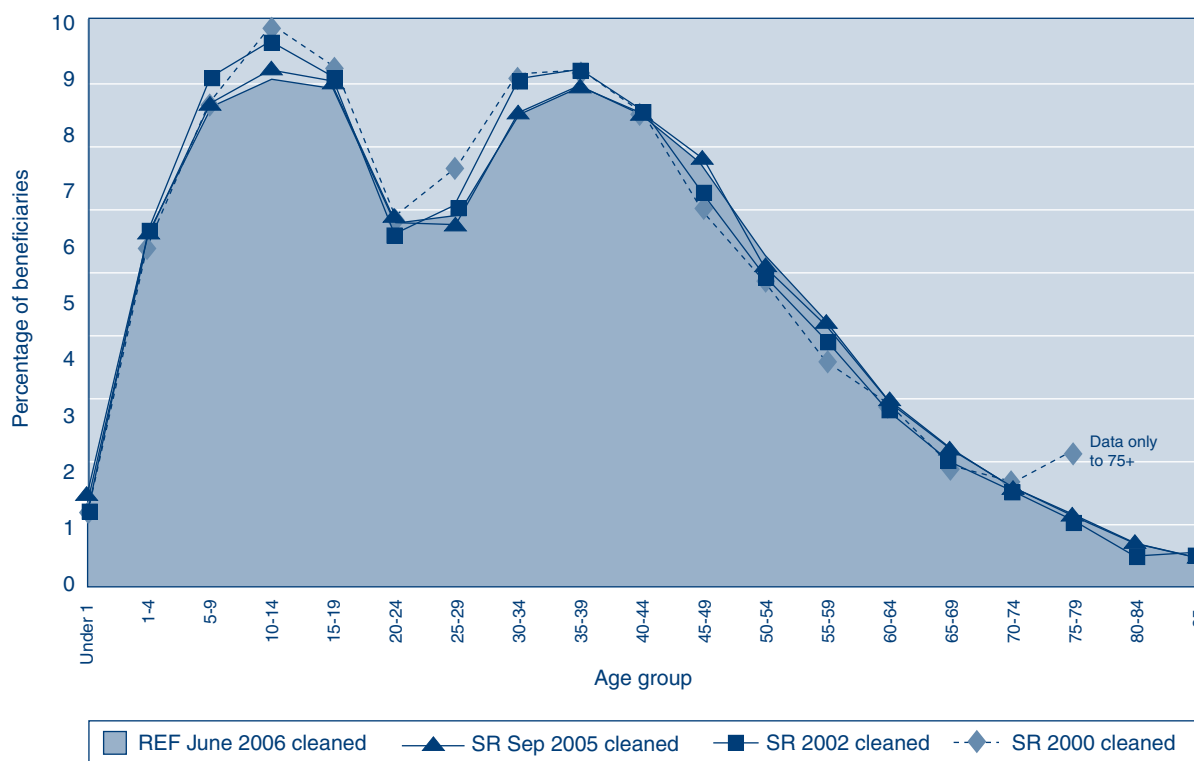
The administrator market has concentrated over time, with the market share of the top three administrators increasing from 49.3% in 2002<sup>t</sup> to 55.8% in 2005. Self-administered schemes have declined from 11.9% of the market to 10.9% over the same period. This is likely to be related to the increased demands on administrators including the need for more sophisticated clinical data, and the implementation of ICD-10 diagnosis coding.

The regulator uses a benchmark of gross administration expenditure of 10% of gross contribution income. In 2005, 62.8% of open scheme beneficiaries and 18.3% of restricted scheme beneficiaries incurred gross administration expenses greater than this level. The regulatory pressure on schemes to actively manage their non-health care costs has increased, with the 2005/06 annual report individually identifying schemes with above average costs. Schemes such as Pro Sano (with high levels of trustee fees) and Discovery Health Medical Scheme (with high administration costs) have also come under the media spotlight.<sup>37,38</sup>

<sup>s</sup> Data given in ten-year bands instead of five-year bands; missing gender information so all beneficiaries labelled either male or female; missing age information and those beneficiaries labelled as all 'Under 1' or '75+' because there was no provision for 'age unknown' in the data collection.

<sup>t</sup> Data on administrator market share was only published from 2002 by the Registrar of Medical Schemes.

Figure 7: Age profiles in medical schemes, 2000 to 2006



Source: Derived using Statutory Return data to 2005 and REF Grid data in 2006

### Improved management of chronic disease

Chronic disease benefits in terms of the CDL legislation are inclusive of diagnosis, medical management and medicine costs. Prior to the introduction of the CDL, benefit design and managed care tended to focus on chronic medicine only and did not take an integrated approach.

The inclusion of the CDL in PMBs limited the extent to which schemes could use financial limits to manage benefits. As a consequence, other means of rationing benefits such as drug formularies<sup>u</sup> and reference pricing have increased in importance. Formularies are often used to encourage the use of generic products. By contrast, the application of reference pricing requires that drugs be categorised into therapeutic classes, with a reference drug selected in each class. The maximum price to be reimbursed is then set based on this reference drug, with the consumer having to pay the difference in price if a more expensive drug is used. Cost savings depend both on how broad the therapeutic classes are and on the selection of the reference drug in each class. One of the aims of reference pricing is to have manufacturers compete to be the reference product and thereby

drive prices down.<sup>39</sup>

Generic utilisation has increased significantly in South African medical schemes. The Mediscor reports indicate that the proportion of generic items claimed increased from 27.7% in 2002 to 43.7% in 2005.<sup>32,33,34,40</sup> A number of possible reasons are provided for the increase in generic utilisation, including the introduction of more generic alternatives to the South African market, the role of reference pricing and formularies in promoting the use of generics and greater awareness of generic products amongst consumers. Pharmacists are now required to substitute generic products (where cheaper), unless the prescribing practitioner has specified otherwise. The Mediscor Medicine Review reflects substantially lower average expenditure per item for generics than for branded products (including those with valid patents and those with expired patents) with price differences averaging 63% in 2005. Even where generic equivalents are not available the use of drug formularies can decrease the utilisation of particular drugs if they are excluded from the formulary and increase the utilisation of others that are included. For example, the utilisation of Lipitor<sup>TM</sup> declined significantly from 2003 to 2004, whilst the utilisation of therapeutic equivalents increased.

<sup>u</sup> A drug formulary is a list of reimbursable drugs and has the effect of limiting coverage to those drugs.

From a benefit design perspective this was particularly problematic in new generation options where diagnosis and medical management benefits were largely self-funded. The structure of the CDL encourages a shift in scheme benefit design towards a disease-based structure as opposed to a treatment-based structure i.e. a specified benefit for asthma as opposed to separate benefits for diagnosis, medicine and consultations.

From a managed care perspective, the primary focus prior to implementation of CDL was on pharmacy benefit management as opposed to disease management. The Old Mutual 2005 Healthcare Survey noted that by 2003 pharmacy benefit management programmes were widespread and had become a standard managed care service that all schemes would be expected to use.<sup>15</sup> By contrast only 59% of the respondents to the survey had disease management programmes (DMPs) in place in 2003. In light of the introduction of the CDLs, a subsequent increase in the roll-out of DMPs are likely, particularly in the fields of HIV and AIDS and diabetes management. Access to benefits is in some instances conditional on registration or participation in a DMP. In certain instances, participation in a DMP may enable a member to have access to enhanced benefits.

Scheme knowledge of their disease profile has been enhanced considerably due to the introduction of the CDL, the requirement to submit the data during the shadow period for REF and the implementation of compulsory ICD-10 coding<sup>v</sup> for providers. The lack of ICD-10 coding prior to this hampered the ability to perform disease-based analyses.

## Moving to strategic purchasing of health care

Medical schemes tend to be **passive purchasers** of health care with many administrators doing little other than verifying the fee-for-service accounts sent in by providers and verifying the eligibility of members. Few schemes have become **strategic purchasers** of health care on behalf of their members. Strategic purchasing requires a continuous search for the best ways to maximise health system performance by deciding which interventions should be purchased, how, and from whom. This implies a concentration on network formation, contracting with selected providers and risk-sharing between schemes and contracted providers. It also

<sup>v</sup> ICD-10 diagnosis coding standard is owned and maintained by the World Health Organization, and is a standard diagnostic classification system used internationally. This system of alphanumeric disease classification is the 'coding standard of choice' in South Africa in both the private and public sectors.

requires more attention to quality measurement to ensure that members receive clinically appropriate care.

Theoretically, consolidation improves purchasing power but this is not happening because the basis for competition between schemes has largely been on risk profile and not on cost-effective delivery of health care. There is evidence that the largest players are beginning to prepare for the changed environment that REF will create by actively attempting to build and contract with networks. The Discovery Group reported in February 2007 that they need to transform their value proposition from *"being just a funder in the health care system towards ... creating structures that ensure members get access to a health care system of exceptional quality, ease of use and one that costs less"*.<sup>41</sup> The formation of the Discovery GP Network was seen as a key element of this strategy. Although the intention has been to work constructively with health care providers, there have been some bruising public battles with specialists.<sup>42</sup> Discovery, despite acting as administrator for over 2 million of the 7 million lives in the market, has found it difficult to contract with providers. Other schemes will be keenly watching the progress of Discovery Health Medical Scheme and GEMS as they transform to being strategic purchasers.

The Medical Schemes Act of 1998 allows schemes to own clinics and hospitals and to choose to deliver health care directly. Very few schemes have made use of this legislated opportunity and the few examples are concentrated in the mining industry or remote locations.

## Constraints on the efficient delivery of health care

It has long been recognised that the fee-for-service system is at the root of the problems of cost escalation and supplier-induced demand in medical schemes.<sup>43</sup> The CMS acknowledges that the historical system of tariff setting was deeply flawed in a number of respects.<sup>44</sup> While some progress was made in 2005 towards understanding practice and input costs for certain disciplines, the NHRPL process has to be geared to getting a usable reference price list to medical schemes in time for pricing contributions each year. The handover of the NHRPL function from the CMS to the DoH during 2006 delayed work on the schedule for 2007 resulting in considerable frustration amongst both schemes and providers. There is a substantial backlog of work on the NHRPL to bring prices to justifiable levels before any of the possibilities of altering the tariff to cover encounters rather than services can be explored.

Further reforms to purchasing and delivery of health care are greatly needed through the reform of private sector delivery models. There is also an intention to encourage the public hospital system to become a contender for the provision of services under a mandatory contributory environment.<sup>45</sup>

The capacity of the health care provider market to absorb more lives was extensively investigated as part of the LIMS process.<sup>26</sup> The task groups raised a concern over the lack of human resource capacity and regional variances in capacity. A clear area of concern was in the specialised fields of nursing, dentistry, specialists and intensive unit care. The supply task group felt strongly that the provision of services to the LIMS market can only be effective and sustainable if there is transparency to the provider, patient and fund, and every attempt is made by all to reduce fraud, corruption and mismanagement throughout the entire delivery process.

There are still substantial barriers to the creation of effective networks of health care in legislation and in the ethical rules of providers. Detailed recommendations were made in the LIMS process of the role that could be played by the Forum of Statutory Health Professional Councils in facilitating coordinated changes to the training and scope of practice of various health care professionals.<sup>26</sup> The combined agreement of the professional councils will have to be in place in order to allow for the development of innovative models such as:

- Staff model arrangements, in which hospitals are able to employ medical and other staff in order to appropriately align incentives and thereby reduce costs.
- Development of closed networks of hospitals, which would be operated on a low cost basis, including changes to design, operations and staffing.
- Changes to design and operation of hospitals allowing them to operate on a similar basis to mine hospitals.

These possible models are prevented by existing legislation, much of which is considered by the industry to be outdated. Legislation and regulations governing employment of and revenue sharing with health care professionals prevents the emergence of efficient, low cost integrated delivery models. Hospitals and other health care organisations are prevented from entering into employment or other revenue or profit sharing arrangements with health care professionals. This prevents the alignment of incentives that is essential for the development of low cost models. A critically important aspect is coordination with the Competition Commission and appropriate amendments to competition legislation.

## Priorities for consolidating medical scheme reform

Medium-term reforms to transform health care financing from a voluntary system to a mandatory social insurance system with risk and income cross-subsidies have been articulated since the National Health Plan of 1994.<sup>2,44,46,47</sup> However, more detailed measures and short-term sequencing of reforms have not been adequately shared with stakeholders and not all recent discussion documents have been publicly released.<sup>6</sup> Many of the frustrations experienced by the medical schemes industry stem from a perceived lack of adequate communication and problems created by the sequencing of reforms. For example, there is a suggestion from the CMS to expand the PMBs and change option structures which increases affordability problems for low income workers, yet the income cross-subsidies which will relieve the pressure on low income workers do not seem to be progressing. Many of the reforms are interrelated or have consequences on other parts of the system so policy-makers have an unenviable and difficult task in sequencing the reforms. The CMS should only be an advisor on policy matters and there is a perceived lack of resources to deal with private sector and medical scheme policy issues in the DoH.

The reforms of 1998 which were implemented in 2000 have had a very beneficial effect on the supervision of the industry and improved governance within medical schemes. There have also been significant but incomplete improvements in the protection of vulnerable groups like the elderly and those with chronic disease. The planned REF will further extend those protections but only to the minimum benefit package. In the medium-term, the most important goal is to move to a mandatory system for health care cover but there are still several reforms needed before mandatory cover is implemented. There are three areas of reform that should be prioritised in the short-term.

### 1. Simplified and standardised benefit design

The most important immediate priority is to simplify and standardise benefit and option structures in medical schemes. The debate on this issue began with the International Review Panel in 2004 and continued with proposals from the CMS in Circular 8 of 2006.<sup>48,31</sup> A greater standardisation of product offerings would greatly assist in moving medical schemes away from competition on the basis of product design (and hence on attracting particular target groups and risk-rating)

and towards competition based on efficiency and quality of health care delivery.

Whilst this will reduce consumer choice, it will improve consumer understanding and choice will be based on delivery and quality issues. Significant variation between schemes is likely to persist and factors such as network choice, drug formularies, authorisation protocols and provider risk-sharing will bring new challenges for consumers making product choices. Critically, greater product standardisation should encourage the merger of schemes and will substantially reduce, if not eliminate, the need for broker involvement in the medical scheme market. This will produce further beneficial effects through the reduction in marketing and acquisition costs as well as scheme administration costs.

Reduced broker activity is expected to reduce the churning of members and make for a more stable environment for risk-pooling. More stable membership in larger risk pools will encourage a move away from a short-term focus on cost to a longer-term focus on wellness and disease management. A reduced and standardised product offering would simplify administration not only for schemes but also for health care providers, thus lowering the overall costs of health care delivery. It will make it easier for health care providers to plan and deliver risk-sharing offerings for multiple schemes.

It may not be possible to implement all the benefit design changes at once but there needs to be a clear time-line of reform from the current situation to the agreed preferred solution. The process requires bold leadership by the CMS and would include re-defining the PMBs to include more primary care in line with the goals of the national health system. Attention should also be paid to reducing the use of instruments like savings accounts and deductibles which individualise expenditure, in favour of greater pooling between healthy and sick.

## **2. Coherent health care provider legislation**

The LIMS process produced a detailed set of issues that needed to be resolved to enable more efficient delivery of health care.<sup>26</sup> This set of constraints is true whether or not there is agreement on the need for LIMS options and schemes. The work requires a clear vision of how to incentivise efficient health care delivery and will need technical coordination between all the statutory health professional councils, the CMS and the Competition Commission. Coordinated legislative and

regulatory changes will be needed and these are best led by the DoH as steward of the health system. This work is a pre-condition for the effective emergence of risk-sharing models and networks of providers which in turn will enable medical schemes to become strategic purchasers rather than passive purchasers of health care.

## **3. Support for low income workers**

The explanation and arguments with regard to removing the current tax incentives and replacing them with a per capita subsidy are discussed more fully in the Chapter on Social Health Insurance. However, the impact of this reform on medical scheme affordability and the smooth implementation of the REF require its treatment here as well. If the REF is introduced before this reform, about half the schemes will be net payors to REF and about half will be net recipients. Schemes and options with low income workers tend to have younger age profiles and will thus be net payors to REF. This will increase the amount needed to be charged to the lowest income members who are already under affordability constraints. The isolated redesign of options in medical schemes to increase risk-pooling will create similar difficulties for low income workers.

All stakeholders agreed with the recommendations of the International Review Panel that the preferred mode of operation for REF would be with tax subsidies removed and the per capita subsidy channelled via REF.<sup>48</sup> This would mean that all schemes become net recipients from REF and this changes the perception of schemes and members about the risk-adjustment process. Critically, it provides a subsidy to the lowest income workers that is not possible through the tax system if they earn below the tax threshold. This reform introduces a limited form of income cross-subsidy which more than absorbs any negative effects of combining all risk profiles in one risk pool. The existing tax subsidy is deeply unfair as it provides most support to the highest income workers and this reform by the National Treasury is long overdue.

## References

- 1 Republic of South Africa. Medical Schemes Act (Act 131 of 1998).  
URL: <http://www.doh.gov.za/docs/legislation/acts/1998/act98-131.html>
- 2 Department of Social Development. Transforming the Present-Protecting the Future: Report of the Committee of Inquiry into a Comprehensive System of Social Security for South Africa; March 2002.  
URL: <http://www.welfare.gov.za/Documents/2002/May/INTRO.PDF>
- 3 Doherty J, McLeod H. Medical Schemes. In: Ijumba P, Ntuli A, Barron P, editors. South African Health Review 2002. Durban: Health Systems Trust; 2003.  
URL: <http://www.hst.org.za/uploads/files/chapter3.pdf>
- 4 Republic of South Africa. Long-Term Insurance Act (Act 52 of 1998).  
URL: <http://www.info.gov.za/gazette/acts/1998/a52-98.pdf>
- 5 Republic of South Africa. Short-Term Insurance Act (Act 53 of 1998).  
URL: <http://www.info.gov.za/gazette/acts/1998/a53-98.pdf>
- 6 Ministerial Task Team on Social Health Insurance, Social Health Insurance Options: Financial and Fiscal Impact Assessment. Unpublished Confidential Technical Report to the Department of Health; June 2005.
- 7 Council for Medical Schemes. Annual Report 2006-07. Pretoria: Council for Medical Schemes; 2006.  
URL: <http://www.medicalschemes.com/publications/publications.aspx?catid=7>
- 8 van den Heever A. Presentation to South African Human Rights Commission: Public Hearings on Access to Health Care Services; 30 May to 1 June 2007.
- 9 Statistics South Africa. Mid-year Population Estimates 1991-1998. Pretoria: Statistics South Africa; 1998.  
URL: <http://www.statssa.gov.za/publications/P0302/P03021998.pdf>
- 10 Statistics South Africa. General Household Survey 2005. Pretoria: Statistics South Africa; 2006.  
URL: <http://www.statssa.gov.za/Publications/P0318/P0318July2005.pdf>
- 11 Helmbold A. Key Features of Partially Covered Households in South Africa. Actuarial Science Honours Thesis (unpublished), University of Cape Town; 2007.
- 12 Council for Medical Schemes. Recommendations by the Risk Equalisation Technical Advisory Panel to the Council for Medical Schemes. Methodology for the Determination of the Risk Equalisation Fund Contribution Table 2007. RETAP Recommendations Report No. 9; 17 April 2007.  
URL: [http://www.medicalschemes.com/publications/ZipPublications/Risk%20Equalisation%20Fund/RETAP\\_recommendation\\_2007.pdf](http://www.medicalschemes.com/publications/ZipPublications/Risk%20Equalisation%20Fund/RETAP_recommendation_2007.pdf)
- 13 Berry LL, Mirabito AM, Berwick DM. A Health Care Agenda for Business. MIT Sloan Management Review Summer 2004; 45(4): 1-11.  
URL: [http://www.definityhealth.com/marketing/newsroom/inthenews/2004/MIT\\_Sloan.pdf](http://www.definityhealth.com/marketing/newsroom/inthenews/2004/MIT_Sloan.pdf)
- 14 Old Mutual. Old Mutual 2003 Healthcare Survey: A Decade of Change; 2004.
- 15 Old Mutual. Old Mutual 2005 Healthcare Survey: Towards Social Health Insurance; 2006.
- 16 Council for Medical Schemes. Annual Report 2005-6. Pretoria: Council for Medical Schemes; 2006.  
URL: [http://www.medicalschemes.com/publications/ZipPublications/Annual%20Reports/CMS\\_annual\\_report\\_2005-6.pdf](http://www.medicalschemes.com/publications/ZipPublications/Annual%20Reports/CMS_annual_report_2005-6.pdf)
- 17 Council for Medical Schemes. Annual Report 2004-5. Pretoria: Council for Medical Schemes; 2005.  
URL: [http://www.medicalschemes.com/publications/ZipPublications/Annual%20Reports/2004-2005%20CMS%20Annual%20Report\\_2005.pdf](http://www.medicalschemes.com/publications/ZipPublications/Annual%20Reports/2004-2005%20CMS%20Annual%20Report_2005.pdf)
- 18 Council for Medical Schemes. Analysis of Contributions and Benefits of Registered Medical Schemes for the Year 2006. Pretoria: Council for Medical Schemes; 2006.  
URL: [http://www.medicalschemes.com/Publications/ZipPublications/Presentations%20And%20Reports/CB%20Report%202006\\_Final\\_08052006.pdf](http://www.medicalschemes.com/Publications/ZipPublications/Presentations%20And%20Reports/CB%20Report%202006_Final_08052006.pdf)
- 19 Ramjee S. The Construction of a Price Index for the South African Medical Scheme Industry. Masters Thesis, unpublished.
- 20 McLeod HD, Mubangizi DB, Rothberg A, Fish T. The Impact of Prescribed Minimum Benefits on the Affordability of Contributions. A Report prepared for the Council for Medical Schemes. Pretoria: 2003.
- 21 Department of Social Development. Reform of Retirement Provisions: Discussion Document. Building a Caring Society Together; 2007.
- 22 McLeod H. Framework for Post-Retirement Protection in Respect of Medical Scheme Contributions. Department of Social Development Retirement Reform Project; 2007.
- 23 Rohman A. Characteristics of Pensioners in Medical Schemes. Actuarial Science Honours Thesis (unpublished), University of Cape Town; 2007.
- 24 Briefing by Department of Public Service and Administration, January 2004.
- 25 Government Employees Medical Scheme. [Press release] 30 July 2007.
- 26 Consultative Investigation into Low Income Medical Schemes. Final Report; 7 April 2006.
- 27 Lucas OM. Managed Healthcare Business Models for Hospital Organizations. Milliman and Robertson Research Report; 1997.
- 28 Ranchod S, McLeod H. Chronic Medicine Benefits in Medical Schemes. Cape Town: Centre for Actuarial Research; December 2001.
- 29 Jammy PR. The Council for Medical Schemes Appeal Committee. In the matter between: Genesis Medical Scheme Appellant and Registrar of Medical Schemes Respondent; December 2006.
- 30 Du Preez L. Scheme should offer more cover, says Masobe. Personal Finance; 17 February 2007.  
URL: <http://www.persfin.co.za/index.php?fSectionId=707&fArticleId=3687219>
- 31 Council for Medical Schemes. Circular 8 of 2006: Consultation on a Revised Benefit Design Structure for Medical Schemes; 2006.
- 32 Mediscor. Mediscor Medicines Review 2002; 2003.  
URL: <http://www.mediscor.net/>
- 33 Mediscor. Mediscor Medicines Review 2003; 2004.  
URL: <http://www.mediscor.net/>
- 34 Mediscor. Mediscor Medicines Review 2004; 2005.  
URL: <http://www.mediscor.net/>
- 35 Draft Medical Schemes Amendment Bill, 2007. Government Gazette; November 2006.
- 36 Comments by the Risk Equalisation Technical Advisory Panel on Draft Medical Schemes Amendment Bill 2007, Submitted to the Director-General: Health; 26 February 2007.

- 37 Du Preez L. Registrar wants curator to sort out Pro Sano board. Personal Finance; 14 October 2006.  
URL: <http://www.persfin.co.za/index.php?fSectionId=707&fSetId=344&fArticleId=3486485>
- 38 Rose R. Registrar rejects Discovery plan to fix solvency. Business Day; 27 June 2007.
- 39 Doonan M. The Economics of Prescription Drug Pricing: Background Paper; 28 March 2001.  
URL: [http://sihp.brandeis.edu/pub\\_details\\_410.html](http://sihp.brandeis.edu/pub_details_410.html)
- 40 Mediscor. Mediscor Medicines Review 2005; 2006.  
URL: <http://www.mediscor.net/>
- 41 Discovery, Unaudited interim results for the ix months ended 31 December 2006; 12 February 2007.
- 42 Fisher-French M. Doctors vs. Discovery, Mail and Guardian; 3 July 2007.
- 43 Department of Health. Inquiry Into the Various Social Security Aspects of the South African Health System. Policy Options for the Future; 14 May 2002.  
URL: <http://www.doh.gov.za/docs/reports/2002/inquiry/index.html>
- 44 Council for Medical Schemes. Regulating in the Public Interest: Taking stock and looking to the future. A Five-Year Review of the Council for Medical Schemes; 2005.  
URL: [http://www.medicalschemes.com/Publications/ZipPublications/Presentations%20And%20Reports/CMS\\_Five\\_Year\\_Review\\_Document.pdf](http://www.medicalschemes.com/Publications/ZipPublications/Presentations%20And%20Reports/CMS_Five_Year_Review_Document.pdf)
- 45 Department of Health. Opening Address to the Consultative Forum on Risk Equalisation by Dr Ayanda Ntsaluba, Director-General, Department of Health. Midrand; 10 July 2003.
- 46 Broomberg J, Shisana O. Restructuring the National Health System for Universal Primary Health Care, Report of the Committee of Inquiry into a National Health Insurance System, Executive Summary; June 1995.
- 47 Department of Health, Draft Policy Document, Policy proposals concerning the financing of the private health industry in South Africa; 28 April 1997.
- 48 Armstrong J, Deeble J, Dror DM, Rice N, Thiede M, Van de Ven WPM. The International Review Panel Report to the South African Risk Equalization Fund Task Group; 16 February 2004.