



COUNCIL FOR MEDICAL SCHEMES

Research Brief

Number 1 of 2008

Prepared by the
Office of the Registrar
of Medical Schemes

Evaluation of Medical Schemes' Cost Increases: Findings and Recommendations

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Foreword

Medical schemes represent one of the most important vehicles for achieving access to private healthcare in South Africa. The risk pooling achieved through medical schemes effectively spreads the risk of burdensome healthcare costs and ensures that individuals who could afford the average cost of the group (the medical scheme contribution) do not have to face the catastrophic point of service cost when they require maternity services, fall ill, or are severely injured. Without the risk pooling that occurs through a medical scheme it would prove virtually impossible for anyone but the very wealthy to access private specialist and hospital-based services.

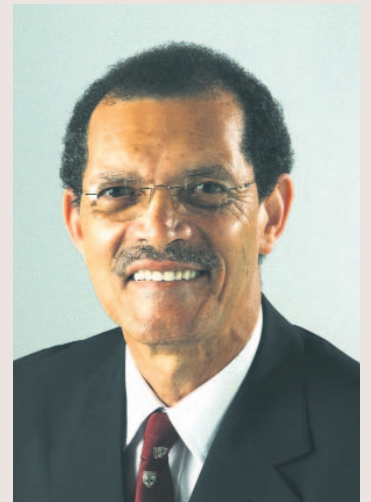
However, risk pooling, if not properly regulated, will result in systemic cost increases arising from the over-supply and over-pricing of medical goods and services. These cost tendencies are apparent in certain areas of the private health care industry in South Africa and as a consequence the benefits of risk pooling are being eroded. This is manifested by medical scheme contributions rising faster than incomes, driven predominantly by escalating healthcare costs.

Thus, whereas in the past medical scheme participation accounted for 20% of the population, it now only reaches 14%. This decline is a consequence of changes in the affordability of medical schemes. From a public policy perspective this outcome is of particular concern when consideration is given to the fact that the bulk of financial and human resources in the South African health system are concentrated in the private sector. Given the fact that total health care resources are limited, the extent to which the private sector inefficiently over-services a relatively wealthy group of individuals of necessity diminishes available resources for the rest of the population.

This report suggests that some of the health care cost increases which are seen in the private health sector are unsustainable and are unjustifiable in significant respects, in particular where they result from inefficient market behaviour and excessive profit-taking. These cost increases are not a consequence of demonstrable improvements in service quality. In this respect the South African private health system lacks transparency and oversight from a quality of care perspective.

Medical scheme cost increases are, however, not only a function of medical cost increases, as administration costs, managed care, and broker fees have played a significant role from 1994 onwards. These cost increases have been exacerbated by poor scheme governance arrangements, and this report suggests that the strengthening of medical scheme governance arrangements is key to addressing concerns of non-health cost escalation. This is a primary focus of the legislative framework intended to be tabled before Parliament in 2008. These reforms deal centrally with the establishment of proper arms-length relationships between third-party contractors to schemes and scheme office-bearers.

With respect to brokers, problems relate centrally to their role as member agents. The existing regulatory framework leaves many opportunities for conflicts of interest to exist between schemes, administrators and brokers. These conflicts affect the advice and support given to members, permitting schemes to operate without appropriate market pressure from consumers on costs or benefits.



Prof William Pick
Chairperson

Eliminating these distortions will require careful attention to the removal of conflicts, which of necessity must include how broker reimbursement occurs.

As the Council for Medical Schemes, charged with the responsibility for overseeing the entities through which most of the private health system is funded, we have an obligation to identify any short-comings in the health system and to make this information available to Government for the purposes of making future policy. The Minister of Health in 2007, noting the negative private health costs trends, requested proposals and inputs on how to address these trends. It is within the context of this request as well as the general mandate of the Council that this document has been produced.

The evaluation in this report suggests that many of the cost increases faced by medical schemes are systemic in nature and potentially manageable with the correct Government interventions. However, without these interventions costs will invariably increase in excess of incomes, with long-term impacts on access to healthcare for the country as a whole. It is therefore hoped that this report can play some part in providing direction to future Government policy and conduct in the private health system, and will also assist the general public to better understand the private health system and its future requirements.

Prof William Pick

Executive Summary

Overview

This research brief provides an evaluation by the Council for Medical Schemes of the factors contributing to rising real costs in medical schemes in South Africa. The necessity for this review derives from the important role medical schemes play in ensuring access to healthcare, a role which is being eroded through cost increases that have for some time exceeded income growth. As a consequence of these trends the affordability barrier with respect to private sector services has increased rather than diminished.

Beyond the specific role played by medical schemes in accessing healthcare there is also the underlying concern that the supply of healthcare goods and services within South Africa is constrained in the short- to medium-term. Private sector market distortions may therefore have a significant impact on the general population's access to healthcare, whether in the public or private sectors. This occurs where a disproportionate proportion of South Africa's limited healthcare resources are attracted into a market where access is severely constrained.

This discussion document consequently evaluates all the main medical scheme expenses with a view to isolating the systemic cost drivers. Based on the findings in each area, recommendations are made on the strategic approaches necessary to address the relevant causes.

Breakdown of costs

The most important contributors to medical scheme costs are hospitals at 29.7% (excluding specialists and general practitioners), medicines at 18.3% and specialists at 18%. These three components account for 66% of the total medical scheme spend. Administration costs, although important, account for 9.6% of the total, with managed care (non-health) and broker fees a further 9%. Cost increases since 2000 have largely been confined to the healthcare cost portion of medical scheme expenses and focused on the big three areas, hospitals, medicines and specialists. Non-healthcare cost increases were significant during the 1990s, but flattened from 2001.

Private hospitals

Hospital cost increases represent the most important contributor to medical scheme cost increases over the past fifteen years. During this period, however, a noticeable break in the trend occurred from 1998. This coincided with the hospital market becoming technically concentrated in the major metropolitan areas (which make up approximately 50% of all medical scheme beneficiaries).

The trend break also coincides with a period in which hospital groups were compensated through tariff increases for the agreed removal of mark-ups on medicines. However, it now transpires, these mark-ups were not removed, but instead replaced with hidden rebates. In the early 2000s these rebates were



T Patrick Masobe
CEO and Registrar

extended to incorporate surgicals, medical devices, and other non-tariff items.

In constant 2006 prices, hospital-based expenditure has risen by around R6,9 billion from 2000 to 2006 (using the 2006 membership base). If this trend continues, the same group of members will pay a further R6,8 billion by 2010 for the same services after accounting for inflation. Thus, in 2010 the same group of people will have to pay an additional R13,7 billion relative to 2000, after accounting for inflation, for the same services.

When consideration is given to the reasons for these increases, no evidence can be found to support hospital industry suggestions that these have arisen as a consequence of: legitimate utilisation increases; HIV and AIDS; new technology; and/or nurse cost increases.

Part of the explanation for the cost increases lie in the very significant increases in hospital activities occurring over the past eight years. These trends run counter to international trends (based on the Organisation of Economic Co-operation and Development countries) where systematic declines in hospital-based activities have been experienced over the past twenty years. Hospital-based utilisation patterns in the South African private hospital sector are very unusual and suggest that local factors are driving them.

Also at variance with international experience are the ratios of high technology equipment to the population. For instance South Africa has more Magnetic Resonance Imaging Units and Computed Tomography Scanners per million population than *inter alia*, Canada, France, Germany, the Netherlands, Sweden and the United Kingdom. All these countries also have significantly older populations than the South African medical scheme population. This tendency toward over capitalisation can also be detected in the excessive number of private beds in relation to the population served.

It is a finding of this report that the over-capitalisation in the private hospital market relates directly to the predominance of non-price over price competition. Non-price competition in this market is characterised by the attempts to attract specialists, the primary drivers of hospital utilisation, to a hospital group using various inducements to support their practices, including the purchase of equipment. In any normally functioning market such inefficiency, resulting in higher costs to consumers, would trigger price competition. However, the increased levels of hospital concentration have blunted this as an option for the market, leaving non-price competition, with its cost inducing effects, to predominate.

It is the finding of this report therefore that cost increases in the private health system in South Africa derive from the changes in market concentration, which have increased the hospital groups' market power and materially altered their market conduct. Furthermore, given recent decisions by the Competition Tribunal it appears inevitable that the hospital market will concentrate even further, absorbing the remaining 10% of independent hospitals within the next few years. The existence of a *de facto* oligopoly market for hospital services implies that prices and costs will become increasingly distorted in the absence of regulation.

This increased market power influences both the demand and pricing of goods and services in the supply chain (e.g. surgicals, consumables and medical devices) and the prices and costs of hospital services paid by final consumers (e.g. medical scheme members, out-of-pocket users, and the Road Accident Fund). As

the hospital sector is able to avoid normal market pressures, its costs rise due to both the prevalence of super-normal profits and to endemic inefficiency. The latter is expressed through the supply of services in excess of need, over-capitalisation, and the needless over-pricing and over-utilisation of expensive medicines and consumables (from which rebates have been derived).

Non-hospital

This report finds that out-of-hospital costs, including medicines, are generally stable, with the exception of specialist costs. Specialist cost increases however appear systemic and relate to their market power, which is more prominent in certain disciplines. Although always prevalent, the systemic factors driving up specialist costs were exacerbated by regulatory interventions in 2004. Specialist cost increases are especially of concern in the case of pathologists, radiologists and anaesthetists.

The distortions introduced into the market for specialist services in 2004 were the elimination of a system whereby tariffs were negotiated centrally without eliminating the collusive opportunities for specialists. As a consequence medical schemes were unable to challenge concerted action by specialists by taking concerted action themselves.

Non-healthcare expenses

Administration and managed care

Non-health costs represent a residual cost risk for medical schemes. During the 1990s significant real increases occurred which came to a halt around the time of the introduction of the **Medical Schemes Act 131 of 1998** which took effect from 2000. The increases in the 1990s can be attributed to the switching of members from low-cost restricted schemes to high-cost open schemes. Once this shift stabilised, the costs levelled out.

Administration and managed-care costs show a degree of diversity across open schemes. Some are very high for their market share, while others appear relatively consistent. This report attributes this variation in large part to differences in governance arrangements rather than to any systemic tendency to over-charge. The central factor here is the degree to which the scheme is able to operate at an arms-length from its third-party administrator and related contractors.

Administration and managed-care costs will consequently be kept in check to the extent that there is competition between open schemes on contributions and benefits and where appropriate governance arrangements are in place. There is evidence that competition is increasing for now, reducing the opportunity for schemes to pass contribution costs onto employers and members without facing market risk. However, if the open-scheme's market becomes concentrated, this relationship will not hold in future. An important protection for future scheme diversity and tighter competition is the proposed risk equalisation fund, which will expose truly inefficient schemes, irrespective of their size, to greater competition.

Medical scheme brokers

The operation of medical scheme brokers in the market does raise systemic concerns. Although their direct costs are not a significant cost driver, the impact they have on scheme choice can dramatically affect how schemes compete, as well as the cost and quality of their benefits and administration services. The systemic concerns are generated through the conflicted relationships that exist between administrators, schemes and brokers.

On the whole, brokers do not at present see members as their clients, as the schemes pay the commissions. Administrators also try to supplement commissions as an inducement to brokers to favour their schemes. This weakens consumer awareness and market transparency concerning the imperfections of schemes with indirect price, cost and efficiency consequences throughout the value chain.

Recommendations

Private hospitals

Resolving private hospital systemic cost increases requires that attention be given to the following:

- Removing the market power imbalance in the determination of fee-for-service ("ffs") prices through the re-establishment of central bargaining;
- Removing all vertical relationships between hospital groups and their supply chain:
 - Pathology;
 - Radiology;
 - Pharmacy and pharmaceuticals;
 - Medical devices; and
 - Consumables and surgicals used in-hospital.
- Removing all conflicts of interest that occur through ownership links, shares, inducements of any form, with related services:
 - Specialists;
 - Emergency transport; and
 - General practitioners.

Reducing market concentration and private bed proliferation in the major metropolitan areas through:

- Greatly improving the hospital licensing system;
- Requiring a minimum level of diversity in hospital ownership through the licensing system;
- Requiring that a minimum level of hospital licenses be held by non-profit hospital groups;
- Granting licenses preferentially to hospitals that directly employ their specialists and general practitioners; and
- The application of strict population-based criteria required for the establishment and licensing of a new private hospital.

Non-hospital

Specialist market power occurs through collusive behaviour and relationships established with hospital groups.

This conduct is most problematic in relation to the setting of ffs prices and in the foreclosure of alternative contract modalities (e.g. selective contracts and risk sharing).

Given that collusive behaviour is difficult to police, it is recommended that the problem be eliminated by establishing a centralised bargaining framework with respect to ffs prices. This should apply to all prices set in the market paid for on a ffs basis.

Aside from this, all specialist relationships, whether direct or indirect (i.e. through a spouse or any other related party), with any element of the supply chain for their services should be expressly prohibited.

To the extent that any lack of clarity exists concerning private hospitals employing specialists, this should also be removed. The direct employment of hospital doctors is a well-established and ethical arrangement that does not result in problematic conflicts of interest. Establishing “staff-model” hospitals as competition for ffs hospitals will enhance price competition amongst service providers.

Non-health

Given the findings of this report, administration and managed-care costs require a focus on governance and scheme competition rather than direct fee control interventions. It is specifically recommended that arms-length relationships between third-party contractors and medical schemes be achieved through regulatory interventions.

The broker market requires re-regulation to eliminate existing conflicts of interest and to ensure that the essential relationship is between the member/employer and the broker/advisor. If these are introduced, consumers will be better advised on medical scheme products and market conduct. As the medical scheme market is currently quite competitive, this improved transparency, operating through the advice market, will greatly improve the conduct and efficiency of schemes.

Concluding Remarks

Any attempt to address medical scheme cost increases must adopt a holistic strategy, addressing each element with an appropriate measure. Although in almost all instances where a systemic problem is identified and regulations are identified, the measures need only focus on the distortions preventing the market from working.

The recommendations provided in this report consequently range from removing the imbalances caused by market concentration through transparent centralised negotiations, to improved governance and the removal of conflicts of interest. In certain instances the peculiarities of non-price competition will need to be moderated through more considered hospital licensing arrangements.

Any failure to address the central systemic cost factors on the supply-side of

the health system will lead to a continued deterioration in access to healthcare through medical schemes. The consequences will be significant for country, for while the industry will remain extremely profitable, it will do so at the cost of access to healthcare for all.

T Patrick Masobe

1 Introduction

The South African private health system is better endowed than the public health system both in terms of financial and of human resources. However, the private sector serves only 14% of the total population if participation in a medical scheme is used as the basis.

This, taken together with the fact that private healthcare costs increase significantly in real terms each year, means that careful attention has to be paid to whether private sector resource use is inefficient and whether the medium- to long-term interests of the country are at risk. Two particular concerns arise:

- That rising costs create an affordability barrier for low-income participation in medical scheme cover.
- That the expanding private health system disproportionately absorbs health resources in the country.

The effect of the above is to worsen inequity in the health system over time. Importantly, however, there is very little evidence to suggest that medical scheme members themselves benefit from the rising costs. Rather, the evidence suggests that the cost increases arise from market imperfections (inefficiency and higher costs) rather than from improvements in service quality and outcomes to medical scheme members.

Consequently, this report examines private health sector cost drivers, their importance, their causes and potential measures to address problems. An important aspect is the diversity of the cost drivers and of their market dynamics. The health sector is complex, with different factors driving specific elements of cost. This requires that each significant element needs to be isolated and addressed.

Importantly, however, the drivers of costs in the private health system can be identified with measures introduced to ensure that costs are fair in future. Without the introduction of these measures, however, it is a finding of this report that costs will continue to rise inappropriately.

2 Historical context

This section provides a high-level overview of the developments within the medical schemes environment related to cost trends.

Since the evolution of medical schemes within the South African context *fee-for-service* (“ffs”) tariffs have been predominantly negotiated on a centralised basis. The reasons for this are:

- Medical schemes have traditionally focused on the reimbursement of medical expenses incurred by a beneficiary. Given this, members/beneficiaries¹ choose their own medical service provider. In such circumstances the relationship between the scheme and the medical service provider is indirect and the tariff does not result from mutually-beneficial negotiations and arrangements.
- However, as a third-party payer (i.e. the medical scheme) will face an infinite liability if it does not establish “reimbursement prices”² which limit the level of reimbursements. These may not always be the same as the *prices* that are actually charged by service providers.
- In practice however *reimbursement prices* form the predominant income source for many service providers as many beneficiaries are unable to pay for health services reliably at point-of-service. Given this, reimbursement prices are typically subject to negotiation between medical schemes and affected service providers.
- The quid pro quo for reaching a settlement in such negotiations has often been that the *reimbursement price* either equals or closely approximates the *actual price* charged. If there were to be a significant divergence between the prices charged and the reimbursement price, the rationale for risk pooling would be diminished, particularly in relation to catastrophic health conditions.³
- Until 2004, the practice existed of setting reimbursement prices centrally, i.e. all service providers and medical schemes negotiated collectively. This was for a number of reasons:
 - Healthcare services require billing for numerous and varied consultation types, procedures, services, and other items. To prevent each service provider from having to charge a different price to each scheme, by patient, a degree of standardisation is expedient.
 - Service providers derive no individual advantage from offering an ffs price that differs from that of any other provider where medical scheme members face no point-of-service expenses. As a result, additional patients do not flow to service providers who drop their prices.
 - Where schemes do wish to diverge from a centrally-determined reimbursement price, they need only apply a co-payment. Also, where providers wish to diverge from a reimbursement price they can either *balance bill*⁴ a patient or negotiate an alternative arrangement directly with a scheme.

The centralised negotiations were however characterised by an unsurprising

1 In this report a “member” is the principal contributor to a scheme, while a “beneficiary” is any person, including the member, entitled to receive benefits.

2 The terms “prices” and “tariffs” are used interchangeably in this report.

3 These would be infrequent high-cost conditions for which a barrier to service access would occur if not risk pooled (i.e. insured) or publicly funded (which is another form of risk-pooling).

4 Balance-billing occurs where a medical service provider charges a price in excess of a scheme’s reimbursement price. This should be distinguished from a co-payment which applies where a scheme makes a member pay a portion of a reimbursement price.

degree of acrimony. (See DoH, 2002 – extract provided in **annexure B**). Ultimately a decision was made that the Representative Association of Medical Schemes (“RAMS”) would negotiate a set of statutory ffs tariffs which would be published in the Gazette each year. This arrangement persisted until 1994 when it was abolished in amendments to regulations of the then Medical Schemes Act.

As a direct consequence of this change RAMS shifted from negotiating an actual set of ffs prices to “negotiating” *reference prices*. Medical schemes were consequently expected to negotiate their own prices separately but could use the reference prices as a guide.

At the same time the body that is now known as the South African Medical Association (“SAMA”) began publishing a competing reference price schedule that applied to GPs and specialists. This tariff schedule resulted in fees that were higher than the RAMS reference prices. Doctors used the SAMA schedule as a basis for balance billing patients.

The Hospital Association of South Africa (“HASA”) applied for and received permission from the competition authorities at the time to set its own “reference price”. However, this schedule did not ultimately result in a difference with the RAMS schedule as the two associations *de-facto* negotiated common reference prices to which all parties adhered.

In 2004, the Competition Commission (“CC”) declared that the centralised reference tariff schedules produced variously by the Board of Health Funders (“BHF” – formerly RAMS), HASA and SAMA were a restricted practice as they were set in a collusive manner.

However, the decision by the CC created significant logistical and competition problems for the price-setting process:

- Medical schemes were theoretically required to negotiate general reimbursement prices with every single medical service provider. Assuming the logistical problem of negotiating the fees could be overcome, this would result in a situation where every doctor would be quoting different consultation fees and different procedure fees for every option in every scheme.
- Hospitals had consolidated into three major groups, which generated a negotiation imbalance with the far-less concentrated medical schemes and administrators. This placed the hospital groups in an oligopoly position which reduced price competition.

To mitigate the logistical problem, the Council for Medical Schemes (“CMS”) therefore established an interim reference tariff schedule, the National Health Reference Price List (“NHRPL”). The CMS was able to do this as it derived no commercial gain from establishing the tariff schedule and therefore fell outside the jurisdiction of the Competition Act.

The NHRPL was however only able to achieve a limited set of objectives. As a reference price schedule the values **were not determined by negotiation but, instead, by cost analysis**. In reality, however, medical service providers with market power deviated from the NHRPL without any market penalty. This occurred in two ways:

- The three major hospital groups negotiated directly with medical schemes and largely imposed their own tariffs and contracting conditions on schemes.
- Specialists began balance-billing up to and exceeding 300% of the NHRPL.

The specialists legitimised their substantially-increased billing with reference to the Health Professions Council of South Africa (“HPCSA”) decision to set an ethical tariff⁵ at 300% of NHRPL.

Medical schemes were forced to condone the balance-billing practices of the specialists as not to do so would leave many beneficiaries without adequate cover. In addition they needed to fund prescribed minimum benefits (“PMBs”) fully as required by the Medical Schemes Act.⁶

In a 100% sample of specialist billing provided to the Council for Medical Schemes by small medical schemes for the first six months of 2006, not a single specialist billed less than NHRPL + 250% of NHRPL. (See **figure 5.3**).

In discussions with other schemes it appears that although the practice of specialists charging in excess of NHRPL is now widespread, not all schemes are in the same position as the one in the example above. In some cases the charging patterns have actually resulted from schemes accommodating the excess billing in their benefits. Consequently, they have inadvertently encouraged and become complicit in the charging patterns by insuring the balance-billed amounts up to the level of the HPCSA ceiling.

As a result of these practices, hospital costs have continued to rise sharply, with specialist and GP costs rising dramatically for the first time since the introduction of the Medical Schemes Act (which largely took effect from 2000). (See **section 4**).

Overall, the intended effect of the NHRPL was muted by the alternative guidelines published by the HPCSA. Government furthermore failed to respond effectively and timeously to the HPCSA interventions. (See **section 5** for the out-of-hospital cost trend resulting from the CC decision of 2004).

- 5 The HPCSA is able to specify an ethical tariff the purpose of which is to protect patients by providing them with recourse if over-charged. However, this clearly only works if the ethical tariff is reasonable.
- 6 The Office has now received frequent indications of abusive charging in relation to PMBs.

Box 2.1: Distinction between a “General Tariff” and a “Negotiated Price”

Medical schemes in South Africa have two types of price/tariff they can establish.

- **The first** is a “*general tariff*” which reflects the set price for medical service provider services paid on a fee-for-service basis. These prices/tariffs apply uniformly to all medical service providers where no preferred-provider arrangement is in place. In essence the member/beneficiary (not the scheme) chooses the medical service provider.
- **The second** is the “*negotiated fee*” which occurs where a scheme negotiates an alternative to the general tariff in exchange for some direction of medical scheme beneficiaries.

Most arrangements take the form of a “general tariff” irre-

spective of whether the NHRPL or a scheme-specific tariff is applied. Negotiated fees represent a trivial component of overall claims turnover at around R2.2 billion in 2006 or 4.5% of gross claims. (Audited Annual Financial Statements of Medical Schemes for 2006 as submitted to the Council for Medical Schemes).

Price competition, the theoretical objective of the CC intervention in 2004, only occurs with the negotiated fee which combines both *price* and “*volume*” (i.e. the direction of patients to the provider). The direction of care permits the medical service providers to discount fees as their income is guaranteed. Thus, **95.5% of medical service provision in relation to medical scheme members involves no competition in the setting of prices.**

3 Breakdown of medical scheme costs

This section reviews the elements of costs incurred by medical schemes. The purpose is to identify those elements that require particular attention in relation to cost containment.

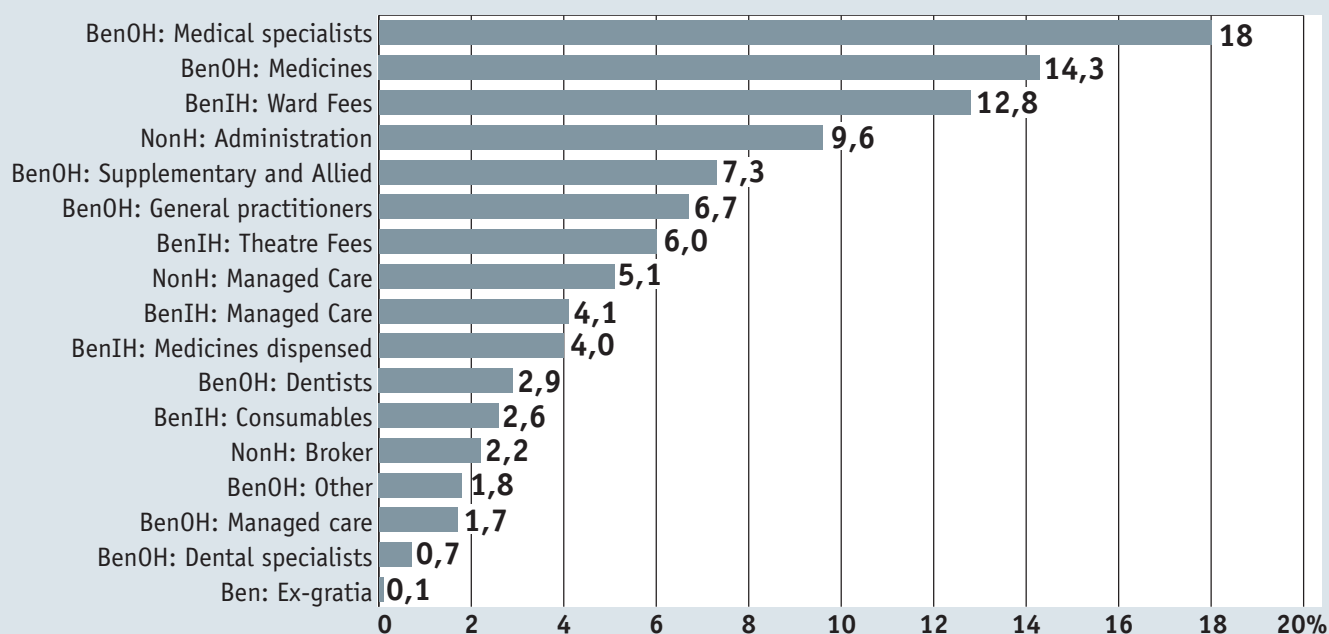
Hospital expenses, at 29.7% of total expenditure (in 2006), form the largest single aggregate cost item for medical schemes.

If the cost areas affecting medical schemes are disaggregated, with hospital costs broken down according to ward fees, theatre, etc. *specialist costs* emerge as the most important single cost item at 18% of total. (Figure 3.1).

Medicines, hospital ward fees, and administration costs emerge as the next three principal cost items at 14.3%, 12.8% and 9.6% respectively. (Figure 3.1). Medicines dispensed in-hospital however account for only 4.1% of total expenditure.

Non-hospital benefits constitute 53.6% of total expenditure. However, this figure is distorted as it does not differentiate between specialist costs incurred on an in- and out-of-hospital basis. (Figure 3.2).

Figure 3.1: Breakdown of medical scheme costs (percentage of total) for 2006

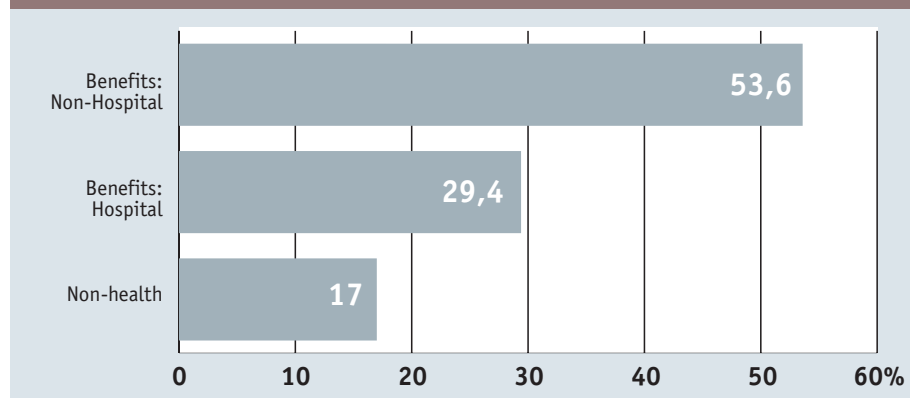


Note: "BenOH" refers to "out-of-hospital benefits". "BenIH" refers to "in-hospital benefits". "NonH" refers to "non-health costs"

Managed-care expenses reported to the Council distinguish between health and non-health components. The health expenditure portion reflects alternative reimbursement arrangements that are regarded as a claims expense by the scheme. This is further divided between in- and out-of-hospital components.

In-hospital managed care constitutes only 4.1% of total expenditure. This

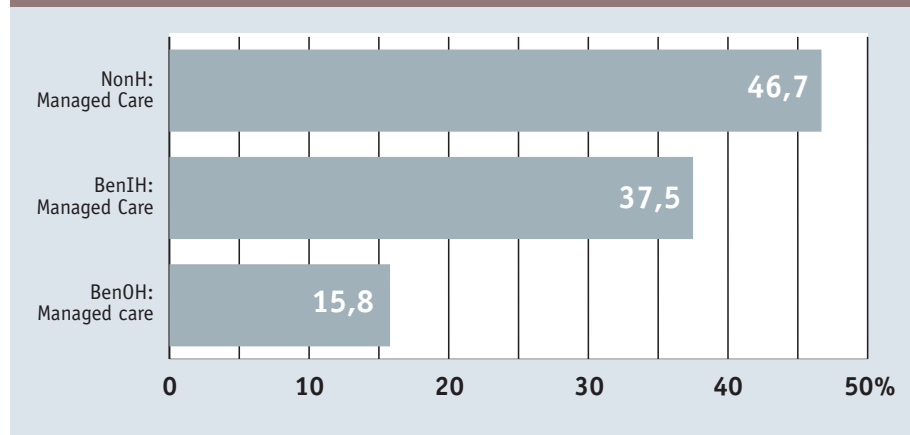
Figure 3.2: Breakdown of medical scheme costs by aggregate item (percentage of total) for 2006



indicates that hospital reimbursement remains predominantly ffs in nature. The same applies to out-of-hospital arrangements which constitute a mere 1.7% of total expenditure. In total, therefore, alternative reimbursement constitutes only 5.8% of total expenditure with the rest in ffs.

“Management” arrangements account for 46.7% of total managed-care expenditure (or 5.1% of overall medical scheme expenditure). Such interventions offer minimal opportunities for addressing systemic medical cost increases. To date, however, these services have been given greatest priority by schemes. This is most likely because they are the simplest to implement.

Figure 3.3: Sectoral managed-care expenditure as a percentage of total managed-care expenditure for 2006



4 Hospital costs

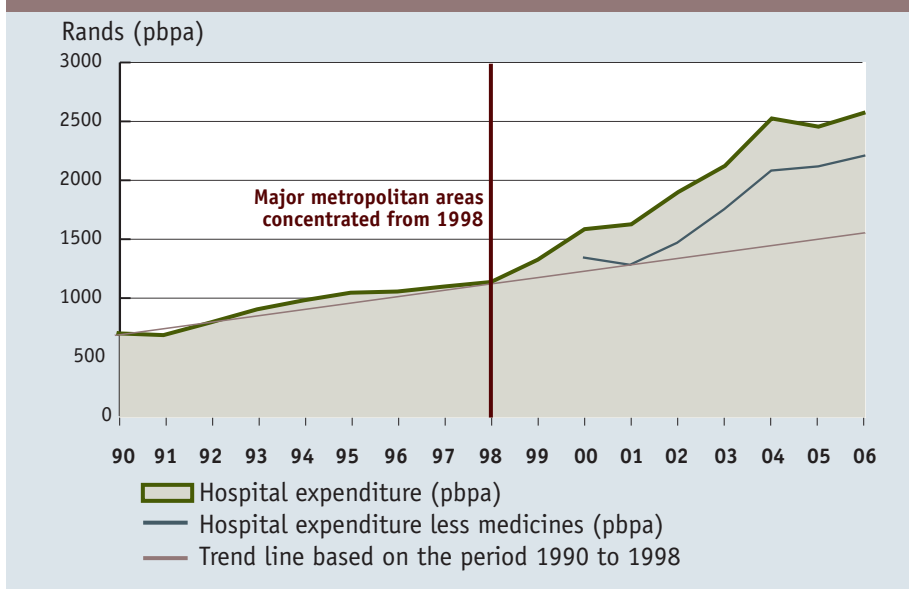
From 2000 to 2006, hospital costs *per average beneficiary per month* ("pabpm") have increased in real terms at an average annual rate of 8.3%. This growth represents a significant trend change when compared to the period from 1990 to 1998. (Figure 4.1).

Using a common base number of beneficiaries (based on the average for 2006) what used to cost R11 billion in 2000 rose to R18 billion by 2006 in constant 2006 prices. Private hospital expenditure has risen by R6,9 billion in real terms over the period.

If this trend is projected forward, private hospital expenditure by medical schemes will rise in real terms by a further R6,8 billion in constant 2006 prices by 2010 (for the same number of beneficiaries) and equate to R25 billion.

Had the cost trend applicable to the period 1990 to 1998 persisted, total medical scheme expenditure on hospital care would have been R10,5 billion in 2006. This is R7,5 billion less than actually occurred. Interestingly, this figure was in fact surpassed by 2000, which shows how dramatic the cost escalations were in the period 1999 and 2000. (Table 4.1).

Figure 4.1: Hospital cost trend from 1990 to 2006 (2006 prices)



The Hospital Association of South Africa ("HASA") offered the following explanations for these cost increases in its annual publications of 2005 and 2006 (HASA, 2005 and 2006):

- Utilisation changes rather than price increases are the central cause.
- Price increases are regarded as reasonable given the cost pressures hospitals are under. Nurse costs are singled out for special attention.

Table 4.1: Hospital expenditure in 2000, 2006 and projected to 2010 (R' million) (2006 prices) (based on 6,981,724 beneficiaries)

YEAR	EXPENDITURE	CHANGE
2000	11,128	
2006	17,988	6,859
2010	24,774	6,787
2000 to 2010		13,646
2006 expenditure based on trend from 1990 to 1998		10,473
Beneficiaries	6,981,724	

- Utilisation changes, although acknowledged as substantial, are regarded as outside the control of hospital management and are, instead, caused by:
 - Morbidity changes due to the aging of medical scheme beneficiaries and HIV/ AIDS; and
 - Changes in technology.

However, the reasons cited above do not provide an adequate explanation of the trend:

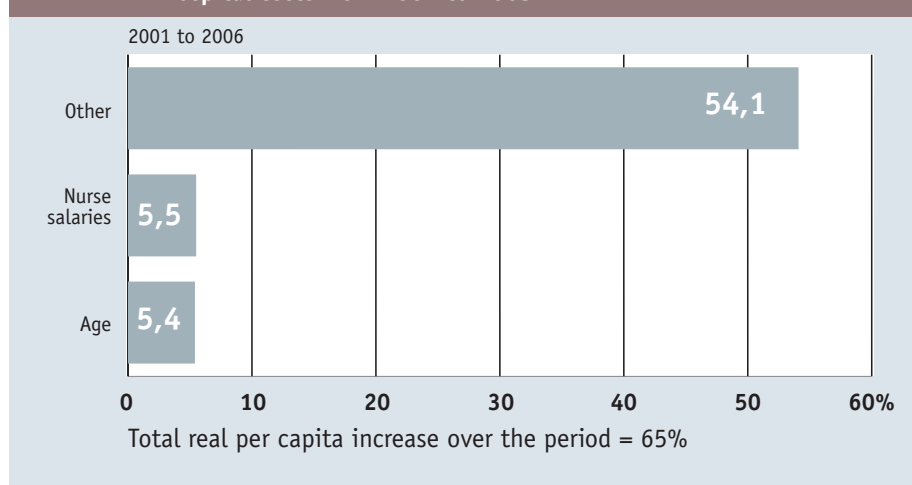
- There has been a real per capita cost increase⁷ over the period 2000 to 2006 of 65%, of which nurse cost increases at best can explain only around 5.5% and aging 5.4%.⁸ This leaves 54.1% of the increase unaccounted for. (Figure 4.2). (Also see annexure A for the evaluation of medical scheme aging used).
- The prevalence of HIV and AIDS is low in medical schemes with those undergoing treatment at less than 1% of beneficiaries⁹. Furthermore most are likely to be managed on an out-of-hospital basis with antiretroviral medicines. (Van den Heever, 2007).
- Technology change over the period cannot explain increased admissions in South Africa and neither are the admission rates representative of international trends. If this were the case, similar trends in hospital inpatient utilisation

7 This excludes medicine costs which have been affected by the introduction of the SEP. When included the increase stands at 62%.

8 This estimate makes use of real nurse cost increases provided by Medi-Clinic to the Competition Tribunal hearings dealing with the Phodclinics merger with the Protector group of hospitals concluded in 2006. It should however be noted that no actual information on nurse salary increases or on private hospital nurse staff establishments have ever been provided by any hospital group to verify their claims on the impact of nurse costs.

9 This is based on the Risk Equalisation Fund data submitted by schemes to the Council.

Figure 4.2: Evaluation of nurses' salaries and age-related cost-drivers of private hospital costs from 2002 to 2005

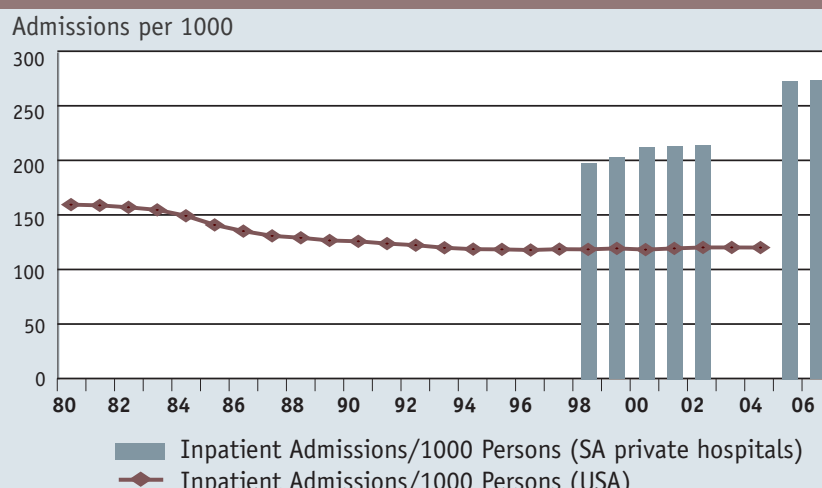


tion would be seen elsewhere in the world, particularly within industrialised countries.

- Whereas private sector inpatient utilisation has been increasing systematically in the South African private sector, the opposite trend is evident in most industrialised countries. Anderson G *et al* note in *Health Affairs* (2001, p.223) that there “... has been a consistent trend toward fewer inpatient days per capita in almost every OECD country since 1980 ...”.
- **Figure 4.3** shows that while admission rates in the United States have been declining since 1980, in the South African private hospital system they are both high and increasing.
- This unusual utilisation trend is also noted explicitly by the South African hospital industry:
 - “The private hospital sector strongly believes that utilisation, in the form of both increased volume and increased acuity or length of stay, has had a material impact on the increases in total hospital expenditure per member per month experienced by medical schemes.” (HASA, 2008, p.12)
 - “Medi-Clinic’s 2007 annual financial report: “On a comparable basis, the revenue growth of 11% was achieved through a 5% increase in in-patient bed-days, a 5% increase in the average income per bed-day and a 1% change in the case profile of patients treated. ... The increase in utilisation was evident in both surgical and medical cases. The number of patients admitted to our hospitals increased by 5% while the average length of stay remained fairly stable.” (HASA, 2008, p.12)
 - “Netcare’s 2007 annual results: Revenue from the South African hospital and trauma business increased by 12,7% to R7 782 million. The increase in revenue is organic and can largely be attributable to a 5,9% and 2,0% increase in total and inpatient admissions, respectively. As a result, patient days increased by 4,5% with the average length of stay increasing slightly to 3,32 days. Maternity patient day growth was 6,4%.” (HASA, 2008, p.12)
- HASA however suggests that similar utilisation trends occur in the United States – “Reporting in the USA points to a similar trend over a number of years ...”. (HASA, 2008, p.12). This statement is however contradicted by information supplied by the American Medical Association (see **figure 4.3**) which shows that while South African private sector admission rates are high and rising, in the United States they are low and declining.
- Length of stay data for the South African private hospital sector is however unusually low by comparison with industrialised countries. HASA (2008, p.12) however notes: “In reality, the actual length of stay in the private sector is approximately three days, which compares well with global benchmarks ...”.
- The peculiar lengths of stay levels actually do not compare well with the international benchmarks and, when seen together with the very high admission rates, suggests that patients of low acuity¹⁰ are being systematically admitted to hospital. While international trends demonstrate an increasingly efficient usage of hospital services, the South African private sector worryingly shows the exact opposite.

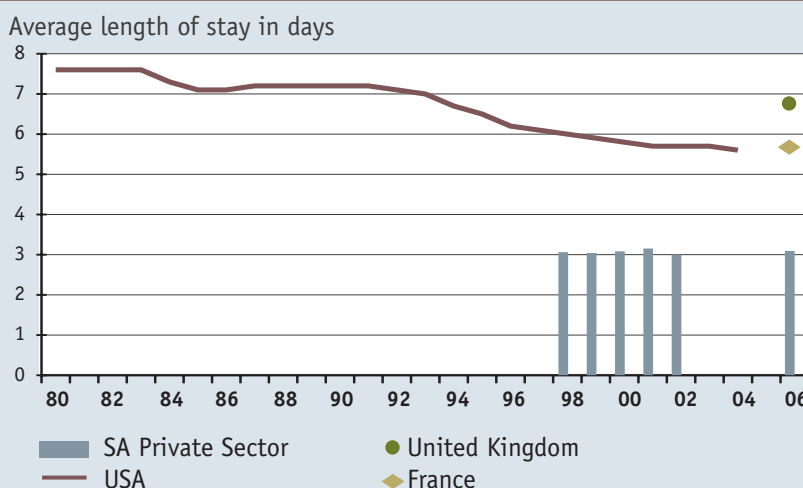
10 Low-acuity refers to patients who are not very ill.

Figure 4.3: Hospital in-patient admission rate trends, comparison of the United States with the South African private sector



Sources: American Hospital Association for the US trend. The South African trend for 1998 to 2002 to is based on a survey by Herc Hoffman. The figure for 2006 is based on HASA (2008, p.13)¹¹.

Figure 4.4: Hospital length of stay trend, comparison of the United States with the South African private sector



Sources: American Hospital Association for the US trend. The South African trend for 1998 to 2002 to is based on a survey by Herc Hoffman. The figures for 2006 are based on HASA (2008, p.13)¹².

- 11 The HASA report refers to an admission rate of 273 per 1,000 when the universal definition is applied to data provided to the Council for Medical Schemes. This figure is similar to a figure of 264 per 1,000 for 2007 provided by a Netcare executive at a presentation to the Institute of Health Risk Managers on 2 November 2007.
- 12 The HASA report refers to an admission rate of 273 per 1,000 when the universal definition is applied to data provided to the Council for Medical Schemes. This figure is similar to a figure of 264 per 1,000 for 2007 provided by a Netcare executive at a presentation to the Institute of Health Risk Managers on 2 November 2007.
- 13 Demand can either be “elastic” or “inelastic”. Elastic prices occur where a change in price results in a more than proportional switch in demand. Inelastic prices occur where a change in price results in a less than proportional change in demand. Elastic prices occur in markets with multiple competitors. Inelastic prices occur in markets where there are few competitors and where the products sold have a strong element of need associated with their purchase.

The actual causes of hospital cost increases, within the South African context, based both on available domestic information and on international perspectives, are invariably tied to market power imbalances, which arise both from the unique position of hospitals in the health system as well as the extreme levels of hospital market concentration (through corporate ownership of multiple hospitals).

Market power is defined in the Competition Act to mean: “the power of a firm to control prices, or to exclude competition or to behave to an appreciable extent independently of its competitors, customers or suppliers”.

Market power tends to be greater where the “demand” for the relevant good or service is “inelastic”.¹³ Where goods and services preserve life and limb and are purchased via a third-party payer (the medical scheme), demand will invariably

be inelastic. The hospital service is, furthermore, differentiated and multi-product in nature with products varying in elasticity. As a result profit-maximising hospitals will price discriminate, *less* will be charged (relative to costs) for more-elastic services and products, and *more* for less-elastic services. (See **box 4.1**).

However, products and services that are intrinsically more elastic in nature, such as surgicals, medical consumables, medical devices, pharmaceuticals, emergency medical services, and pathology services, will be rendered price inelastic if the hospital shares in the profit of these items and becomes a determinant of their price. (Such conduct in relation to surgicals and pharmaceuticals has become prevalent in South Africa and is discussed further below in relation to mark-ups and rebates.)

Hospital-based services also become price inelastic through the increase in market concentration of hospital groups (i.e. where a holding company acquires ownership of multiple hospitals).

A review of South African private hospitals reveals that market concentration has increased substantially over the past ten years, significantly increasing their market power in relation to funders and patients. This change in concentration will have caused the demand curve to become more inelastic, increasing prices and costs.

From 1996 to the 2006 the market share of the three main hospital groups¹⁴ grew from approximately 50% of all beds to 87.8%. The market share of independent hospitals outside the three main hospital groups stood at 16.2% of acute beds nationally and 12.3% of beds in the main metropolitan areas. Based on this ownership trend the major metropolitan areas became concentrated, based on the Herfindahl-Hirschman Index ("HHI") (see **box 4.2**), from 1999. The national market became concentrated from around 2002. (See **figures 4.5** and **4.6**).¹⁵

The period when the major metropolitan areas became concentrated coincides with a clear trend break in hospital cost increases. (See **figures 4.1** and **4.6**). This is most probably related to the change in market power resulting from the increased concentration.¹⁶

14 Network Healthcare Holdings (Pty) Ltd ("Netcare"), Medi-Clinic (Pty) Ltd ("Medi-Clinic"), and Life Healthcare (Pty) Ltd ("Life").

15 It should also be noted that when the day hospital system owned by Presmed merged with Afrox in 1999, day hospitals ceased to compete with normal acute-care hospitals.

16 It can be argued that this concentration was of little relevance at the time as hospital groups negotiated centrally with medical schemes via the RAMS and later the BHF. However, prior to becoming concentrated, hospital groups would have been individually more vulnerable and more inclined to be risk averse within a central price negotiation process. In particular they faced the risk that some hospitals, or hospital groups, would break ranks. Once the market became concentrated, however, the chances of any hospital group breaking ranks became remote.

Box 4.1: Profit Maximising Behaviour of Private Hospitals

"Hospitals are assumed to have a downward sloping demand curve; each hospital has a somewhat differentiated product in that not all of its physicians have staff appointments at ... other hospitals, its mix of services may differ, as does its location and reputation. To maximise profits, the hospital would select that price on the demand curve where its marginal cost curve intersects the marginal revenue curve Further, since the hospital is a multi-product firm with different payers, it can increase profits by price discriminating according to the price elasticity of demand for each class of patient and type of service. (The ability of the hospital to practice price discrimination implies that the hospital has market power.) The hospital's room rate is more price elastic than is the

demand for ancillary services because, once in the hospital, the patient cannot substitute other providers' ancillary services. Thus the demand for ancillary services is believed to be less price elastic. To maximize its profits, the hospital will charge higher prices (relative to costs) for those services and that class of patients whose demands are less price elastic.

"The Profit-Maximizing model of hospital behaviour predicts that hospitals will increase their prices if demand either increases or becomes less price elastic, or if the prices of their inputs (i.e. the hospital's marginal cost curve) increase."

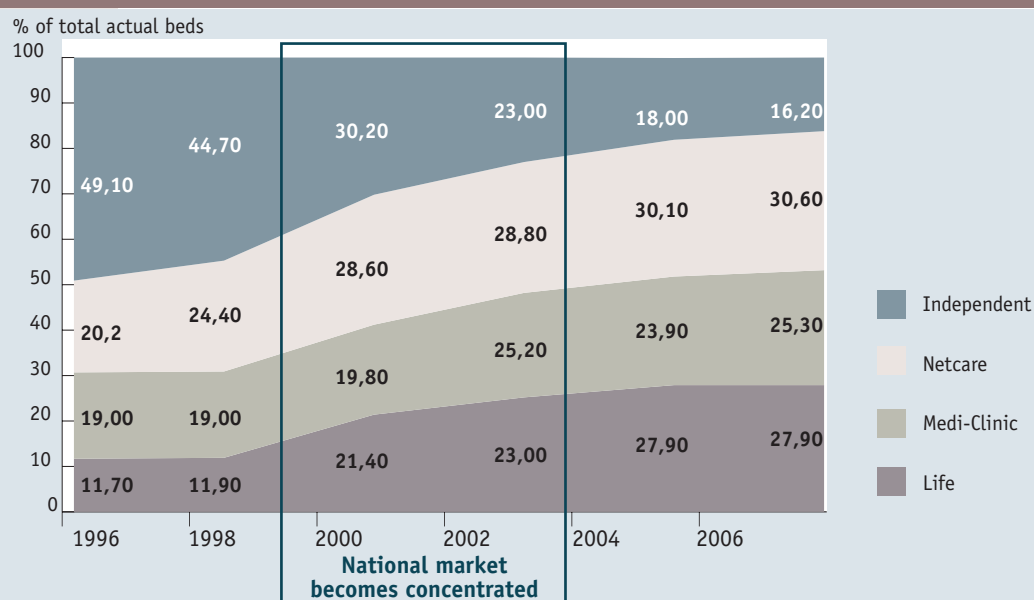
Feldstein, 2005, p.274.

- 17 The current (2006) administrator HHI is likely to be higher but not significantly different to the actual concentration in 1998/9.
- 18 Note that the CHG hospital group was incorrectly accounted for as an independent hospital group. It should have been included as part of the Netcare group.

The market concentration of medical schemes, according to the HHI, is very low and on the HHI stands at 1,005 in 2006. If it is assumed that administrators negotiate on behalf of schemes, the HHI increases to 1,489, which is however still well below the level regarded as concentrated (i.e. 1,800). By contrast the national hospital market is concentrated at 2,307. Large metropolitan areas, with high population concentrations, demonstrate higher hospital concentrations than the national average (Johannesburg: 3,476; Durban: 4,372; Cape Town 2,718). (See [figure 4.6](#)).

Prior to 1998 the national hospital market was in fact below the current administrator HHI.¹⁷ In 1999 it became level with the administrator market (using 2006 as a proxy for administrator concentration in 1999) and thereafter exceeded it. However, the hospital market concentration of the major metropol-

Figure 4.5: Hospital national concentration trend in acute beds from 1996 to 2006



Source: Van den Heever, 2007.¹⁸

Box 4.2: Herfindahl-Hirschman Index (HHI)

“Within a geographic area, researchers have classified the market as being more or less competitive based on the number of hospitals in that area; others have used the Herfindahl-Hirschman Index (HHI), which is the measure of concentration used by the Department of Justice in its merger guidelines. The advantage of this index is that it is sensitive to both the number of firms and to their relative sizes (e.g. percent of total admissions). Thus for the same number of firms in the market, the index will indicate greater market concentration if a few firms have a high market share than if all the firms had the same share. A merger between large firms will result in a much greater

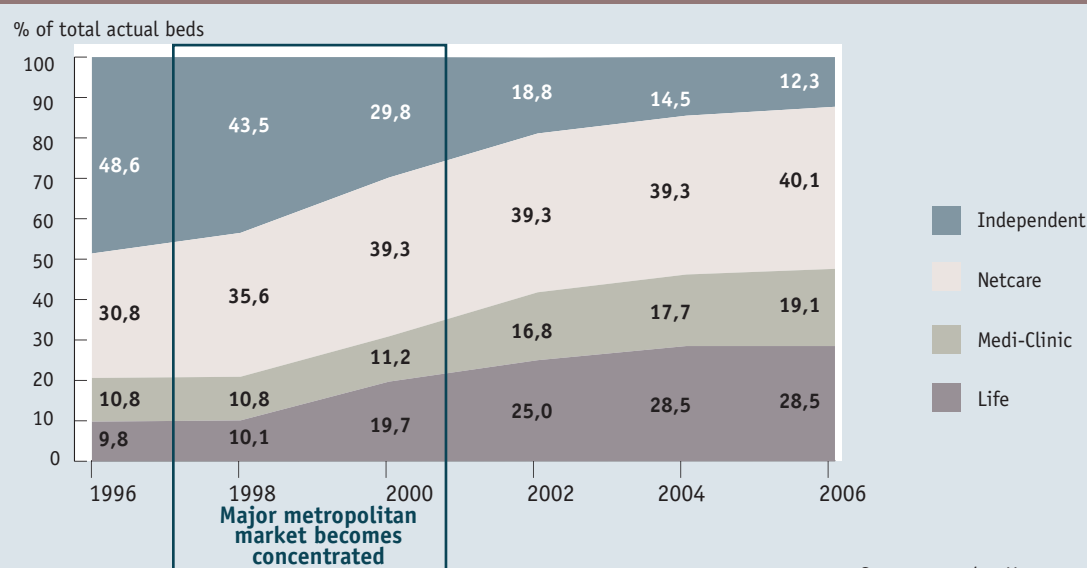
increase in the index than if two small firms merged.” (Feldstein, 2005, p.264).

“Estimating whether a merger may be anti-competitive involves calculating the market share’s HHI index of each of the competitors (within the relevant product and geographic markets) both before and after the proposed merger. If the new HHI exceeds 1,800 under the proposed merger, then the merger is likely to trigger an anti-trust investigation. The HHI, however, is not sufficient by itself to determine the competitiveness of that market, how hospitals compete, and whether competition will be decreased as a result of the merger.” (Feldstein, 2005, p.264).

itan areas exceeded administrator concentration from 1998. Hospital group concentration in key areas such as Johannesburg were level with administrator concentration in 1996, but dramatically exceeded it from 1997 onward.

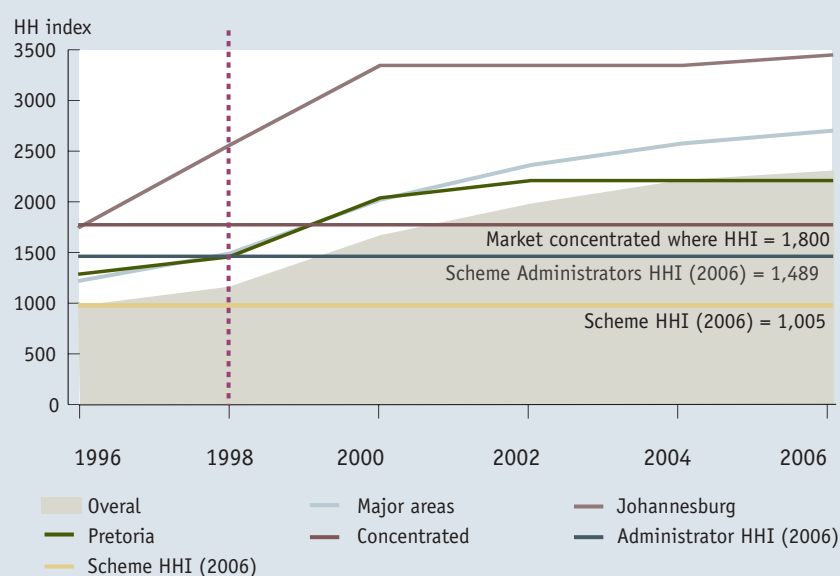
These factors show that the balance in market power between schemes and the hospital market altered materially after 1998. This permitted hospitals to operate independently of medical schemes (purchasers of healthcare) and suppliers of goods and services to hospitals. With respect to suppliers, the rebate arrangements, discussed below, are indicative of this market power, as are the extensive relationships developed in respect of pharmaceuticals, medical devices, medical consumables, emergency transport, pathology, and radiology practices.

Figure 4.6: Hospital concentration trend in acute beds in the four major metropolitan areas¹⁹ from 1996 to 2006



Source: van den Heever, 2007.

Figure 4.7: Hospital concentration trend in acute beds as measured by the HHI from 1996 to 2006



¹⁹ The four major metropolitan areas roughly constitute 50% of all medical scheme beneficiaries.

Market concentration becomes a cost driver by removing competitors from the market. As costs rise with hospital market concentration, medical schemes become less able to make use of alternative service suppliers and are always forced to make use of the available hospital groups and to accept their terms. The *de facto* terms include²⁰:

- Remaining predominantly in ffs or “near-ffs” arrangements;
- Accepting general and relative price increases demanded by the hospital groups²¹;
- Remaining vulnerable to systemic utilisation increases caused by specialist behaviour incentivised by:
 - Fee-for-service reimbursement; and
 - Inducements to over-supply services provided by hospital groups (shares, free rooms, equipment purchases, etc.).

The shift to alternative contracting arrangements that would have been expected from a normally-functioning market remains stunted. As noted above, only 4.1% of total medical scheme expenditure involves some form of alternative reimbursement with hospitals. When even these arrangements are examined more closely they are often prejudicial to schemes (as they incorporate terms biased toward the hospital group) with no material risk shifted onto hospital groups.²²

Although the hospital groups technically do compete, they do so only for specialists. They however do not compete on *price*, *cost*, or *efficiency*. As specialists drive the demand for hospital-based services, hospital groups go to great lengths to support their professional and financial needs. This includes purchasing equipment and providing free or subsidised rentals for practices. (See **box 4.3** for an indication of the equivalent experience in the United States).

Non-price competition consequently drives up hospital service supply in excess of *need* which is built into the cost passed on to medical schemes. Evidence of this can be found in the general over-supply of acute beds and expensive hospital-based medical technology in the private health sector. More specifically, however, the oversupply in large metropolitan areas can be contrasted with the relative under-supply of acute beds in the very concentrated small catchment areas.

20 These conclusions are based on the reports provided by the Office in various sub-missions made to the competition authorities from 2004 to 2007. CMS (2005, 2006a and b) and van den Heever (2006a –c, 2007)

21 Schemes are made to accept cost increases as they face severe commercial consequences if their membership becomes subject to balance billing. Schemes are quite easily be played off against each other as any scheme which permits balance billing (i.e. they refuse to accept a hospital groups proposed tariff increases) will lose members to the scheme that gives in.

22 Contracts with some genuine risk and price concessions are only permitted by the main hospital groups where they involve ring-fenced low-income groups. This is a form of price discrimination which can only arise where the party segmenting the market has significant market power.

Box 4.2: Investment analyst views on the South African Hospital Industry

“The [private hospital] industry remains highly cash generative, with the only risk we can identify being regulation. Aside from regulation, or acquisitions, Medi-Clinic’s cash generating ability remains fairly predictable.” (UBS, 2005, p.28).

“Private hospitals have pricing power, owing to their dominant market position.” (UBS, 2005, p.25).

“Netcare effectively owns 50% of Ampath, Medi-Clinic owns an effective 38% in Pathcare and Afrox [Life] owns a stake in Lancet. Private hospital groups have been able to extend their dominance into the related fields of pathologists and radiologists through the extraction of

management fees. Although a direct holding is against the law, as the HPCSA (Health Professions Council of South Africa) has restrictions in terms of sharing fees, hospitals have by-passed legislation through the extraction of management fees. Through its association with the hospitals, the pathologist practice (associated with the hospital) has also consolidated, as private hospitals have been able to restrict new entrants, and competition. Pricing power has shifted from the medical aid to the pathologist, owing to the private hospitals’ dominant market position.” (UBS, 2005, p.19).

The estimated bed need for the medical scheme population is around 16,817, based on projected bed days and an assumed 80% required hospital occupancy rate. There are however currently 25,048 (2004) private hospital acute beds serving the private sector. This results in an estimated occupancy of around 53.7%. Interestingly, the over-supply is concentrated in regional markets where the hospital groups compete. (CMS, 2005). (see **Figure 4.8** and **Table 4.2**).

In a price-competing market no such oversupply would survive. This therefore points to a market characterised by non-price competition.²³ In any market with this form of “competition” suppliers can expand supply without facing any market penalty.²⁴

Figure 4.8: Acute bed concentrations by ownership by private sector catchment population (2004 estimate)

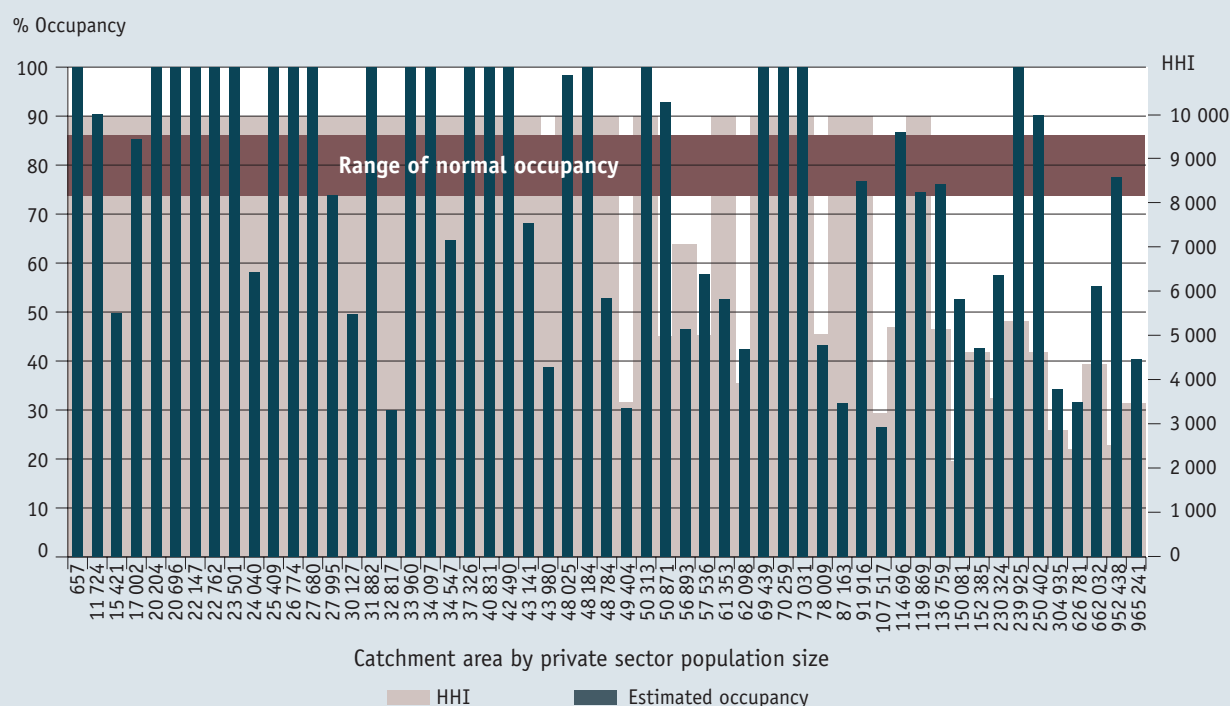


Table 4.2: Bed need versus supply for the private health sector (2004)

CATCHMENT AREA	ESTIMATED OCCUPANCY	ACTUAL	NEEDED: 80% OCCUPANCY	NEEDED: 100% OCCUPANCY
Cape Town	77.5%	2,462	2,386	1,909
Durban	55.3%	2,401	1,658	1,327
Johannesburg	40.3%	4,805	2,418	1,934
Port Elizabeth	42.5%	718	382	305
Pretoria	31.6%	3,977	1,570	1,256
Vereeniging	52.5%	573	376	301
South Africa	53.7%	25,048	16,817	13,454

Source: CMS, December 2005.

²³ It should be noted that in various Competition Tribunal applications the hospital groups have freely argued that their market is characterized by non-price competition.

²⁴ Oversupply can also be identified in the high concentrations of MRI and CT scanners found in South Africa. (CMS, February 2007).

Box 4.3: Price and Non-Price Competition in the United States

"Non-price competition manifested itself in several ways [within the United States]. Hospitals in more competitive markets (a greater number of hospitals) maintained more excess capacity than hospitals in less competitive (more concentrated) markets. Physicians were thus assured that by affiliating with a particular hospital their patients were likely to have a bed when one was needed. Greater amenities were thus provided to patients as well as to physicians (offices next to the hospital at below market rents). To increase the productivity of physicians on their medical staff, hospitals provided them with more support staff such as interns and residents and a higher proportion of registered nurses in their nursing units. Hospitals also purchased the latest in medical technology and added facilities and services. Physicians did not have to refer their patients (and possibly lose them) to other institutions. High-tech serv-

es also provided a means for the hospital to indicate to prospective patients that it was a high-quality institution.

"Non-price competition led to rapidly rising hospital costs. Using data from the period 1972 and 1982, Robinson and Luft found that in more competitive markets, hospital costs were higher, they offered more services, and average lengths of stay was longer. More competitive hospitals were also reluctant to engage in cost containment activities for fear of losing their physician referrals.

"The finding of higher costs in more competitive (less concentrated) markets was contrary to the expectations of traditional economic theory, namely that in more competitive industries firms become more efficient. (What was lacking, however, were the incentives for hospitals to compete on price.)"

Feldstein, 2005, p.282

Aside from acute beds, evidence of the effects of non-price competition can be found in the over-supply of expensive equipment within the South African private health system such as Magnetic Resonance Imaging units ("MRIs") and Computed Tomography Scanners ("CT scanners").

Figures 4.9 and **4.10** show that in the South African private health market there are more MRIs and CT scanners per million people than *inter alia*: Canada, France, Germany, the Netherlands, Sweden, and the United Kingdom. It has more CT scanners than even Switzerland. Per capita the South African private sector has more MRIs than 18 OECD countries, with only ten having more. For CT scanners there are 21 OECD countries with fewer than South Africa and only 8 with more.

Countries such as France²⁵ and the United Kingdom can reasonably be regarded as benchmarks for appropriate distributions of high-technology diagnostic equipment. Compared to both these countries South Africa's private sector is an outlier.

MRIs and CT scanners are both hospital-based. The existence of significant over-capacity is indicative of a market functioning exclusively according to "non-price competition" where inefficiency, over-pricing and over-servicing is not penalised by the market.

Although market power clearly sustains a higher cost due to a lack of appropriate competition, an important contributing factor to the increases from 1998 has been the existence of hidden arrangements between hospital groups and suppliers of pharmaceuticals, surgicals, and medical devices.

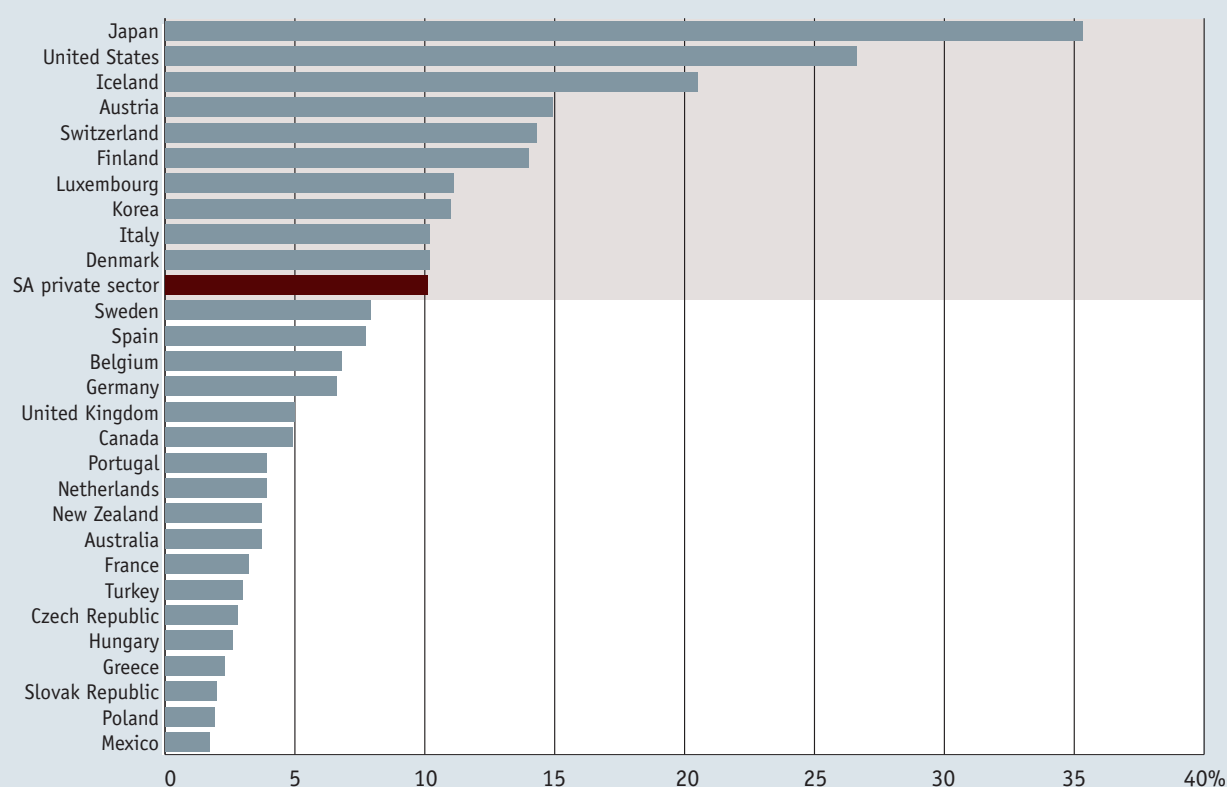
These originally (prior to 1998) took the form of mark-ups.²⁶ However, an agreement between medical schemes and hospital groups in 1998 proposed that all mark-ups be removed in exchange for increases to hospital tariffs. In essence the mark-ups were to be converted into tariffs. As a consequence, in 1999 significant tariff increases were awarded to private hospital groups as part of a joint agreement.

However, outside of the control and sight of schemes, mark-ups were con-

25 France has been assessed as having one of the best health systems of all countries by the World Health Organization. This is based on a comparison of health outcomes and cost.

26 There is a strong possibility that aspects of the rebate system, at least in respect of pharmaceuticals existed alongside the explicit mark-ups. This is based on discussions with market participants.

Figure 4.9: International comparison of MRI scanners, availability per 1 million people, as of 2004



Source: OECD Healthdata, all countries show the most recent known information. For most this is for 2004. South African data is accurate as from January 2004.

Figure 4.10: International comparison of CT scanners, availability per 1 million people, as of 2004

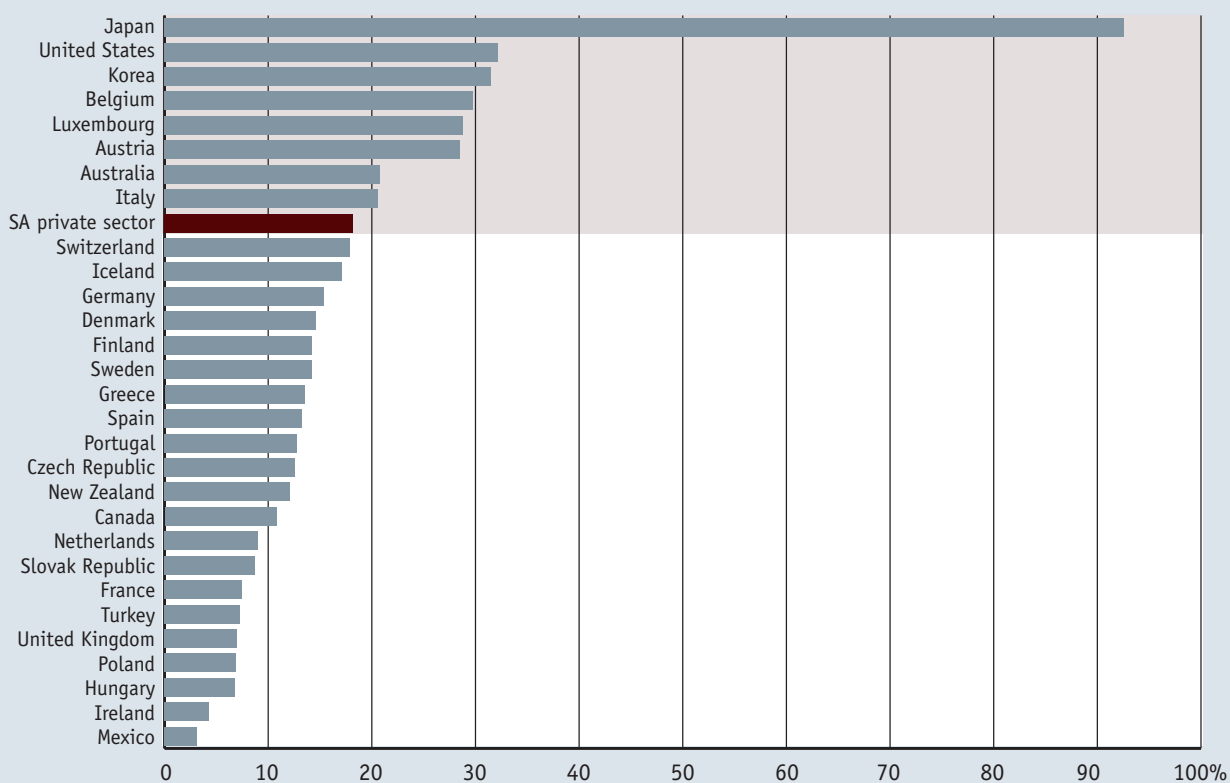
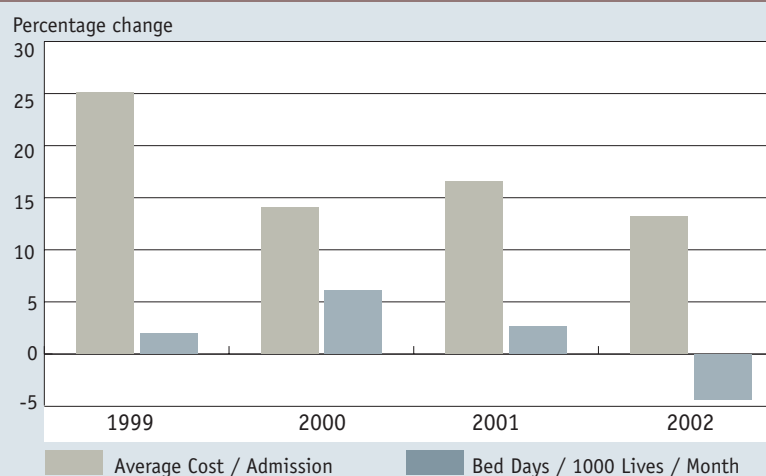


Figure 4.11: Percentage change in the average cost per admission (constant 2006 prices) compared to the change in bed days per 1,000 lives (period = 1999 – 2002)



Source: Based on data supplied by Hoffman H, and which derived from all the major medical scheme administrators over the relevant periods.²⁷

verted into hidden rebate arrangements with suppliers. As a consequence, from 1999 schemes paid both for the historical mark-ups (now in the form of hidden rebates) and for the increased hospital tariffs. The agreement was for medical schemes to pay only the *net acquisition price* (i.e. the manufacturer price) for pharmaceuticals. This contributes to an explanation of part of the trend break in hospital costs occurring from 1998.

Figure 4.11 shows the dramatic real change in the real cost per admission that occurred in 1999, reflecting the combined effect of the new tariffs and the retained mark-ups. Importantly, the number of bed-days did not increase by as much as costs, reflecting that the cost changes had little to do with utilisation.

In conclusion, therefore, cost increases in private hospitals in South Africa most probably derive from the changes in market concentration, which has increased the hospital groups' market power and materially altered their market conduct. Furthermore, given recent decisions by the Competition Tribunal it appears inevitable that the hospital market will concentrate even further, absorbing the remaining 10% of independent hospitals within the next few years. The existence of a *de facto* oligopoly market for hospital services implies that prices and costs will become increasingly distorted in the absence of regulation.

This increased market power expresses itself through its influence of pricing in the supply chain as well as in relation to medical schemes and other purchasers of hospital services (i.e. the Road Accident Fund, Commission for Occupational Injuries and Diseases, out-of-pocket users). As the hospital sector is able to avoid normal market pressures, its costs rise due both to the prevalence of super-normal profits and to endemic inefficiency. The latter is expressed through the supply of services in excess of need, over-capitalisation, and the needless over-pricing and over-utilisation of expensive medicines and consumables (from which rebates have been derived).

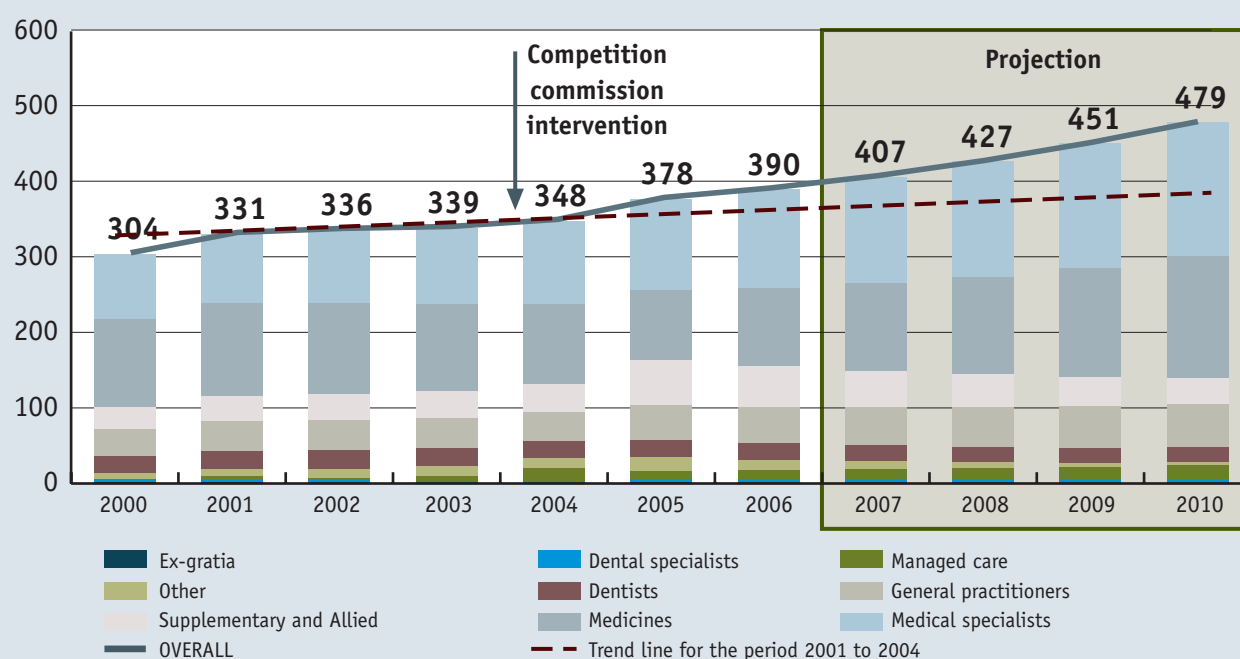
²⁷ This data also formed the basis for a presentation by Rajesh Patel at the annual conference of the Board of Health Funders in 2007.

5 Out-of-hospital costs

Out-of-hospital costs showed a high degree of stability from 2001 until 2004. From 2004 however a break in trend is evident with steep increases. (See [figures 5.1 and 5.2](#)). Specialists were the predominant contributor to the trend change, the largest out-of-hospital cost item.

The trend break coincides with the Competition Commission decision to prohibit centralised tariff negotiations between medical schemes and medical service providers.

Figure 5.1: Non-hospital cost trends from 2000 to 2006, with a projection to 2010, Rands per beneficiary per annum (Constant 2006 prices)



Source: Based on the Council for Medical Schemes annual reports.

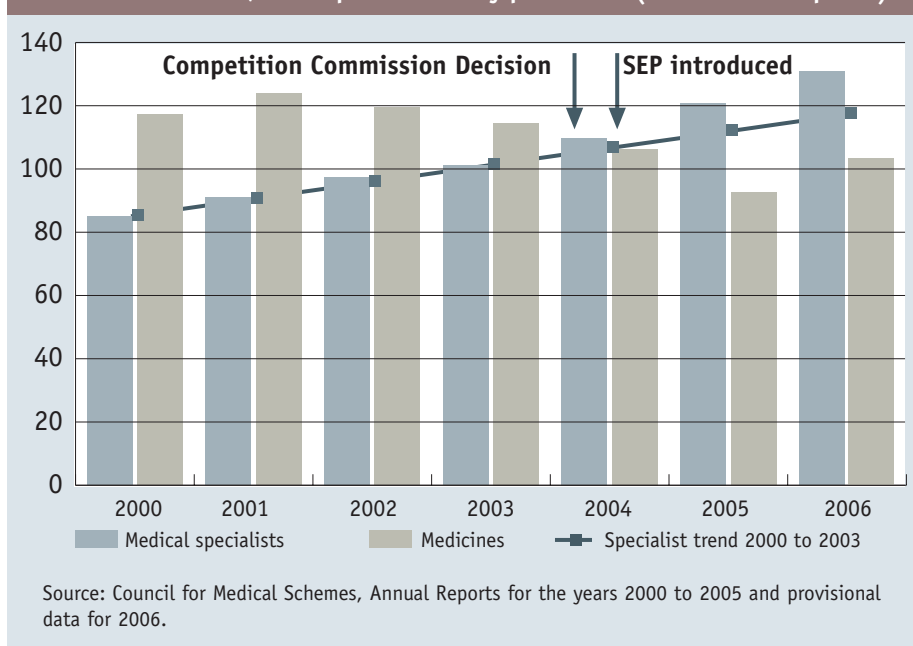
Specialists and medicines are the most important contributors to out-of-hospital costs. Both cost categories have grown significantly in real terms over time. However, the per capita cost of medicines has shown a downward trend from 2002, becoming steeper from 2005. The latter relates to the implementation of the Single Exit Price ("SEP") and the removal of certain perverse marketing practices (bonusing and discounting) used by pharmaceutical manufacturers to influence the dispensing behaviour of medical practitioners and the purchasing behaviour of hospital groups.

In contrast to medicines, specialist costs rose steadily from 2000, rising more steeply after the Competition Commission decision of 2004, demonstrating the

unintended consequences of this intervention. (See **figures 5.1** and **5.2**).²⁸

In real terms specialist costs, expressed on a per beneficiary per month (pbpm) basis, increased by 53.8% from 2000 to 2006. This change cannot be ascribed to population aging or changes in morbidity (See **annexure A**). In essence the expenditure on specialists in the private sector has risen by this amount with no explanation possible other than that specialists have been charging more.

Figure 5.2: Benefit cost trends for Medical Specialists and Medicines from 2000 to 2006, Rands per beneficiary per annum (Constant 2006 prices)



However, probably as a consequence of the pricing behaviour of specialists, in 2006 a substantial 19% real increase occurred in the per capita cost of balance-billed amounts for specialist services. This change amounted to an additional R309 million spent on specialists. Out-of-pocket expenditure through medical schemes amounted to R1.6 billion in 2006, suggestive of a significant and growing gap in coverage.

The trend break in specialist cost changes is confirmed at the individual specialist level with the per average beneficiary per annum (PABPA) real change prior to 2004 considerably lower than the trend thereafter. The year-on-year cost changes in fact more than double in value from 2004, as can be seen in **figure 5.3** and **table 5.2**. These changes can be detected both in 2005 and in 2006. This suggests that the trend break results from market imperfections.

The contribution to overall specialist cost changes is however disproportionately represented in three disciplines: Pathologists, Radiologists, and Anaesthetists account for 52.5% of the total specialist cost increase from 2004. Pathologists on their own account for 24.5% of the increase from 2004. Radiologists and Anaesthetists account for 16.3% and 12.1% of the increase respectively.

The strong relationship between hospital groups and radiology and pathology is likely to have been an important contributor to these disproportionate

28 The introduction of the Medicines and Related Substances Control Act (and the associated regulations relating to the single exit price), focused on removing conflicts of interest between doctors and pharmaceutical companies as well as establishing a transparent and partially administered price. The reform owes its success to date on the multi-dimensional nature of the intervention.

Table 5.1: Specialist costs including scheme co-payments (2005 and 2006) (2006 prices)

CATEGORY	2005	2006	CHANGE) (RANDS	% CHANGE
Risk Benefits Paid	108	118	10	9.1%
Savings Benefits Paid	13	13	0	0.9%
Member balance-billing	16	20	3	19.0%
Total specialist costs	138	151	13	9.6%

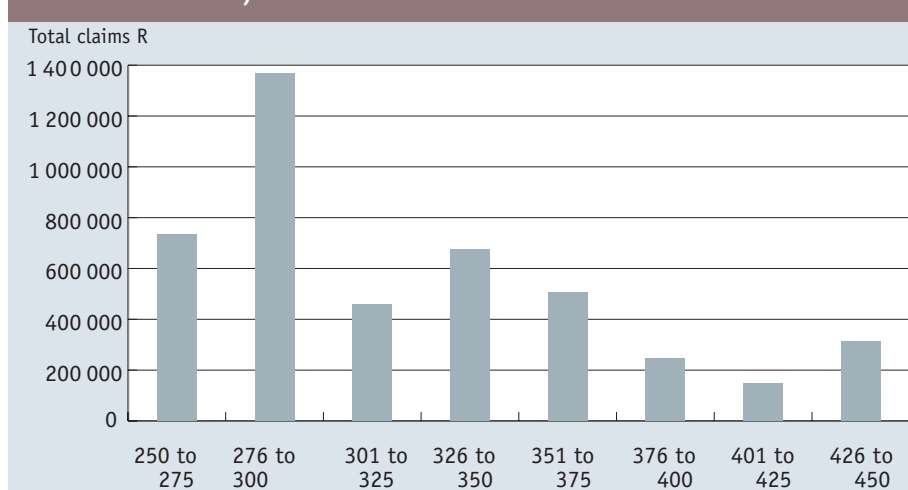
Source: Annual Financial Statements of all medical schemes for the 2005 and 2006 financial years

increases. (See **Box 4.2**).

Anaesthetists, on the other hand, do not routinely consult with patients and are only needed when patients are in hospital and need surgery. This places them in a unique position of economic power in relation both to patients and to schemes.²⁹ The cause of their increases, although also linked to hospital services, is unlikely to result from the same specific factors as for radiology and pathology.

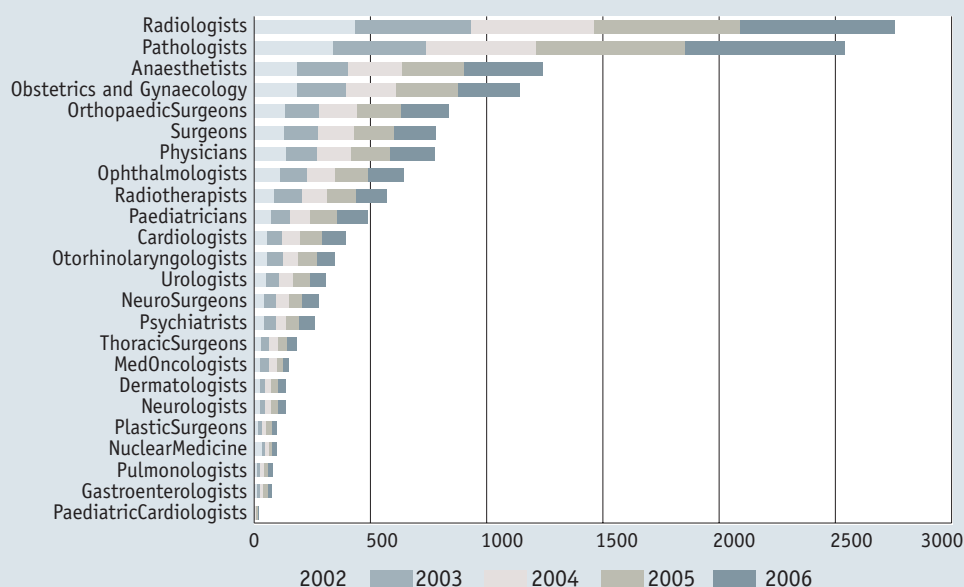
The trend break in out-of-hospital costs occurring from 2004, after having been stable from 2001 to 2004, is primarily the result of specialist cost increases. As noted in **section 2** these increases were sparked by the intervention of the Competition Commission, which prohibited the centralised negotiation of tariffs. This, coupled with the publication by the HPCSA of a de facto tariff schedule at 300% of the NHRPL, upset the balance of market forces setting prices in the market – particularly as some specialist associations continued to act in concert in apparent contravention of the Competition Commission ruling. (See **box 5.1** and **annexure C** for communications sent to independent specialists during 2006. Also see **figure 5.3** for an example of specialist billing experienced by a small medical scheme).

Figure 5.3: 6-month 100% sample of specialist billing (period = first 6 months of 2006) expressed as a percentage of NHRPL (Small Medical Scheme)



29 Surgical interventions are typically necessary and invariably fully covered by the medical scheme. Given this, anaesthetists are in a position to determine prices at their discretion without any fear of a market-related retaliation.

Figure 5.4: Changes in specialist costs, PABPA, from 2002 to 2006 (Constant 2006 prices)



Source: Council for Medical Schemes, Annual Reports for the years 2002-2006.

Box 5.1: Communication sent by the South African Society of Anaesthesiologists to its members (2006)

"Dear SASA member:

Discovery recently sent forms to all specialists, offering payment of claims at "Discovery Health Premier Rate" (125% of NHRPL), with a further 35% increase to anaesthetists if they include modifier 0028 (Low flow). We feel that the following background information is necessary for you to make an informed decision in this regard:

SALT had a meeting with Discovery two weeks ago. During this meeting the same proposal (a unilateral decision on their part) was rejected. We wish to draw your attention to the following aspects of the proposal:

The reference price is the Discovery Health rate, for which there is no scientific basis. The increase will be 25% above the Discovery Health Rate, which leaves us with the current NHRPL rates. The 35% increase for inclusion of modifier 0028 stands to save Discovery way more than they are offering us. Either way, this is still below the WCA rates.

Direct payment into your account only if there is no

deviation from their rates.

SALT is of the opinion that the Discovery proposal is a unilateral document without real value, which will take us back to where we were a few years ago. Our recommendation (although you are free to do as you see fit) is to bill as normal. The majority of anaesthetists are already charging rates that are substantially above Discovery rates (and mostly above WCA). Accepting this proposal would therefore imply a reduction in rates, albeit with some risk reduction as well (which should have no effect on the cash flow beyond 3-4 months).

The calculated 2007 rate has been noted by CMS and we will soon see the "regulated" rates. We will forward them to you as soon as they become available.

Click here to view SALT's official reply to Discovery's proposal

Regards, SALT Team."

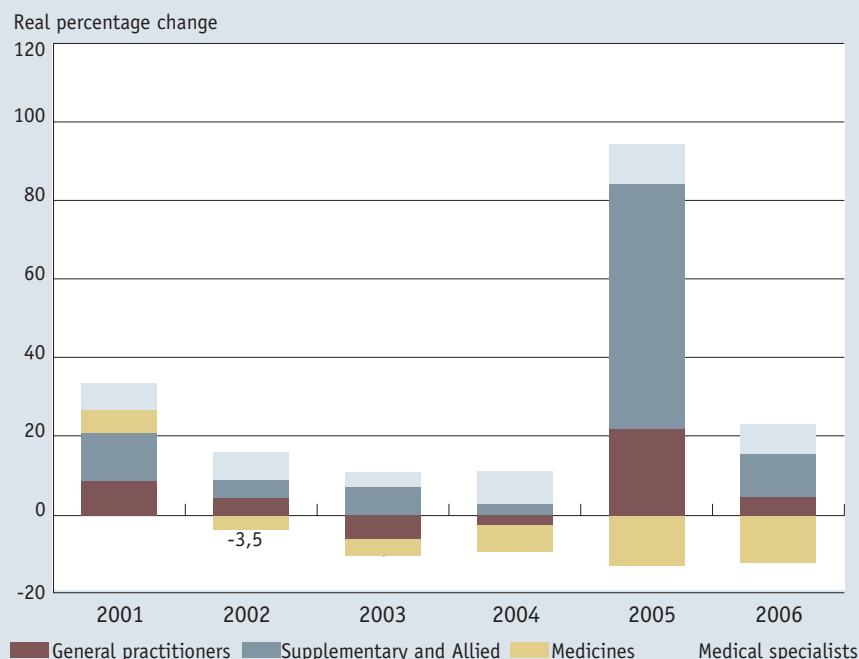
Source: Communication to independent anaesthetists by the South African Society of Anaesthesiologists during 2006

30 General practitioner consultations frequently do not form part of risk-pooled benefits, with the result that utilization and reimbursement can be affected by member household budget constraints.

Cost increases by other categories of health professional or on other cost items appear relatively stable. GPs, although demonstrating a significant one-off increase in 2005, are not expected to follow the same pattern as specialists. They are more vulnerable to market forces.³⁰ The increases in 2005 resulted from an

improvement in the NHRPL consultation fees determined through the process. A similar one-off adjustment occurred in relation to *supplementary and allied health professionals* for the same reasons. In both instances increases into 2006 were moderate or negative in real terms.

Figure 5.5: Year-on-year percentage changes in selected non-hospital costs, 2001 to 2006



Source: Council for Medical Schemes, Annual Reports for the years 2002-2006.

In conclusion, out-of-hospital costs, including medicines, are generally stable, with the exception of specialist costs. Specialist cost increases appear systemic and relate to the market power of certain specialist disciplines. Although always prevalent, the systemic factors driving up specialist costs were exacerbated by the Competition Commission and HPCSA interventions in 2004. Specialist cost increases are especially of concern in the case of pathologists, radiologists and anaesthetists.

The specific distortions introduced into the market for specialist services in 2004 were the elimination of a system whereby tariffs were negotiated centrally without eliminating the collusive opportunities for specialists. As a consequence medical schemes were unable to challenge concerted action by specialists by taking concerted action themselves.

Resolving this market inconsistency requires that general fees be negotiated centrally within a fair bargaining framework. However, this should not preclude the direct negotiation of arrangements, provided it does not involve anti-competitive conduct on the part of any party.

Table 5.2: Changes in specialist costs (PABPA) for the period 2002 to 2006
(2006 prices)

SPECIALISTS	PROPORTION OF TOTAL CHANGE					NET CHANGE					
	2003	2004	2005	2006	2004 TO 2006	2003	2004	2005	2006	2003 TO 2004	2005 TO 2006
	%	%	%	%	%						
Nuclear Medicine	-4,6	-3,1	-1,4	-1,0	0,3	(17)	(16)	(16)	(13)	(32)	(29)
Paediatric Cardiologists	0,2	0,3	0,2	0,3	0,2	1	1	2	4	2	6
Medical Oncologists	5,8	2,3	0,5	0,3	-0,9	21	12	5	4	32	9
Neurologists	0,3	0,0	0,7	0,7	1,2	1	0	7	10	1	17
Gastroenterologists	1,0	0,8	0,7	0,7	0,6	4	4	7	9	8	16
Plastic Surgeons	1,4	0,8	0,8	0,7	0,7	5	4	8	10	9	19
Pulmonologists	1,4	1,1	0,9	0,8	0,6	5	5	9	11	10	20
Dermatologists	0,5	-0,2	0,9	0,7	1,2	2	(1)	10	10	1	20
Psychiatrists	1,4	0,6	1,1	1,8	2,6	5	3	12	25	8	37
Thoracic Surgeons	2,2	1,5	1,2	1,0	0,7	8	8	13	14	16	26
Neurosurgeons	1,9	2,6	1,5	2,0	1,6	7	14	16	28	20	44
Urologists	1,6	1,4	1,8	1,6	1,7	6	7	19	22	13	41
Otorhinolaryngologists	2,8	2,1	2,2	1,7	1,5	10	11	24	24	21	47
Physicians	-0,1	1,4	3,1	4,0	5,5	(0)	7	34	54	7	88
Ophthalmologists	2,7	1,6	3,3	3,3	4,4	10	8	35	46	18	81
Radiotherapists	8,9	4,6	3,5	3,3	2,5	32	24	38	45	55	83
Cardiologists	3,8	5,0	4,0	3,6	2,8	13	26	44	49	39	93
Paediatricians	3,5	3,3	4,3	4,7	5,5	12	17	47	64	29	111
Surgeons	5,3	4,8	4,4	3,8	3,2	19	25	47	52	44	99
Orthopaedic Surgeons	5,4	5,7	5,5	5,5	5,3	19	29	60	75	49	135
Obstetrics and Gynaecology	8,7	7,5	7,6	6,5	5,9	31	38	82	89	69	172
Anaesthetists	9,0	9,9	7,6	11,3	12,1	32	51	83	155	83	238
Radiologists	19,2	19,3	17,7	17,4	16,3	68	99	192	239	167	431
Pathologists	17,7	26,6	28,0	25,3	24,5	63	137	304	347	200	651
TOTAL	100,0	100,0	100,0	100,0	100,0	356	513	1 084	1 373	869	2 457
Top 3	45,8	55,9	53,3	54,0	52,9	163	287	578	742	450	1 320

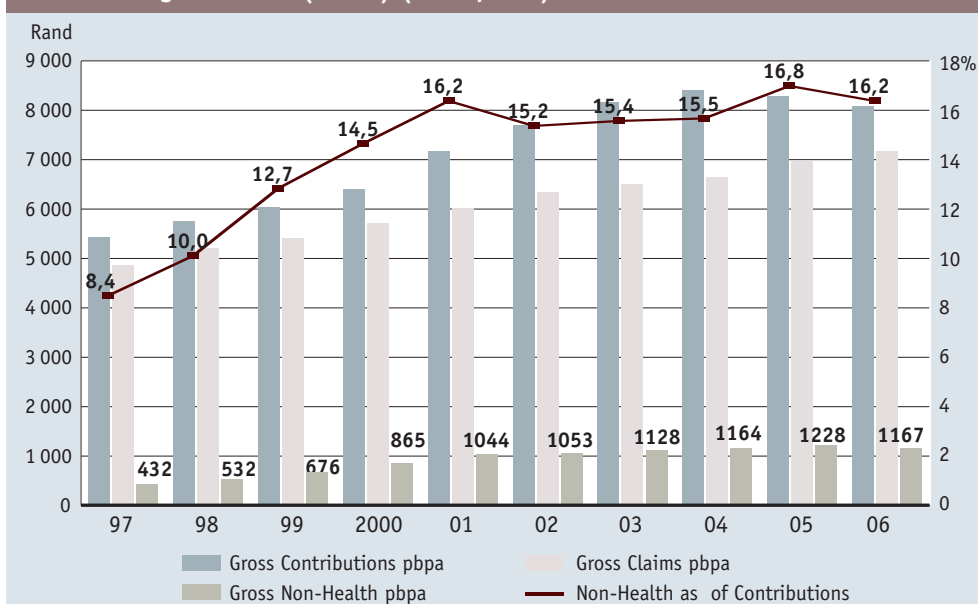
6 Non-health costs

In 2006 non-health costs constituted 16,2% of gross contributions to medical schemes against only 8,4% in 1997. Most of the increase to this level occurred in the period from 1997 to 2001. From 2001 there was a break in the trend, with non-health costs flattening. *Thus whereas non-health costs contributed to medical scheme contribution increases to 2001, claims costs predominate as a cause thereafter.*

Table 6.1: Non-health costs from 1997 to 2006 compared to gross contributions and gross claims (PABPA) (2006 prices)

YEAR	GROSS CONTRIBUTIONS		GROSS CLAIMS		GROSS NON-HEALTH	
	PBPA	% GROWTH	PBPA	% GROWTH	PBPA	% GROWTH
1997	5 442	8,2	4 873	5,8	432	18,0
1998	5 764	5,9	5 218	7,1	532	23,1
1999	6 045	4,9	5 411	3,7	676	27,1
2000	6 415	6,1	5 725	5,8	865	27,9
2001	7 174	11,8	6 012	5,0	1 044	20,7
2002	7 704	7,4	6 353	5,7	1 053	0,9
2003	8 166	6,0	6 498	2,3	1 128	7,2
2004	8 406	2,9	6 653	2,4	1 164	3,2
2005	8 292	-1,4	6 978	4,9	1 228	5,5
2006	8 077	-2,6	7 172	2,8	1 167	-4,9
since 1997	2 635	48,4	2 299	47,2	735	170,1
since 2000	1 662	25,9	1 447	25,3	302	35,0

Figure 6.1: Non-health costs from 1997 to 2006 compared to gross contributions and gross claims (PABPA) (2006 prices)



Source: Council for Medical Schemes.

The principal driver of non-health cost increases from 1996 has been administration expenditure, with managed-care expenditure only starting to have a material effect from 1999. However, from 2001 managed-care expenditure stabilised with administration cost increases also slowing.

The initial rise in non-health costs can in part be explained by the significant shift of members from restricted to open schemes during the 1990s (**figure 6.3**). Restricted schemes typically have a lower cost structure due to the absence of marketing expenses and broker fees, as well as to better governance. Once the major shift from restricted to open schemes tailed off from 2000, non-health costs stopped rising and also begin to stabilise. This suggests that much of the cost trend was driven by structural differences in costs between open and restricted schemes rather than a systemic cost spiral.

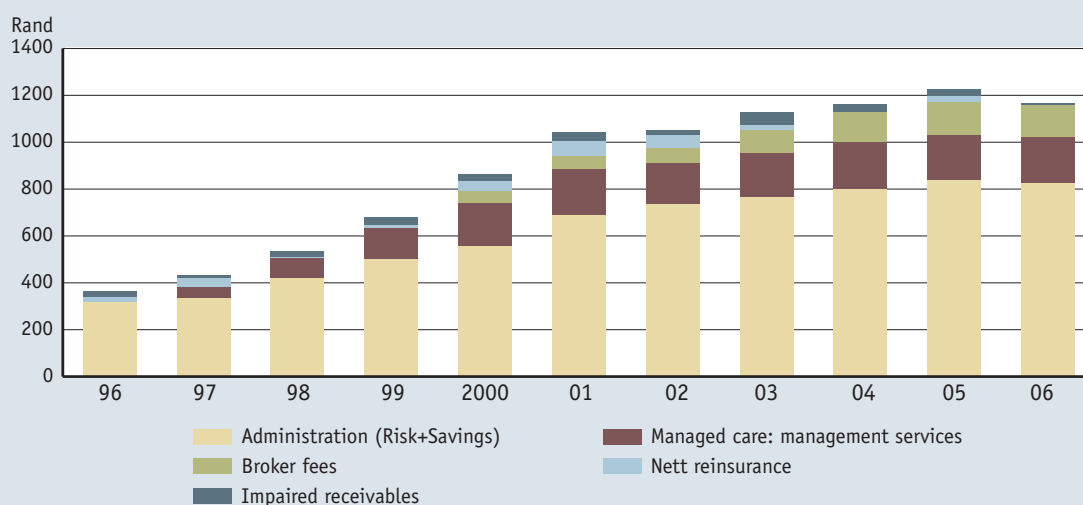
The non-health cost experiences from 2000 in open schemes would also have been affected by regulatory requirements removing conflicts of interest in governance arrangements. These governance changes established a greater separation between schemes and third-party administrators. Prior to 2000, egregious conflicts of interest characterised the open schemes' governance arrangements.

Net payments to reinsurers were also on the rise during the 1990s and peaked in 2001. Reinsurance agreements, coinciding with the period of weak governance, became one of the favoured mechanisms for extracting profits from schemes. However, since the implementation of legislation to regulate reinsurance arrangements pre-emptively these have disappeared as a cost item for schemes.

Broker fees became evident as a new expense from 2000, rising steadily to 2004 and then stabilising. Before 2000, broker fees were illegal and were consequently not reported even though they were paid by various hidden means. The rise in broker fees evident in **figure 6.2** primarily reflects their surfacing. Previously these expenses were hidden in administration costs or commissions in respect of conditionally sold insurance products.

However, brokers influence the cost of schemes directly and indirectly.

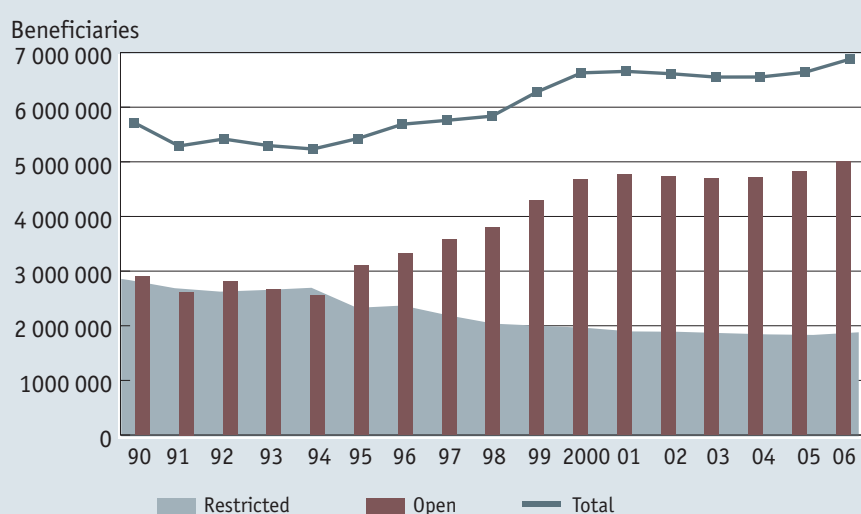
Figure 6.2: Non-health costs by category from 1997 to 2006 (PABPA) (2006 prices)



Source: Council for Medical Schemes.

Directly, where a fee is paid for their services, and indirectly through the quality of their advice. Many schemes and administrators attempt to influence brokers to advise clients to choose a particular scheme by bidding up broker commissions. This was what largely necessitated the regulated capping of broker fees from 2004. However, the regulatory regime still has loopholes allowing conflicts of interest to exist by permitting schemes to pay the fees in respect of advice to members. **The conflicts substantially reduce the quality of advice in the market and permit schemes to avoid being wholly responsive to members and beneficiaries.**

Figure 6.3: Member movements from restricted to open schemes from 1990 to 2005



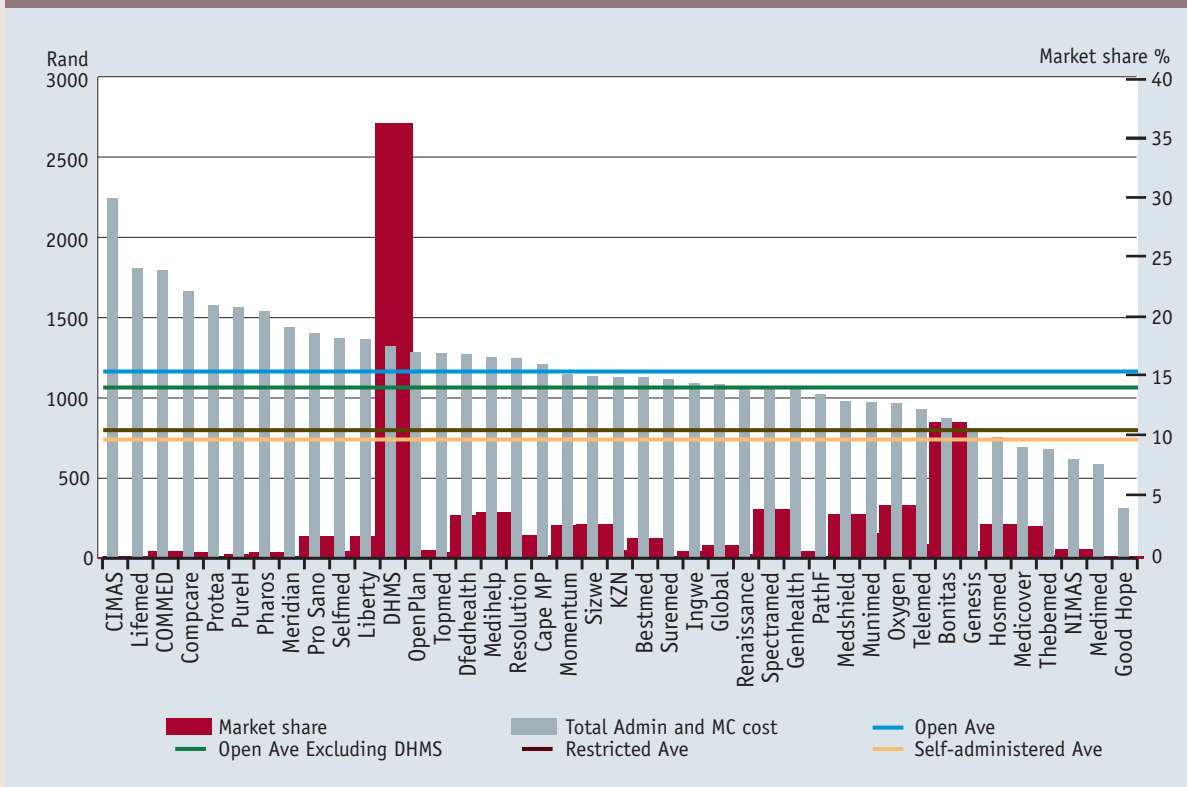
Source: Council for Medical Schemes.

There is some evidence of inappropriate non-health costs within open schemes indicated by the variation in administration and managed-care costs relative to industry benchmarks (figure 6.4).

- It would seem reasonable to expect that administration and managed care costs should vary in relation to scale — the larger the scheme, the lower the per capita administration and managed-care costs. Figure 6.4 shows fairly dramatically that this relationship does not hold consistently in open schemes. A distinct outlier is Discovery Health Medical Scheme (“DHMS”), which has the largest market share of all schemes, but whose administration and managed-care costs significantly exceed all the various comparative averages and benchmarks.
- Virtually all open schemes exceed the average administration and managed-care cost (PABPA) of restricted schemes and self-administered schemes. However, an important benchmark is the open scheme average excluding DHMS. Schemes above this average require special attention from the CMS as the costs may be due to governance problems.
- Schemes close to or below the key benchmarks are indicative of arms-length

relationships with third-party administrators. This is particularly evident where scale correlates with lower costs. A significant portion of the market appears to fall into this category.

Figure 6.4: Open Schemes: administration and managed-care cost PABPA by scheme (2006)



Despite the existence of problem schemes in relation to administration and managed-care expenses, there is some indication that the problems are not systemic and should be addressed through governance-related interventions and reforms rather than by regulation of fees. It is also likely that significant pressure will be put on these fees when the *Risk Equalisation Fund* becomes operational.³¹

31 The Risk Equalisation Fund framework will expose efficiency price variations on a common set of benefits.

7 Discussion and findings

Over the past ten years cost increases have characterised both the health and the non-health components of medical schemes' expenditure. However, the factors driving the cost increases in each of these elements are not the same and dealing with them requires distinct approaches.

The most important overall cost elements of medical schemes are:

- Hospitals (29.4%);
- Specialists (18%); and
- Medicines (in- and out-of-hospital) (18.3%).

Non-health costs are also relatively important with the following making up most of the expense:

- Administration (9.6%);
- Managed-care management services (5.1%); and
- Broker commissions (2.2%).

With respect to health costs, systemic problems affect hospitals (including all goods and services supplied by a hospital), specialists and medicines. However, the factors driving the costs of these three, although related, are distinct.

Medicines are to a degree catered for in the Medicines and Related Substances Control Act and prices appear to be responding positively to the new regulatory regime.

However, hospitals and specialists, the parties primarily responsible for the surges in overall medical scheme costs over the past 15 years, require a high degree of priority in future. Without addressing the systemic problems evident in these markets it is unlikely that any serious cost containment will occur in medical schemes in the foreseeable future. If the present conditions are permitted to continue, coverage by medical schemes will decline and become more inequitable.

There is no evidence to support the view that the hospital cost experiences are a result of:

- Aging of medical scheme members;
- Increased morbidity;
- Pandemics and, in particular, HIV and AIDS;
- Cost-push factors, such as nurse costs; and
- New technology.

There is strong evidence of increased hospital admissions and bed days as a contributor to overall per capita hospital costs. It is however the finding of this report that the increased utilisation results from excessive admissions to hospital of patients of low acuity. The trends observed in the South African private hospital system are anomalous from an international perspective where utilisation rates are in decline.

Hospitals:

- The market for hospital services has become very concentrated conferring significant market power on three major hospital groups (Medi-Clinic, Life, and

Netcare).

- Hospital groups negotiate prices and contracts centrally, creating a market imbalance in relation to funders who are considerably less concentrated.
- The major hospital groups operate as an oligopoly and are in a position to collude tacitly in setting prices and to determine other contractual agreements.
- The hospital market technically became concentrated in the key national markets (major metropolitan areas) from 1999 (due to merger activity), and overall from 2002. The period when the market became concentrated coincides with a trend break in hospital costs. This report concludes that the two are causally related. Concentration increases market power, which sustains high prices, costs and inefficient behaviour.
- The merger trend driving the concentration appears systemic, with the likely result being that the three major hospital groups will have taken over the entire private hospital market within the next few years.
- The accumulation of market power has been extended to parts of the hospital value chain through vertical relationships (pathology, radiology, pharmacy, surgicals, medical devices, and consumables³²) and relationships with related services (specialists, emergency transport). This has driven cost increases in these healthcare goods and services.
- Through the accumulation of market power, hospital groups are in a position to retain ffs as the predominant means of reimbursement in the medical schemes market. Even where a hospital group does not directly manipulate utilisation, the ffs is demand inducing and fosters the inefficient use of resources.
- Hospital groups do not enter into material selective contracting arrangements with medical schemes except where low-income groups are concerned. They wield sufficient market power to segment the market between high-income groups, which they keep in ffs, and low-income groups that are permitted some discounted arrangements.
- The consequence of the market concentration has been a systemic rise in the cost of all hospital services and inputs. However, the hospital does not directly influence the demand for hospital services. It is influenced by the relationships established with the drivers of demand — specialists and emergency transport.
- Emergency transport arrangements are directly owned by hospital groups. Emergency transport companies are in a position to direct patients to preferred hospitals. Although this does not drive up demand, it may direct patients away from competing hospitals, undermining their sustainability.
- The relationships between specialists and hospitals are the central driver of cost in the private health system. Hospitals compete for specialists (non-price competition) by offering inducements such as free or subsidised rooms, shares, overseas trips to conferences, and equipment provision.
- Non-price competition results in a systemic over-supply of beds and equipment coupled with incentives for specialists to over-service. Hospital groups clearly have little interest in specialists who are careful about hospital referrals. The over-supply of private hospital infrastructure is so pervasive that it is

32 These relationships occurred through the rebate system which amounted to hospital groups and suppliers jointly determining the final prices charged to medical schemes with an agreed distribution of profit.

roughly double what is needed for the population served.

- Furthermore, consistent with what is expected in a market characterised by non-price competition, over-supply is most prevalent in heavily-populated areas served by competing hospital groups.
- Resolving private hospital systemic cost increases requires that attention be given to the following:
 - Removing the market power imbalance in the determination of ffs prices through the re-establishment of central bargaining;
 - Removing all vertical relationships between hospital groups and their supply chain:
 - Pathology;
 - Radiology;
 - Pharmacy and pharmaceuticals;
 - Medical devices; and
 - Consumables and surgicals used in-hospital.
 - Removing all conflicts of interest, that occur through ownership links, shares, inducements of any form, with related services:
 - Specialists;
 - Emergency transport; and
 - General practitioners.
 - Reducing market concentration and private bed proliferation in the major metropolitan areas through:
 - Greatly improving the hospital licensing system through the establishment of an independent national licensing body;
 - Requiring a minimum level of diversity in hospital ownership through the licensing system;
 - Requiring that a minimum level of hospital licenses be held by non-profit hospital groups;
 - Granting licenses preferentially to hospitals that directly employ their specialists and general practitioners; and
 - The application of strict population-based criteria required for the establishment and licensing of a new private hospital.³³

Specialists:

- Specialist market power occurs through problematic behaviour and relationships established with hospital groups.
- This conduct is most problematic in relation to the setting of ffs prices. Given that collusive behaviour is difficult to police, **it is recommended that the problem be eliminated by establishing a centralised bargaining framework with respect to ffs prices. This should apply to all prices set in the market paid for on an ffs basis.**
- Aside from this, **all specialist relationships with any element of the supply chain for their services should be expressly prohibited.**
- **To the extent that any lack of clarity exists concerning private hospitals employing specialists, this should be removed.** The direct employment of hospital doctors is a well-established and ethical arrangement that does not result in problematic conflicts of interest.

Non-health costs represent a residual future cost risk for medical schemes.

³³ Private hospital licensing also needs to take account of the impact any new hospital will have on public sector staffing.

However, the increases prevalent in the 1990s flattened in the 2000s. Much of the initial increase related to the switching of members from low-cost restricted schemes to high-cost open schemes. Once this shift stabilised, the costs appeared to level out.

Administration and managed-care costs also show a degree of diversity across open schemes. Some are very high for their market share, while others appear relatively consistent. This variation relates in large part to differences in governance arrangements rather than to any systemic tendency to over-charge.

Administration and managed-care costs will be kept in check to the extent that there is competition between open schemes on contributions and benefits. There is evidence that competition is increasing, reducing the opportunity for schemes to pass contribution costs onto employers and members without facing market risk. However, if the open-scheme market becomes concentrated, this relationship may not hold in future. An important protection for future scheme diversity and tighter competition is the proposed risk-equalisation fund, which will expose truly inefficient schemes, irrespective of their size, to greater competition.

Given the above, administration and managed-care costs **require a focus on governance and scheme competition rather than direct interventions.**

Brokers do, however, raise systemic concerns. Although their direct costs are not a significant cost driver, the impact they have on scheme choice can dramatically affect how schemes compete, as well as the cost and quality of their benefits and administration services. The systemic concerns arise in relation to the conflicted relationships that exist between administrators, schemes and brokers.

On the whole, brokers do not at present see members as their clients as the schemes pay the commissions. Administrators also try to supplement commissions as an inducement to brokers to favour their schemes. This weakens consumer awareness concerning the imperfections of schemes with indirect price, cost and efficiency consequences throughout the value chain.

The broker market therefore requires re-regulation to eliminate existing conflicts of interest and to ensure that the essential relationship is between the member/employer and the broker/advisor.

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Annexure A: Have changes in the age structure of medical scheme members caused the cost increases?

Changes in the demographic profile of the medical schemes market can influence the hospital cost per medical scheme beneficiary. To assess the extent to which such changes have led to increases in-hospital costs the demographic movements of the medical schemes market from 2001 to 2005 are examined.

To examine the effects of aging on costs, the demographic changes over this period are weighted for expected cost by age band. The results show clearly that the aging medical scheme population cannot explain the changes in cost and utilisation over this period.

The data used in this evaluation is sourced from the Council for Medical Schemes ("CMS"). The CMS has end-of-year demographics for each scheme by month only for the past two years. Given this, it is not possible to produce an average of membership over a full 12-month period from 2001 by age band. However, the demographic structure of schemes on 31 December from 2001 to 2005 does exist and provides a valid basis for identifying whether any structural change has occurred over the period.

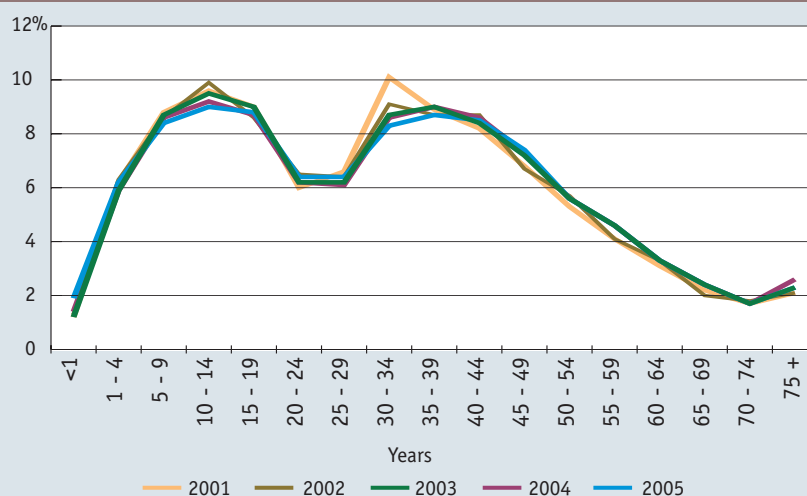
Table A.1 provides the consolidated age structure of schemes over the period on 31 December in each year. Adjustments were made to the 2001 to 2003 data where some schemes did not know the age of some of their beneficiaries. To keep the totals consistent for each of these years the beneficiaries of unknown age were pro-rated to the other age categories. The beneficiaries of "unknown" age for each year were:

2001:	73,273 (1.1% of all beneficiaries)
2002:	76,716 (1.1% of all beneficiaries)
2003:	42,271 (0.6% of all beneficiaries)

The overall totals show a 2.6% increase in total beneficiaries in the 2005 financial year (year-on-year for totals as at 31 December). Based on average beneficiaries over a 12-month period the year-on-year change in 2005 is 1.3%.

Figure A.1 shows the age profile for each year expressed as a percentage of the total beneficiaries for all registered medical schemes. The underlying data is reflected in **table A.1**. This suggests an insignificant change in the profile over the period in question.

Figure A.1: Age profile of all registered medical schemes' beneficiaries from 2001 to 2005 on 31 December of each year



Source: Annual returns provided to the Council for Medical Schemes for the period 2001 to 2005

Table A.1: Age profile of all registered medical schemes' beneficiaries from 2001 to 2005 on 31 December of each year

AGE	2001	2002	2003	2004	2005
Less than one year	82 838	86 111	79 112	93 966	127 763
1 - 4 years	417 097	416 622	390 833	393 040	420 470
5 - 9 years	584 899	573 341	580 002	571 537	575 877
10 - 14 years	644 242	658 921	630 254	613 581	615 955
15 - 19 years	601 959	573 429	595 711	582 267	600 673
20 - 24 years	398 722	431 868	408 340	410 104	440 336
25 - 29 years	438 736	425 943	411 415	409 720	436 872
30 - 34 years	677 160	606 209	577 559	572 151	569 258
35 - 39 years	597 097	580 081	597 621	599 354	596 517
40 - 44 years	549 604	577 890	559 399	574 312	582 196
45 - 49 years	454 989	442 496	480 135	489 061	508 188
50 - 54 years	351 347	379 144	372 041	374 728	386 104
55 - 59 years	273 918	273 013	303 239	306 830	316 477
60 - 64 years	209 898	218 630	218 857	221 984	222 694
65 - 69 years	147 148	136 065	156 866	162 031	162 136
70 - 74 years	116 026	117 190	114 777	116 036	115 329
75 years +	138 130	140 476	153 369	171 861	158 776
As at 31 December	6 683 810	6 637 429	6 629 530	6 662 563	6 835 621
Percentage change		-0,7%	-0,1%	0,5%	2,6%

Source: Annual returns provided to the Council for Medical Schemes for the period 2001 to 2005.

The hospital cost weight has been produced using information from various studies. (Fish *et al*, 2002a and 2002b). The weights also drew on medical scheme data supplied to the CMS in terms of various processes. **Figure A.2** reflects the

weights graphically, while the values are provided in **table A.2**.

The results (**table A.2**) show that over the entire period (2001 to 2005) the change in the age profile of all medical scheme beneficiaries, when weighted for cost, explains only 3.6% of the cost change.

The overall real per capita cost change for the period is calculated at 45.5%. This shows that the changes in the beneficiary age profile in the medical schemes cannot explain 41.9% of the cost change actually experienced over the period.

Table A.2: Weighted changes in medical scheme beneficiary age profile over the period 2001 to 2005						
AGE	WEIGHT RANDS	2001	2002	2003	2004	2005
		R'000				
Less than one year	6 384	528 847	549 742	505 060	599 890	815 654
1 - 4 years	1 168	487 187	486 633	456 510	459 088	491 127
5 - 9 years	500	292 712	286 928	290 262	286 025	288 197
10 - 14 years	418	269 395	275 533	263 546	256 574	257 567
15 - 19 years	684	411 611	392 103	407 339	398 146	410 732
20 - 24 years	1 445	575 958	623 837	589 851	592 399	636 069
25 - 29 years	2 371	1 040 157	1 009 827	975 384	971 366	1 035 738
30 - 34 years	2 273	1 539 449	1 378 150	1 313 017	1 300 723	1 294 146
35 - 39 years	2 061	1 230 527	1 195 459	1 231 607	1 235 178	1 229 331
40 - 44 years	1 990	1 093 550	1 149 831	1 113 039	1 142 711	1 158 398
45 - 49 years	2 356	1 071 784	1 042 355	1 131 019	1 152 045	1 197 101
50 - 54 years	3 033	1 065 724	1 150 040	1 128 494	1 136 645	1 171 151
55 - 59 years	3 874	1 061 205	1 057 698	1 174 799	1 188 711	1 226 085
60 - 64 years	5 761	1 209 215	1 259 520	1 260 827	1 278 842	1 282 932
65 - 69 years	7 225	1 063 143	983 068	1 133 355	1 170 673	1 171 431
70 - 74 years	8 836	1 025 214	1 035 499	1 014 178	1 025 302	1 019 055
75 years +	8 956	1 237 110	1 258 122	1 373 593	1 539 210	1 422 019
TOTAL		15 202 789	15 134 346	15 361 880	15 733 527	16 106 734
Per capita change		2 275	2 280	2 317	2 361	2 356
% change due to age			0,2%	1,6%	1,9%	-0,2%
% change actual			19,6%	10,0%	16,8%	-0,9%
% change due to age		3,6%				
% change actual		45,5%				

Annexure B: The remuneration of medical practitioners from 1968 to 1986

“Until this time, much emphasis had been placed on the regulation of tariffs set with the medical profession. The setting of medical fees between medical schemes and the medical profession was always a problem and a source of conflict. The Medical Association often objected to the fees that were set and the arbitration mechanism. This resulted in many doctors choosing to opt out of the tariff of fees system. If a medical practitioner was contracted in, then payment of the account was guaranteed by law. This provided an incentive for doctors to remain contracted in.

“In order to resolve this conflict, a Remuneration Committee was set up in terms of the Amendment Act, No. 95 of 1969, to investigate the tariff of fees at least every two years. The objective of this amendment was to improve the arbitration mechanism such that disputes would not result in further doctors choosing to opt out of the tariff of fees system which was regarded as damaging to doctor/patient relationships.

“However, the medical profession eventually regarded the Remuneration Committee in a negative light. Allegations were made that the Act was being used to control the medical profession and that the inflexible provisions relating to the Remuneration Committee were financially prejudicial to medical practitioners and dentists. By 1978 the Dental Society and the Medical Association indicated that they were no longer prepared to participate in the activities of the Remuneration Committee. Consideration had been given to regulating against the free choice of doctors to contract out. However, publication of draft legislation to this effect resulted in a further 1,600 medical practitioners deciding to contract out. By this time 3,941 out of a total of around 14,000 medical practitioners had already contracted out.

“As a consequence of these conflicts, the Amendment Act, No. 51 of 1978, abolished the Remuneration Committee and the Commission that made recommendations to the Council on fees. Provision was made for the Medical and Dental Council to determine fees. This was allowed on condition that it prevent further contracting out. If not successful the Minister would step in to regulate the ability of the medical profession to contract out.

“The Amendment Act, No. 42 of 1980, made provision for contracted in doctors to send accounts directly to medical schemes. This issue had been a constant source of conflict between medical practitioners and government. The previous dispensation only allowed accounts to be sent to patients who had to pass them on to the medical scheme. Medical practitioners argued that this caused extensive delays and reduced the benefit for contracted-in doctors of guaranteed payment.

“However, the Browne Commission (1986) recommended very strongly in its interim report that the provision allowing direct payment be scrapped and that the doctor send the first and second account to the patient and only the third directly to the medical scheme. Upon receipt of the account, the scheme was required by law to pay within six weeks.

"The Amendment Act, No. 59 of 1984, effectively eliminated the principle of contracting-in and contracting-out. Any profession or supplier of a service was allowed to determine its own tariffs through their respective statutory control bodies. The Representative Association of Medical Schemes (RAMS) was allowed to determine a scale of fees after consultation with representatives of suppliers of services. If a service supplier were to charge fees equal to or less than the fees indicated on the scale of benefits, the medical scheme was required to pay the supplier of the service directly, provided the scheme offered that benefit."

Source: Department of Health, May 2002.

Annexure C: Communications sent to specialist groups by their associations



e-bulletin

De Beers Medical Aid Contracts

De Beers medical Aid has recently been sending out letters to doctors, especially those at Medi-Clinic Hospitals, asking them to enter agreements with them. I have had a good look at these agreements and they are typically one-sided in favour of the Funder.

They offer to settle valid claims within 30 days of receipt, if you as the service provider undertake to bill at NHRPL and not ask for a co-payment. They are in fact not offering anything that they are not obliged to do by law. Medical aids are obliged to pay you within 30 days of receiving the account. Few meet these requirements.

In return for them offering to keep to their legal requirements, they want you to make concessions! They want you to give up the right to charge patient's, as you feel appropriate, on an individual and procedure basis. And then to crown it all, they can still repudiate any claim, which they feel is not valid. You are then stuck with an account which has been heavily discounted, and because you have nothing to bargain with, with the patient, is often not worth sending for collection.

Looks to me like De Beers thinks we are stupid! In return for them meeting their legal obligations, they want us to make all the concessions!

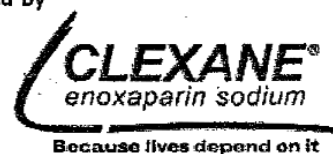
I strongly suggest those no-one signs these agreements with De Beers, and if they already have, then to send notification to De Beers of you're cancelling the agreement.

Dick van der Jagt
Fees and Salaries Subcommittee.
EXCO

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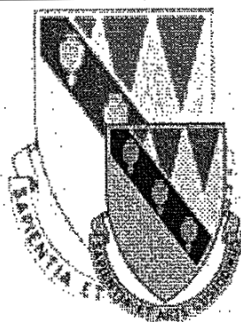


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The South African Society of Anaesthesiologists

Dear SASA member:

Discovery recently sent forms to all specialists, offering payment of claims at "Discovery Health Premier Rate" (125% of NHRPL), with a further 35% increase to anaesthetists if they include modifier 0028 (Low flow). We feel that the following background information is necessary for you to make an informed decision in this regard:

SALT had a meeting with Discovery two weeks ago. During this meeting the same proposal (a unilateral decision on their part) was rejected. We wish to draw your attention to the following aspects of the proposal:

The reference price is the Discovery Health rate, for which there is no scientific economic basis.
The increase will be 25% above Discovery Health Rate, which leaves us with current NHRPL rates.
The 35% increase for inclusion of modifier 0028 stands to save Discovery way more than they are offering us.
Either way, this is still below WCA rates.

Direct payment into your account only if there is no deviation from their rates.

SALT is of the opinion that the Discovery proposal is a unilateral document without real value, which will take us back to where we were a few years ago. Our recommendation (although you are free to do as you see fit) is to bill as normal. The majority of anaesthetists are already charging rates that are substantially above Discovery rates (and mostly above WCA). Accepting this proposal would therefore imply a reduction in rates, albeit with some risk reduction as well (which should have no effect on cash flow beyond 3-4 months).

The calculated 2007 rate has been noted by CMS and we will soon see the "regulated" rates. We will forward them as soon as they become available.

[Click here to view SALT's official reply to Discovery's proposal](#)

Regards,

SALT Team.

Acknowledgement

The research team responsible for this work was led by **Alex van den Heever** who is a senior advisor at the Office of the Registrar of Medical Schemes. Other members included **Thulani Matsebula** and **Stephen Harrison**. We also acknowledge the contributions made to the development of these ideas by **Phakamile Nkomo**, **Patrick Matshidze**, **Julindi Scheepers**, **Boshoff Steenekamp**, **Tebogo Maziya** and **T. Patrick Masobe**.



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