CIRCULAR

Reference	:	Evaluation of contribution increase assumptions for 2013
Contact	:	Nondumiso Khumalo
Telephone	:	012 431-0514
Facsimilee	:	012 431 0612
E-mail	:	n.khumalo@medicalschemes.com
Date	:	1 February 2013

CIRCULAR 4 OF 2013: EVALUATION OF COST INCREASE ASSUMPTIONS BY MEDICAL SCHEMES FOR 2013 FINANCIAL YEAR

Purpose

This Circular provides an evaluation of industry assumptions submitted by medical schemes for the 2013 financial year as provided in the benefit review submissions. The purpose of providing this information is to increase transparency of the schemes pricing decisions and increase the quality of provider negotiations.

Since 2010 the Council for Medical Schemes (CMS) embarked on a process of stringent review of medical schemes contribution and cost increases in order to limit the transfer of inappropriate cost increases to beneficiaries.

Legislative requirement

The Medical Schemes Act outlines legislative requirements informing CMS working with regards to benefit content configuration as well as pricing of options:

Regulation 8 (1) of the Medical Schemes Act regulations requires that "any benefit option that is offered by a medical scheme must pay in full, without co-payments or use of deductibles , the diagnosis , treatment and care costs of the prescribed minimum benefit conditions

Section 24 (2) (e) sates that " … medical scheme does not or will not unfairly discriminate directly or indirectly against any person on one or more arbitrary grounds including race, age, gender, marital status, ethnic or social origin ,sexual orientation, pregnancy, disability and the state of health "

Section 29 (l) makes it mandatory for the scheme to communicate with their members on any change in contributions, membership fees, or subscription, benefits or any other condition affecting their membership.

Section 29 (2) and Section 35 of the Act which seeks to encourage financial soundness of Medical Schemes

Section 31 seeks to ensure that the scheme rules registration promotes equity in rule amendments, discourage prejudice towards the member through unlawful exclusion/limitation of benefits also promote public accountability and transparency.

Section 33 (2) outlines that "approval of benefit options will be subject to provision of prescribed benefits, self-supporting in-terms of membership and financial performance, financially sound, the option should not jeopardize the financial soundness of any existing options within the medical scheme"

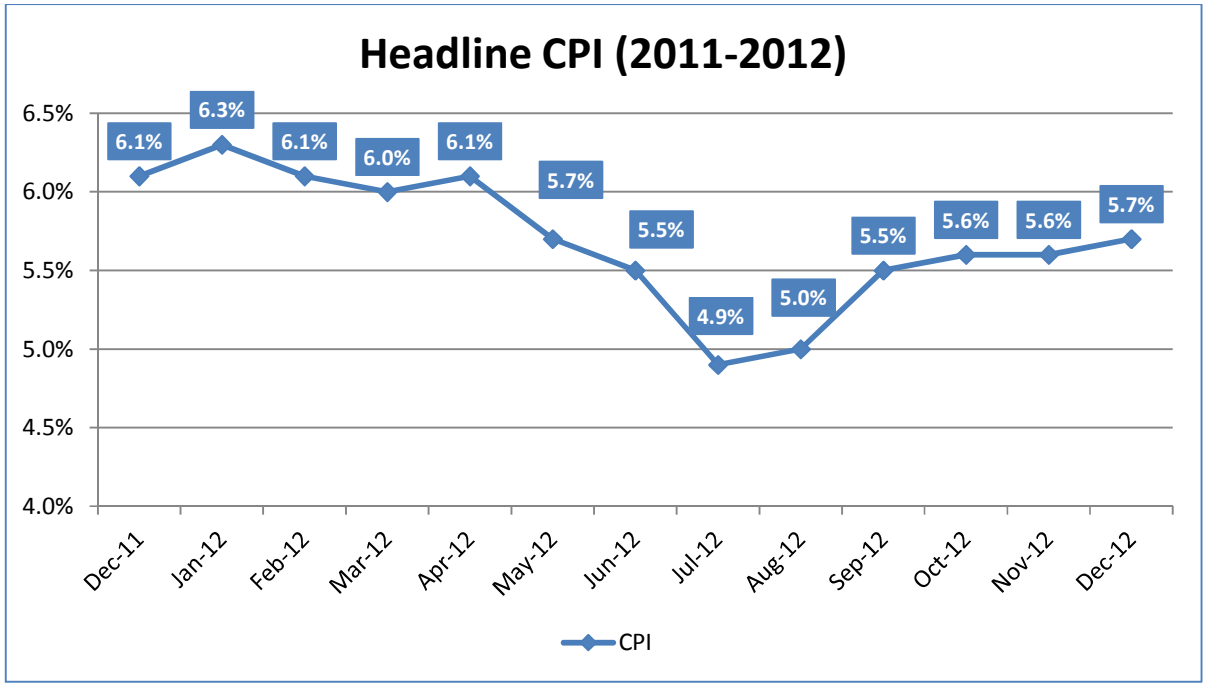
Overview

The analysis provided in this circular unpack contribution increase assumptions into standard cost items and utilisation stratified by schemes size, scheme type, facility type, professional services, medicine costs, non-healthcare costs and ex gratia payments and all other relevant cost variables.

Headline CPI Inflationary expectations

As published in Circular 29 of 2012 ("Circular 29") average year-on- year (2011-2012) CPI increase was 5.8%, with the Office of the Registrar advising that the cost increase assumption for 2013 be limited to 6.0%. The headline CPI projection for 2011/12 and 2012/2013 by National Treasury estimated to be 5.2% and 5.5% respectively (Medium Term Expenditure Report). The graph below shows the latest Consumer Price Index (CPI or inflation) figures from Statistics South Africa providing information to December 2012.

Figure 1: Consumer Price Index Changes for 2012



Source: Actual data is based on the routine CPI publication by Statistics South Africa

Medical schemes membership is closely correlated to employment statistics and contribution increases in excess of CPI erodes the real growth in income growth, creating affordability challenge for members of medical schemes. This affordability challenge prevents low-income members in participating meaningfully in the medical scheme market and limiting the opportunity for meaningful risk pooling and cross subsidisation within the industry.

Industry cost assumption data

This section provides an outline of the methodology followed in the analysis of cost assumptions data submitted by medical schemes for 2013 financial year. This analysis undertook a quantitative review of 2011-2012 Annual Statutory data, medical schemes cost assumptions data, review of actuarial reports and an analysis of medical schemes risk measurement data triangulated with contextual analysis of the medical schemes market.

Medical Schemes submit cost assumptions data with the submission of benefit changes and contribution increases for 2013. The data from the submissions were consolidated verified and analysed. Data from 85 medical schemes, representing 8 319 308 beneficiaries, was included in the analysis. The data was made up of 24 Open and 61 Restricted medical schemes with 4 681 350 (56%) and 3 637 958 (44%) beneficiaries, respectively. Schemes were further divided into four different size groups as shown in Table 1 below.

Table 1: Medical Schemes size categories

Size (group size)		Scheme Count	Scheme Percentage	Beneficiaries[1]	Beneficiary Percentage
Small:	**>0 – 15 000**	37	44%	289 821	3%
Medium:	**>15 000 – 65 000**	28	33%	807 507	10%
Large:	**>65 000 – 220 0000**	14	16%	1 648 668	20%
Very large:	**>220 000**	6	7%	5 573 312	67%
Total		**85**	**100%**	**8 319 309**	**100%**

Scheme tariff increase assumptions for 2013

The average assumed increases for different tariff items i.e. excluding the effect of utilisation, demographic changes and reserving are summarised in Table 2 and figure 2.

The average assumed tariff increase for private hospital ward and theatre fees was 7.1% and 7.0% respectively. These assumed tariff increases are 1 percentage point and 1.1 percentage points higher than the advised tariff increase assumption advised in Circular 29.

The average assumed increase for in-hospital managed care activities was 4.3%, with 25% of medical schemes making an increase provision of at least 7.3%. The out-of-hospital managed care assumed increases averaged 5.6% and three-quarters of medical schemes set the increase at 7.0% or less.

Assumed tariff increases for professional services ranged from 0.0% to 17.9%. The average tariff increase for providers in this category was about 6% - consistent with Circular 29, with the highest increases observed in the Specialists (medical & clinical) and Allied Health Professionals categories. One-half of all medical schemes assumed that increases will be greater or equal to 7.5% and 7.6% for the Specialists and Allied Health Professionals categories, respectively. This is concerning as 50% schemes tariff increase assumptions (excluding utilisation and demographic factors) are greater than that advised in Circular 29 and prevailing CPI levels. This is exacerbated by the impact of utilisation and demographic effects, which contributes to medical scheme contribution increases outstripping inflation.

The average increase in Non-Healthcare Expenditure ranged from -13.9% to 14.5%, with 50% of schemes proposing an increase of 5.5% or more which is lower than the advised increase in Circular 29.

[1] Number of beneficiaries at the end of December 2011

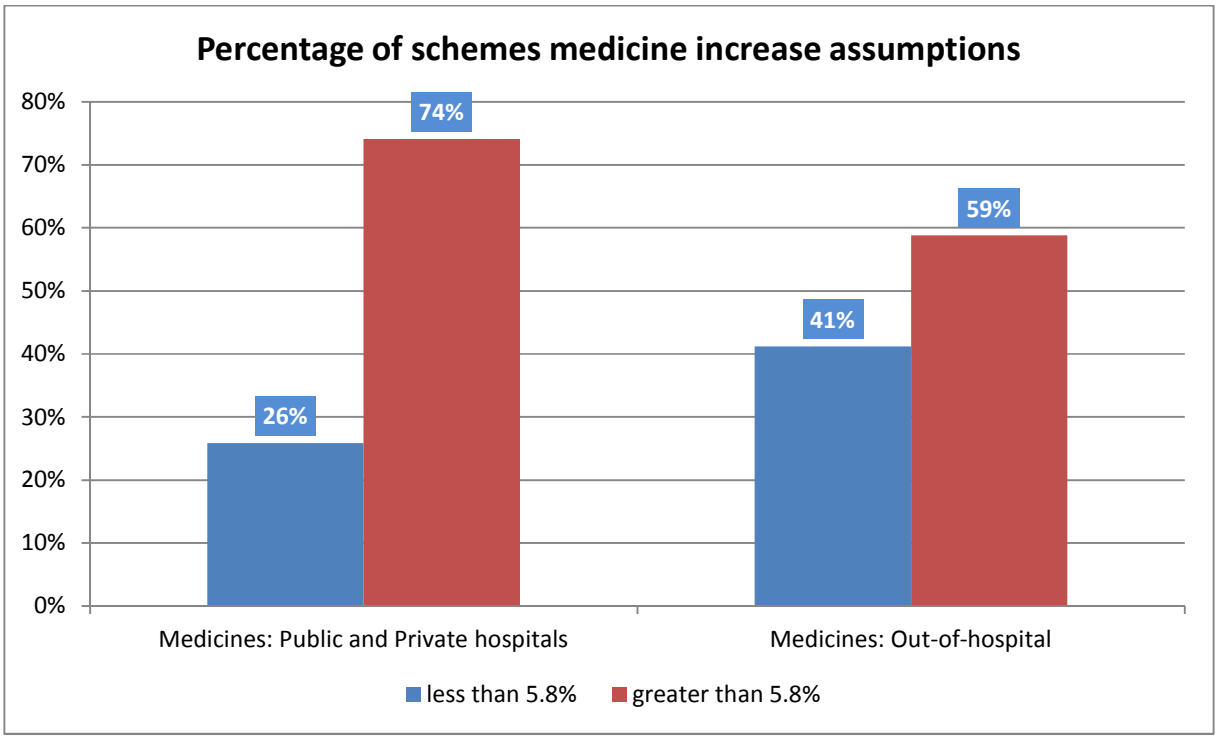
Table 2: Summary of the most important assumptions for cost items incorporated into overall contribution increase for the 2013 financial year (excluding the impact of utilisation & demographic changes)

Cost Item	25th Percentile	50th Percentile	75th Percentile	Weighted Average
Private hospitals				
Ward fees	6.2%	7.0%	7.5%	7.1%
Theatre fees	6.2%	7.0%	7.5%	7.0%
Consumables	5.2%	7.0%	7.5%	6.6%
Medicines	5.2%	6.0%	7.0%	6.0%
Equipment	6.2%	7.0%	7.5%	6.7%
Procedure	6.2%	6.5%	7.5%	6.6%
Managed Care	0.0%	5.5%	7.3%	4.3%
Other	6.2%	7.0%	7.5%	6.6%
Public hospitals				
Ward fees	6.2%	7.0%	7.5%	6.8%
Theatre fees	6.2%	7.0%	7.5%	6.7%
Consumables	5.2%	6.0%	7.0%	6.2%
Medicines	5.2%	6.0%	7.0%	5.7%
Equipment	6.2%	6.2%	7.5%	6.5%
Procedure	6.2%	6.5%	7.5%	6.4%
Other	6.2%	7.0%	7.5%	6.5%
Professional services				
General practitioners	5.5%	6.0%	6.5%	6.1%
Specialists - medical & clinical	5.5%	6.0%	6.5%	6.4%
Dentists	5.5%	6.0%	6.5%	6.0%
Allied Health Professionals	6.0%	6.5%	7.6%	6.7%
Other Professional	5.5%	6.0%	6.5%	6.1%
Medicines Out-of-hospital	4.0%	5.5%	8.0%	5.6%
Ex gratia payments	5.8%	5.8%	7.0%	5.5%
Out-of-hospital Managed care	5.5%	6.0%	7.0%	5.8%
Non Healthcare Expenditure	4.4%	5.5%	6.0%	5.4%

About 75% of medical schemes made an assumption that tariff increases for most cost items in-hospital (excluding medicines) will be approximately 2 percentage points above the current level of CPI. The median assumed increase for medicines for Private and Public hospitals was 6% and 5.5% for medicines out-of-hospital.

In figure 2 below we observe that 74% (53% of beneficiaries) of schemes assumed increases to medicines in private and public hospitals greater than the gazetted SEP increase for 2013 of 5.8%. Also for out of hospital medicines, 59% (49% of beneficiaries) of schemes assumed that increases will be greater than the gazetted SEP increase for 2013.

Figure 2: Percentage of schemes assumed medicines price increases



The assumed increases in Non-Healthcare Expenditure, excluding the impact of utilisation and demographic changes, were not different between Open and Restricted medical schemes. The increases were 5.3% and 5.6% for Open and Restricted medical schemes, respectively. The increase in the Small sized medical was higher than in the Medium and Very Large medical schemes (Table 4).

Table 3: Non-Healthcare Expenditure by Scheme Type

Type	Scheme Count	25th Percentile	50th Percentile	75th Percentile	Mean
Open	24	4.4%	4.4%	5.8%	5.3%
Restricted	61	5.5%	5.5%	6.0%	5.6%

Table 4: Non-Healthcare Expenditure by Scheme Size

Scheme Size	Scheme Count	25th Percentile	50th Percentile	75th Percentile	Mean
Small	37	5.5%	6.0%	6.0%	5.8%
Medium	28	5.5%	6.0%	6.0%	4.1%
Large	14	5.5%	5.8%	6.0%	5.9%
Very large	6	4.4%	5.5%	5.5%	5.4%

Scheme utilisation demographic increase assumptions for 2013

The average assumed impact of utilisation and demographic changes across all schemes was 2.8%. These changes were highest in Open medical schemes with an average assumed of 3.1% compared to 2.3% in restricted medical schemes. Four medical schemes made an unrealistic assumption of 5% or more in the assumed impact of utilisation and demographic changes. The assumed impact of utilisation and demographic change was not correlated with Average Age, Pensioner Ratio or the estimated PMB cost.

Table 5: Assumed impact of utilisation and demographic changes

Type	Scheme Count	25th Percentile	50th Percentile	75th Percentile	Weighted Average
Open	24	1.0%	4.6%	4.6%	3.1%
Restricted	61	2.0%	2.0%	2.5%	2.3%
Total	**85**	**1.5%**	**2.0%**	**4.6%**	**2.8%**

Table 6: Summary of the utilisation & demographic assumptions incorporated into overall contribution increase for the 2013 financial year

Cost Item	25th Percentile	50th Percentile	75th Percentile	Weighted Average
Private hospitals				
Ward fees	2.0%	2.2%	4.6%	2.9%
Theatre fees	2.0%	2.2%	4.6%	2.8%
Consumables	2.0%	2.2%	4.0%	2.7%
Medicines	2.0%	2.2%	4.6%	2.9%
Equipment	1.9%	2.0%	4.6%	2.8%
Procedure	1.9%	2.0%	4.6%	2.8%
Managed Care	0.0%	0.0%	1.0%	0.6%
Other	1.5%	2.0%	4.6%	2.8%
Public hospitals				
Ward fees	1.4%	2.0%	4.6%	2.7%
Theatre fees	1.0%	2.0%	4.6%	2.6%
Consumables	1.4%	2.0%	4.0%	2.6%
Medicines	1.4%	2.0%	4.6%	2.7%
Equipment	1.0%	2.0%	4.6%	2.6%
Procedure	1.0%	2.0%	4.6%	2.6%
Other	1.0%	2.0%	4.6%	2.6%
Professional services				
General practitioners	1.0%	2.0%	5.2%	2.6%
Specialists - medical & clinical	1.5%	2.0%	4.8%	2.7%
Dentists	1.0%	2.0%	4.9%	2.6%
Allied Health Professionals	1.0%	2.0%	4.7%	2.5%
Other Professional	1.0%	2.0%	4.7%	2.6%
Medicines Out-of-hospital	1.4%	2.0%	6.6%	3.2%

Scheme total increase assumptions for 2013

The average total assumed increase for 2013 across all medical schemes was 9.6%. The average Total Assumed Increase for 75% of schemes was 11.7% or less. The summary statistics for increases by type of scheme are shown in Table 7.

Table 7: Total Assumption Increase for 2013 by Scheme Type

Type	Count	25th Percentile	50th Percentile	75th Percentile	Weighted Average
Open	24	7.8%	11.7%	11.7%	9.9%
Restricted	61	8.7%	10.3%	10.3%	9.2%
Total	85	8.1%	10.3%	11.7%	9.6%

Table summarises the average total assumed increase for 2013 by size of scheme. The size of the scheme did not seem to have a significant impact on the weighted average of the proposed contribution increases. The average Total Assumed increases were lower in Small medical schemes (8.4%), but not significantly different from those in Large or Very Large medical schemes (9.7% or 9.8%).

Table 8: Total Assumed Increase for 2013 by Scheme Type

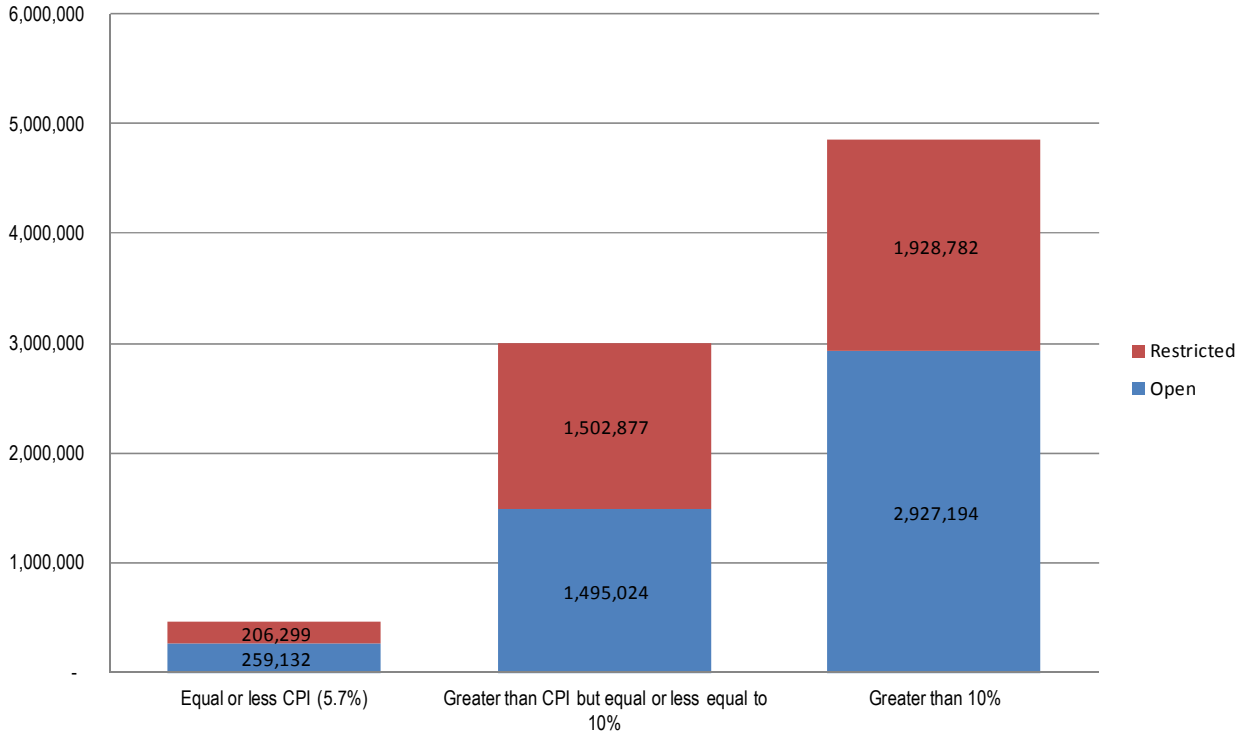
Size	Count	25th Percentile	50th Percentile	75th Percentile	Weighted Average
Small	37	7.5%	8.2%	10.1%	8.4%
Medium	28	6.9%	8.0%	9.2%	7.8%
Large	14	8.0%	9.4%	10.8%	9.7%
Very large	6	8.7%	10.3%	11.7%	9.9%

Table 9 summarises the impact that the total assumed increase assumptions will have on beneficiaries. The average assumed Increases of 10% or more will affect 4,455,976 or 24.7% of beneficiaries. Only 465,431 or less than 12.9% of beneficiaries will experience increases of 5.7% or less (Figure 3).

Table 9: Total Assumption Increase for 2013 category by size of schemes

Total Assumed Increase for 2013 category	Scheme Count (%)				
	Small	Medium	Large	Very large	Total
Equal or less CPI	4 (10.8)	6 (21.4)	0 (0)	1 (16.7)	11 (12.9)
Greater than CPI but equal or less 10%	23 (62.2)	18 (64.3)	9 (64.3)	3 (50.0)	53 (62.4)
Greater than 10%	10 (27.0)	4 (14.3)	5 (35.7)	2 (33.3)	21 (24.7)
Total	37 (100.0)	28 (100.0)	14 (100.0)	6 (100.0)	85(100.0)

Figure 3: Impact of Assumed Total Increases on beneficiaries.



More than 62% of schemes proposed to increase contributions by between 5.7% and 10% and nearly a quarter of schemes will increase contributions by a rate of 10% or more. The size of the schemes did not seem to affect the proposed increases (Table 8).

The Assumed Total Contribution increase across all medical schemes was not correlated with Average Age, Pensioner Ratio or the estimated PMB cost.

Changes in Average Age, Pensioner Ratio and estimated PMB costs were calculated for periods between 2010 and 2011 (December). The Assumed Total Contribution increase was also not sensitive to changes in these variables.

The Assumed Total Contribution increase was not correlated with Average Age, Pensioner Ratio, the estimated PMB cost or changes in these variables over time after stratifying by scheme type (Open vs. Restricted).

The Assumed Total Contribution increase was negatively correlated with Average Age, Pensioner Ratio and estimated PMB cost in Open schemes ($R= -0.58$, $p=0.0037$).

The Assumed Total Contribution increase was not correlated with Average Age and Pensioner Ratio in Small and Medium medical schemes. The Assumed Total Contribution increase was modestly correlated with estimated PMB cost in Small medical schemes ($R=0.37$, $p=0.0241$, $n=37$).

The Assumed Total Contribution increase was strongly correlated with Average Age and pensioner Ratio (R=0.71, p=0.0063) in Large medical schemes. This observation must be interpreted with caution because of the small sample size (n=13).

The Assumed Total Contribution increase was not correlated with any of the analysed variables in Very Large medical schemes.

The high-risk medical schemes proposed higher contribution increases (9.7%; 95% CI=9.0%, 10.5%) compared to low-risk schemes (9.3%; 95% CI=8.4%, 10.24%), the difference was however not statistically significant.

Table 10: Total Assumed Increase for 2013 category by size of Scheme Risk category

Scheme Risk Measure[2]	Scheme Count	25th Percentile	50th Percentile	75th Percentile	Weighted Average
High	52	7.7%	10.8%	11.7%	9.7%
Low	33	6.5%	7.8%	8.7%	9.3%

Fifty-two or 80% of schemes (representing 7,118,490 beneficiaries) proposed a total increase of more than 6% for both private and public hospitals. The average assumed increases in the prices of medicines is not different between Open and Restricted medical schemes, for both private (average= 8.9%, IQR= 1.9%) and public (average=8.4%, IQR=3.1%) as shown in Table 11. These assumed increases are inclusive of the impact of utilisation and demographic changes,

Table 11: Assumed increases for Public, Private Hospitals and Out-of-hospital Medicines

Variable	Scheme Count	25th Percentile	50th Percentile	75th Percentile	Weighted Average
Private Hospitals	85	8.1%	9.1%	10.0%	8.9%
Public Hospitals	85	6.9%	9.1%	10.0%	8.4%
Out of hospital	85	4.0%	5.5%	8.0%	5.3%

[2] Scheme Risk is estimated using the scheme's demographic profile, prevalence of Chronic Diseases, HIV and Maternity.

Figure 4: Summary of the most important assumptions for cost items incorporated into overall contribution increase for the 2013 financial year

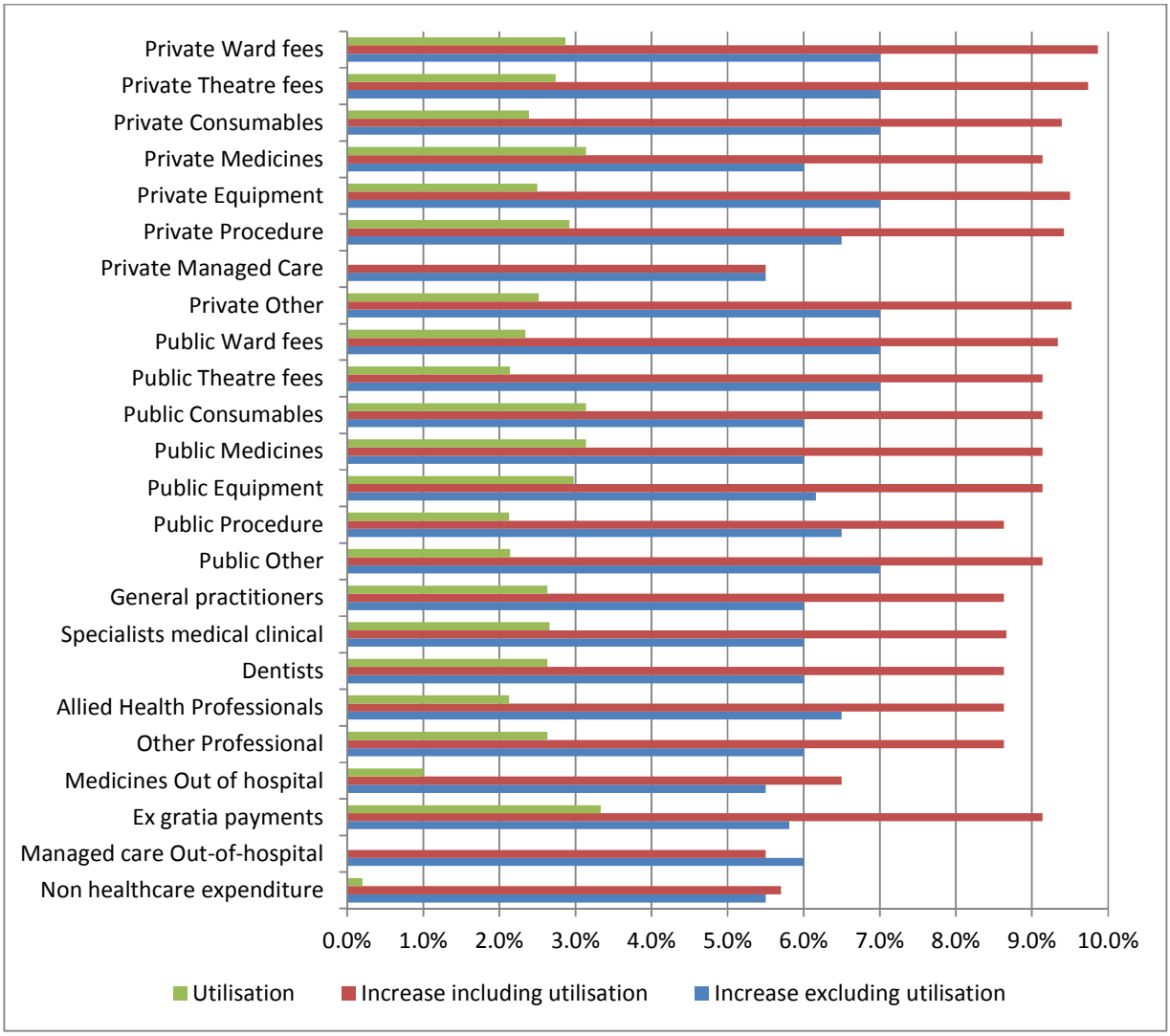


Table 32: Summary of the most important assumptions for cost items incorporated into overall contribution increase for the 2013 financial year

Cost Item	25th Percentile	50th Percentile	75th Percentile	Weighted Average
Private hospitals				
Ward fees	9.1%	9.9%	11.0%	10.1%
Theatre fees	9.1%	9.7%	11.0%	9.9%
Consumables	9.1%	9.4%	9.4%	9.4%
Medicines	8.1%	9.1%	10.0%	8.9%
Equipment	9.0%	9.5%	11.0%	9.6%
Procedure	8.6%	9.4%	11.0%	9.5%
Managed Care	0.0%	5.5%	8.0%	4.9%
Other	9.0%	9.5%	11.0%	9.5%
Public hospitals				
Ward fees	8.6%	9.3%	11.0%	9.5%
Theatre fees	8.6%	9.1%	11.0%	9.3%
Consumables	8.0%	9.1%	9.4%	8.8%
Medicines	6.9%	9.1%	10.0%	8.4%
Equipment	8.6%	9.1%	11.0%	9.1%
Procedure	8.6%	8.6%	11.0%	9.1%
Other	8.6%	9.1%	11.0%	9.2%
Professional services				
General practitioners	7.0%	8.6%	11.0%	8.7%
Specialists - medical & clinical	7.9%	8.7%	10.5%	9.2%
Dentists	7.4%	8.6%	10.6%	8.7%
Allied Health Professionals	7.4%	8.6%	12.7%	9.3%
Other Professional	7.6%	8.6%	10.5%	8.7%
Medicines Out-of-hospital	6.1%	6.5%	15.1%	9.0%
Ex gratia payments	6.8%	9.1%	10.2%	7.8%
Managed care Out-of-hospital	4.0%	5.5%	6.0%	5.2%
Non Healthcare Expenditure	5.5%	5.7%	6.0%	5.9%
Reserve Loading	0.0%	1.5%	1.5%	0.9%
Total Assumption Increase	**8.1%**	**10.3%**	**11.7%**	**9.6%**

The following are CMS concerns with regards to cost assumptions as submitted by the medical schemes:-

- As was the case in 2012, cost assumptions for 2013 for private hospitals are still above CPI. Furthermore we see that the tariff increase assumptions is on average 1 percentage point above the maximum advised tariff increase assumption from Circular 29. The average utilisation assumption for private hospitals of 2.8% further impacts on the affordability of medical scheme contributions as private hospital costs make up a significant portion of medical schemes expenditure. The impact of utilisation on the total cost of providing cost effective medical scheme benefits cannot be ignored as it has a material impact on the keys drivers of costs in the industry.

- Pharmaceutical costs within the hospitals also increased when compared to 2012 cost assumptions. Medicine pricing is assumed to increase by 6.0% on average which is consistent with the approved SEP increase of 5.8% for 2013. The effect of utilisation increases the average cost of medicines in private hospitals to 8.9%. Whilst acknowledging the impact of the push factors (new drugs and utilisation) and pull factors (such as generic market & voluntary SEP reduction) which influence medicine expenditure, medicine cost assumptions in total were expected to be closer to the SEP especially if managed care interventions are effective in managing utilization and promote the use of generic medicines. Private hospitals should also continue to manage medicine utilization within their facilities including encouraging the use of generic substitution and better coordination of care.

- Expenditure on specialist continues to be a key cost driver for healthcare costs. The weighted average cost increase assumption of 9.2% represents an assumed tariff increase of 6.4% and an assumed utilisation component of 2.8% implying that the assumed increase in costs are above CPI contributing to the larger than CPI increase in scheme contributions. Also, specialists have a specific relationship with private hospitals in a fee-for-service market; where they remain a significant driver of healthcare expenditure within hospitals. Whilst acknowledging the challenges encountered by medical schemes in influencing the entire continuum of care, it is recommended that medical schemes should consider the use of alternative reimbursement mechanisms to counter the inherent incentive for over-servicing as indicated by the assumptions on utilisation in the pricing for 2013. Furthermore, medical schemes should strengthen care coordination within their preferred providers.

- It was interesting to observe that the in-hospital and out-of-hospital managed care average cost increase of 7.0% and 5.5% in 2011 decreased to 4.9% and 5.2% in 2012, respectively. It is therefore recommended that cost savings due to efficiency gains on managed care should translate to cost savings for patients in terms of reasonable contribution increases and/or no changes in benefit content or enrichment of benefits in the long-term.

- Non-health care costs continue to vary considerably within medical schemes with an average cost assumption increase of 5.9% compared to a median increase of 5.5% in 2011. This increase represents a 0.4 percentage points increase from the previous year's assumed cost increase. With regards to administration fees, it is

recommended that medical schemes undertake an efficiency analysis so as to identify any suboptimal administrative operations and processes. Improved administrative efficiency has a potential to free resources within the schemes which could be transferred to medical schemes members in terms of affordable contribution increases or other member benefits. Also, oversight by medical schemes is encouraged to ensure that the scheme funds are not spent on goods and services not involving medical services.

Conclusion

Whilst acknowledging that the average cost assumption increase within the industry is 9.6%, the increase in the tariff portion is 6.8% which is 0.8% percentage points larger than the advised tariff increase assumption provided in Circular 29. The impact of utilisation and demographics make up 2.8% of the total assumed increase in costs for 2013. The analysis provided in this Circular also show that for certain schemes contribution increase does not compare with demographic indicators. Furthermore, CMS noted that utilisation estimates submitted as part of cost increase assumptions by most schemes do not correlate with worsening or improving demographic and disease profile of medical schemes for both Open or Restricted schemes.

The cost increase assumptions in Low-risk medical schemes were slightly lower than in High-risk group, but the difference was not statistically significant. The size of a medical scheme does not seem to have an impact on cost assumption increases. Implying that medical schemes remain price takers with no benefits derived from economies of scale by members who belong to large medical schemes.

As recommended earlier, medical schemes should try to address cost factors to the best of their ability, because failure to do this will lead to a continued affordability challenge in accessing healthcare threatening the long term sustainability of the industry since members are price sensitive. High input costs continue to be one of the barriers to entry for new members and will lead challenges to growth in the industry.

DR MONWABISI GANTSHO
CHIEF EXECUTIVE AND REGISTRAR