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## **Utilisation of medical services**

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Research and Monitoring Unit

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## 1. Background

The Council for Medical Schemes (CMS) has carried out an analysis on the utilisation data of health services during the calendar years 2013 and 2014. This analysis was based on the data provided by medical schemes through the Annual Statutory Returns in 2015.

There is an interest to understand the utilisation of medical services by beneficiaries as well as the cost of such services. For purposes of this analysis, the utilisation of health services has been divided into three main components, namely, hospitalisation, providers and medicines. This report provides the utilisation of these medical services by beneficiaries for the 2013 and 2014 financial years and the average cost of such services over the same period. Furthermore, the report also aims to assess the rates of increases in both the utilisation and the cost of such services.

The increase in utilisation of health services has been cited in several places as an important driver of healthcare cost inflation. This report will therefore provide useful insights on utilisation of health services as well as also help explain in part its likely impact on healthcare inflation.

## 2. Introduction

Beneficiaries access different areas of the healthcare industry based on their needs. The claims by beneficiaries are consists mostly of hospitalisation, visits to providers and use of medicine hence this report focuses on these health services.

To understand the results of this report it is important to note how the data used in the analysis has been collected.

The definitions used by schemes to report the data were recently revised and standardised. The most significant definitions used in the reporting of data used in this report are as follows:

- Providers are health service providers which exclude hospitals. This includes healthcare professionals i.e. General Practitioners, Specialists etc. and other providers such as ambulance services.
- A visit to a provider refers to a valid claim by the provider which has been paid for by the scheme. A single visit is defined as all claim lines relating to a specific beneficiary, on a specific service date to a specific provider plus a unique consultation code.
- A day case (inpatient < 24 hours) admission is defined as an admission where the Discharge date is the same as the Admission date. These admissions are referred to as day admissions in this report.
- An inpatient (inpatient ≥ 24 hours) admission is defined as an admission where the Discharge date is after the Admission date. Such admissions are referred to as long stay in this report.
- Medicines are defined as a NAPPI coded product where the first digit of the NAPPI code is at least 7, and is paid from a medicine related benefit pool. The remainder of the NAPPI items are classified as Consumables.

These and other definitions are on the CMS Technical Guide Data Spec V3.3 (which can be found on the CMS website). Using the information provided by medical schemes, an analysis was conducted to determine the costs associated with utilisation of medical services.

### 3. Summary of Data used in the analysis

This report is based on the Annual Statutory Returns (ASR) data provided by schemes to the CMS. Membership data was submitted for each benefit option as set out in the ASR technical guide. The data used was from tables A2, B1, B2, B3 and B6. Further details on the data collected can be accessed from these documents, which are available on the CMS website on the link <http://www.medicalschemes.com/Publications.aspx>. (The Annual Statutory Return Technical Guideline for preparation of data V3.2, 2015).

The benefit option classification as set out in the Annual Report of 2015 (The Council for Medical Schemes Annual Report 2014/15, 2015: 142) was also used.

#### *Data collected in table A2*

In table A2 schemes were required to provide the number of beneficiaries at the end of each month in the financial years 2013 and 2014. This membership data was collected based on the following:

- Financial year
- Financial month
- Principal members
- Adult dependents
- Child dependents

The data was also collected for each benefit option for the financial years 2013 and 2014. This data was used to calculate the average number of beneficiaries in each financial year by benefit option.

#### *Data collected in table B1*

In table B1 schemes were required to provide the number of visits to the various providers and the total cost of such visits. This data was collected based on the following:

- Financial year
- Discipline code (depending on which health personnel was seen)
- Place of visit (whether or not the beneficiary visited in-hospital or out-of-hospital)
- Amount claimed
- Amount paid from risk
- Amount paid from savings

Similarly, the data was collected for each benefit option for the financial years 2013 and 2014. This data was used to calculate number of visits to providers as well as the average cost of such visits.

#### *Data collected in table B2*

In table B2 schemes were required to provide the total amounts spend on medicines and consumables outside hospital and the number of items dispensed. The main data fields collected included the following:

- Financial year
- Discipline code (of health professional prescribing the medicines)
- Type of items dispensed (medicine or consumable)
- Number of items dispensed
- Amount claimed

- Amount paid from risk
- Amount paid from savings

Similarly, the data was collected for each benefit option for the financial years 2013 and 2014. This data was used to calculate number of items dispensed as well as the average cost of such items

#### *Data collected in table B3*

In table B3 schemes were required to provide hospital admission data for beneficiaries. The major data fields collected included:

- Financial year
- Age band
- Gender
- Discipline code (type of facility)
- Admission type (day visit or long stay)
- Number of admissions
- Number of days in-hospital
- Amount claimed
- Amount paid from risk
- Amount paid from savings

As with other data, this was collected for each benefit option of the financial years 2013 and 2014. This data was used to calculate the average rates of admission by gender, age and benefit option type. The average cost per admission and the average cost per day in-hospital was also calculated using this data.

#### *Data collected in table B6*

In table B6 schemes were required to provide hospital admission data for beneficiaries by type of admission. The major data fields collected included:

- Financial year
- Admission type (Surgical, medical etc.)
- Admission type (day visit or long stay)
- Number of admissions
- Number of days in-hospital
- Amount claimed
- Amount paid from risk
- Amount paid from savings

As with other data, this was collected for each benefit option for the financial years 2013 and 2014. This data was used to calculate the average rates of admission by admission type.

#### *Adjustments to data*

To ensure a more objective analysis of the data, some adjustments were made to the data. These adjustments include:

- Only options which existed in both 2013 and 2014 were included – this was done in order to make the year on year comparison with consistent data

- Data on length of stay from table B6 and B3 was largely inaccurate for a number of schemes. The data errors mostly related to schemes providing length of stay that was larger than conceivable. In some extreme instance the average length of stay was more than 365 days which is impossible.
- Adjustments were made to this data by using the average length of stay for the more accurate data. These schemes that provided relatively inaccurate data affected about 425 000 beneficiaries. The statistics on average cost per day in-hospital was not reported by type of admission.

## 4. Results - cost and utilisation of health services

The definition of cost and utilisation used in this section are as follows:

Average cost of health services:

- I. A visit to providers: this is the average cost of each visit paid for by the schemes. It is calculated as the total cost of all visits to providers divided by the corresponding number of visits. In the analysis, this is split by the visits in-hospital and the visits out-of-hospital.
- II. Item dispensed (medicines): this is the average cost of each item dispensed and paid for by the schemes. It is calculated as the total cost of all items dispensed divided by the corresponding number of all items dispensed.
- III. Item dispensed (consumables): this is the average cost of each item dispensed paid for by the schemes. It is calculated as the total cost of all items dispensed divided by the corresponding number of all items dispensed.
- IV. A hospital admission: this is the average cost of each hospital admission paid for by the scheme. It is calculated as the total cost of all hospital admissions divided by the corresponding number of all hospital admissions. In the analysis, this is split by day admissions and long stay admissions.
- V. Each day in-hospital: this is the average cost of each day spent in-hospital paid for by the scheme. It is calculated as the total cost of all long stay admissions divided by the corresponding total number of days spent in-hospital.

Each day case hospital admission was counted as one full day – the actual length of stay in hours was not collected. The average cost per day is thus the same as the average cost per admission in the case of day admissions.

The definition of utilisation for the three major sections is as follows:

- I. Utilisation of providers: this is the number of visits paid for by the scheme per average beneficiary per month. It is calculated as the number of all visits to providers divided by the average beneficiaries per month.
- II. Utilisation of medicines and consumables: this is the number of items dispensed (medicines and consumables) pabpm paid for by the scheme. It is calculated as the number of all items dispensed divided by the average beneficiaries per month. This was calculated for both medicines and consumables.
- III. Utilisation of hospitals - day hospital admissions: this is the number day hospital admissions pabpm paid for by the scheme. It is calculated as the total number of day hospital admissions divided by the average beneficiaries per month.
- IV. Utilisation of hospitals - long hospital admissions: this has two components one relating to the number of admissions and the other length of stay. The former is the number of long stay admissions pabpm paid for by the scheme. It is calculated as the total number of long stay admissions divided by the average beneficiaries per month.



The latter is the average length of stay per admission. It is calculated as the total days spent in-hospital divided by the number of long stay admissions.

### ***Results from the analysis***

The utilisation was analysed by benefit option type. To understand the results better it is important to refer the beneficiary movement report published by the CMS. This report shows the size of the benefit option types as well as their risk profiles.

The smaller benefit option types experience large variation in utilisation and costs of care. These annual variations are a mere indication of the option sizes and may not necessarily be due to underlying significant changes.

The utilisation of medicines is difficult to measure accurately as data is not collected on quantities of a drug, combination drugs or not, as well as strength of drugs. Data collected is based on number of items dispensed. Despite this challenge the data may be used to make reasonable inferences on utilisation of medicines and consumables.

The statistics on utilisation of medicines may also be affected by type of providers. Some providers generally do not need to dispense medicine or consumables such as Dental Specialists. Therefore the variation in the number of items dispensed and or the average cost of item dispensed would show significant variation from year to year.

**Table 1: Summary of findings**

	2013	2014	% change per 1 000 beneficiaries
<b>Hospitalisation</b>			
<b>Number of admissions</b>	2 506 398	2 540 535	<b>0.3%</b>
<b>Day case</b>	756 185	769 764	<b>0.7%</b>
<b>Long stay</b>	1 750 213	1 770 771	<b>0.1%</b>
<b>Average cost per admission (R)</b>	16 606.88	18 331.34	<b>10.4%</b>
<b>Day case (R)</b>	6 545.34	7 213.98	<b>10.2%</b>
<b>Long stay (R)</b>	20 953.99	23 164.12	<b>10.5%</b>
<b>Number of inpatient days</b>	7 494 131	7 904 851	<b>4.1%</b>
<b>Day case</b>	756 185	769 764	<b>0.0%</b>
<b>Long stay</b>	6 737 946	7 135 087	<b>4.7%</b>
<b>Average cost per day (R)</b>	5 554.14	5 891.50	<b>6.1%</b>
<b>Day case (R)</b>	6 545.34	7 213.98	<b>10.2%</b>
<b>Long stay (R)</b>	5 442.90	5 748.82	<b>5.6%</b>
<b>Providers</b>			
<b>Number of visits</b>	68 824 388	71 435 900	<b>2.7%</b>
<b>In-hospital</b>	17 340 663	18 428 527	<b>5.2%</b>
<b>Out-of-hospital</b>	51 483 725	53 007 373	<b>1.9%</b>
<b>Average cost per visit (R)</b>	689.13	744.05	<b>8.0%</b>
<b>In-hospital (R)</b>	1 103.59	1 184.16	<b>7.3%</b>
<b>Out-of-hospital (R)</b>	549.53	591.04	<b>7.6%</b>
<b>Medicines</b>			
<b>Number of items dispensed</b>	212 366 520	223 161 203	<b>4.2%</b>
<b>Consumables</b>	14 752 285	15 063 860	<b>1.0%</b>
<b>Medicine</b>	197 614 235	208 097 343	<b>4.2%</b>
<b>Average cost per item dispensed (R)</b>	88.69	92.18	<b>3.9%</b>
<b>Consumables (R)</b>	66.38	72.25	<b>8.8%</b>
<b>Medicine (R)</b>	90.36	93.62	<b>3.6%</b>

\* represents the average cost per admission for the day case as the specific length of times spent are not known  
 Table 1 shows the utilisation and cost of health services in 2013 and 2014.

## ***Hospitalisation***

The utilisation of hospitals increased from 2013 to 2014 in aggregate. The average length of stay in-hospital was higher in 2014 compared to 2013 increasing by 4.1%. The number of admissions pabpm grew by only 0.3% over the same period.

The cost of hospitalisation increased quite significantly. The average cost per admission was 10.4% higher in 2014 compared to 2013. The average cost per day in-hospital was also 6.1% higher in 2014 compared to 2013.

The day case average cost per day is higher than the long stay average cost per day. The long stay average cost includes both medical and surgical admissions whilst day case admissions are mostly surgical admissions which cost more. Furthermore, the day case accounts thus include the theatre and other fees over a single day whilst the theatre and other fees for long stays are spread over the number of days in-hospital.

During 2014, medical schemes spent 37.6% of the total healthcare benefits on hospitalisation. (The Council for Medical Schemes Annual Report 2014/15, 2015: 146)

## ***Providers***

The utilisation of providers increased by 2.7% in 2014 compared to 2013. The increase in utilisation of providers was higher in-hospital, increasing by 5.2%. The utilisation of providers out-of-hospital providers increased by 1.9%.

The average cost of each visit to providers increased by 8% in 2014 compared to 2013. The increase in the average cost of each visit was higher for out-of-hospital visits which increased at 7.6% while in-hospital visits increased by 7.3%.

The average cost of visiting providers was significantly higher in-hospital compared to out-of-hospital visits. In 2014 the average cost of an in-hospital visit was R1 184 while the average cost of a visit outside hospital was R591.

During 2014, medical schemes spent 43.7% of the total healthcare benefits on providers. (The Council for Medical Schemes Annual Report 2014/15, 2015: 146)

## ***Medicines and consumables***

Medicines and consumables dispensed in-hospital are included in the hospitalisation data, hence these are medicines and consumables dispensed out-of-hospital only. The number of items dispensed in 2014 was up 4.2% compared to 2013. The greatest increase in items dispensed was on medicines which increased by 4.2%. The consumables dispensed increased by a marginal 1% from 2013 to 2014.

The average cost of each item dispensed increased by 3.9% in 2014 compared to 2013. The increase in the average cost of each item dispensed was higher for consumables which increased by 8.8% while medicines increased by 3.6%. The single exit price increased by 5.82% in 2014.

During 2014, medical schemes spent 16.6% of the total healthcare benefits on medicines out-of-hospital. (The Council for Medical Schemes Annual Report 2014/15, 2015: 146)

## 4.1 Hospitalisation

The hospital utilisation data mainly focussed on the number of admissions and length of stay. The total number of admissions was 2 506 398 in 2013 and 2 540 535 in 2014. The average cost per admission was R16 606.88 in 2013 and R18 331.34 in 2014. The total number of inpatient days was 7 494 131 in 2013 and 7 904 851 in 2014. The average cost per day in-hospital was R5 554.14 in 2013 and R5 891.50 in 2014.

The following data shows the changes in the number of admissions and number of days patients spend in-hospital along with the costs associated per admission and per day. The data is shown for the 2013 and 2014 financial years.

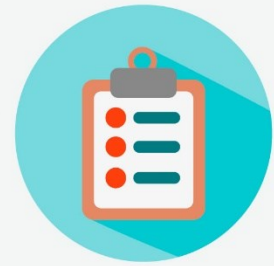
In the data that follows, the day case information for admissions and number of days spent in-hospital are the same since a day case admission means the patient only spends one day (arrives and leaves the hospital on the same day) in-hospital.

The increases shown in the figures are based on the experience pabpm and not of the absolute amounts in the figures. This is a more accurate way of comparing the results.

It is also important to note that the PMBs only benefit option type had a very small portion of all the beneficiaries. This option had a risk profile that was significantly worse off compared to other options. This in part, explains some of the utilisation trends observed.



# HOSPITALISATION



2013		2014		% CHANGE
NUMBER OF ADMISSIONS				pabpm
756 185	Day Case	769 764		0.7%
353 440	Male	358 218		0.5%
402 745	Female	411 546		1.0%
1 750 213	Long Stay	1 770 771		0.1%
712 385	Male	719 165		0.1%
1 037 828	Female	1 051 606		0.2%
AVERAGE COST PER ADMISSION (R)				
6 545.34	Day Case	7 213.98		10.2%
6 566.49	Male	7 276.07		10.8%
6 526.79	Female	7 159.94		9.7%
20 953.99	Long Stay	23 164.12		11.0%
22 944.42	Male	25 469.79		10.2%
19 587.72	Female	21 587.33		10.5%

The percentage change for the above data represents the change from 2013 to 2014 on a pabpm basis. The bulk of the admissions are long stay admissions with females being admitted more than males. The rates of admissions increased slightly from 2013 to 2014.

Long stay admissions, on average cost much more than day case admissions. The average cost per admission was higher for males compared to females. The average cost per admission increased by at least 9.7% for both males and females for all admission types.





# HOSPITALISATION



2013		2014		% CHANGE
NUMBER OF IN PATIENT DAYS				pabpm
756 185	Day Case	769 764		0.0%
353 440	Male	358 218		0.0%
402 745	Female	411 546		0.0%
6 737 946	Long Stay	7 135 087		4.7%
2 793 898	Male	2 959 205		4.9%
3 944 047	Female	4 175 880		4.5%
AVERAGE COST PER DAY (R)				
6 545.34	Day Case	7 213.98		10.2%
6 566.49	Male	7 276.07		10.8%
6 526.79	Female	7 159.94		9.7%
5 442.90	Long Stay	5 748.82		5.6%
5 850.34	Male	6 189.83		5.8%
5 154.27	Female	5 436.31		5.5%

The percentage change for the data above represents the change from 2013 to 2014 pabpm. There is an increase of 4.7% in the average in-patient days per admission for beneficiaries who are admitted for more than one day.

There were also increases in the average cost per day in hospital which increased by at least 5.6% for long stay admissions. The increase in the average cost per day was 5.8% for males who are admitted for more than one day while the increase in the average cost per day for females was 5.5%. The increase in the average cost of admission per day for day cases was 10.2%.



**Table 2: Number of hospital admissions per 1 000 beneficiaries by benefit option type in 2013 & 2014**

Benefit Option Type	Day case		% change	Long stay		% change
	2013	2014		2013	2014	
Traditional + PMBs & other Chronic @ DSP	77,22	76,88	-0,4%	209,66	210,31	0,3%
Savings + PMBs & other Chronic @ DSP	125,51	126,54	0,8%	230,68	217,97	-5,5%
PMBs & other Chronic	79,17	78,49	-0,9%	175,60	181,58	3,4%
Savings + PMBs & other Chronic	94,21	96,40	2,3%	187,46	191,75	2,3%
Traditional & PMBs Only @ DSPs	39,97	41,78	4,5%	104,14	111,97	7,5%
PMBs Only	92,57	95,30	3,0%	216,40	166,30	-23,2%
Hybrid (EDO + primary)	107,13	106,77	-0,3%	229,09	232,94	1,7%
PMB Exempt	16,96	19,35	14,1%	125,78	63,49	-49,5%
Traditional + PMBs & other Chronic	51,27	51,36	0,2%	167,08	168,46	0,8%
<b>Totals</b>	<b>87,40</b>	<b>88,04</b>	<b>0,7%</b>	<b>202,30</b>	<b>202,53</b>	<b>0,1%</b>

Table 2 shows the number of admissions per 1 000 beneficiaries for the 2013 and 2014 financial years by benefit option type. Most benefit option types had small changes in the number of admissions for the day case, while, the PMB Exempt option had a large increase of 14%.

Long stays also had small changes across most benefit option types, except for the PMBs Only and PMB Exempt benefit option types which decreased significantly with decreases of 23% and 50% respectively. These benefit option types are the smallest in terms of membership size hence they are subject to such changes from year to year.

**Table 3: Average cost per hospital admission by benefit option type in 2013 & 2014**

Benefit Option Type	Day case			Long stay		
	2013	2014	% change	2013	2014	% change
Traditional + PMBs & other Chronic @ DSP (R)	6 309,27	6 706,81	6,3%	19 767,23	22 171,02	12,2%
Savings + PMBs & other Chronic @ DSP (R)	6 668,54	8 198,97	22,9%	21 281,95	24 405,81	14,7%
PMBs & other Chronic (R)	6 306,02	6 958,77	10,4%	20 952,06	21 841,80	4,2%
Savings + PMBs & other Chronic (R)	6 707,86	7 252,70	8,1%	24 221,57	26 220,23	8,3%
Traditional & PMBs Only @ DSPs (R)	5 609,45	5 929,75	5,7%	22 420,03	24 916,10	11,1%
PMBs Only (R)	6 144,49	6 934,86	12,9%	19 578,37	29 672,11	51,6%
Hybrid (EDO + primary) (R)	6 639,52	7 106,70	7,0%	20 533,70	21 939,17	6,8%
PMB Exempt (R)	4 673,76	5 293,99	13,3%	6 929,29	15 515,75	123,9%
Traditional + PMBs & other Chronic (R)	7 892,98	8 634,85	9,4%	23 675,00	25 486,92	7,7%
<b>Totals (R)</b>	<b>6 545,34</b>	<b>7 213,98</b>	<b>10,2%</b>	<b>20 953,99</b>	<b>23 164,12</b>	<b>10,5%</b>

Table 3 shows the average cost per admission for the 2013 and 2014 financial years by benefit option type. For the day case admissions, all options had an increase in average cost per admission. The Savings + PMBs & other Chronic @ DSP had the highest increase in the average cost per admission which increased by 22%.

Similarly, for long stay admissions, all benefit options had increases in average cost per admission from 2013 to 2014. The largest increases were in the PMB Exempt and PMBs option types which increased by 123.9% and 51.6% respectively.



**Figure 1: Number of hospital admissions per 1 000 beneficiaries by gender and age in 2013 & 2014**

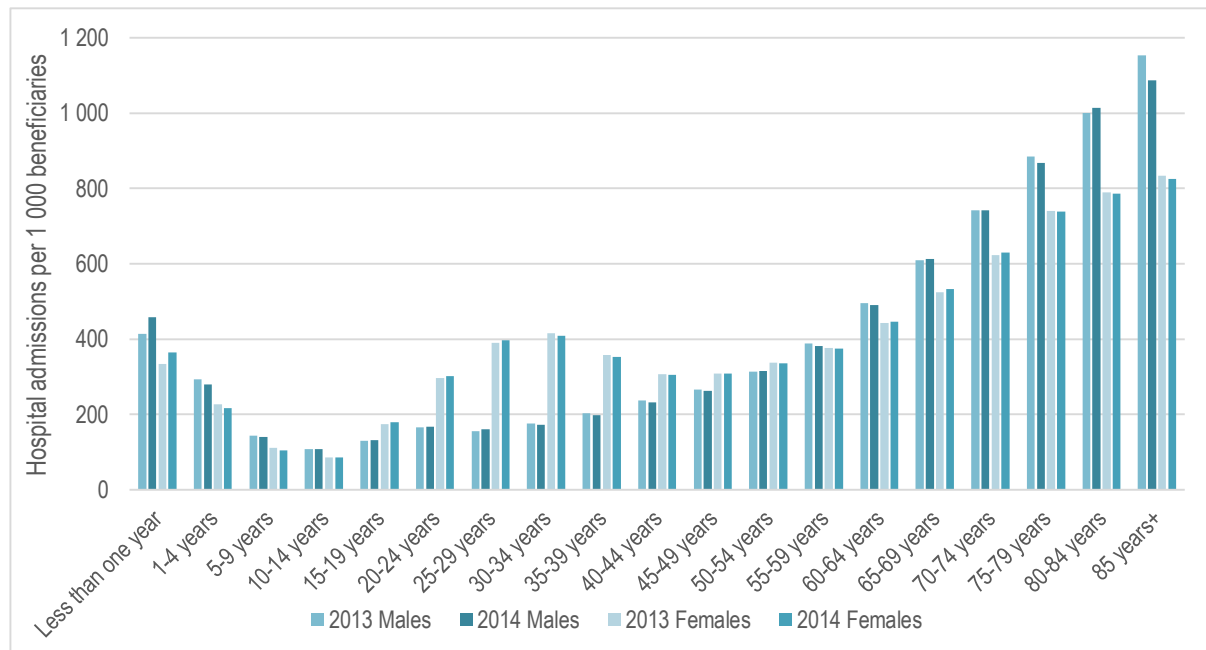


Figure 1 shows the number of admissions per 1 000 beneficiaries at different age bands for males and females in the 2013 and 2014 financial years. A noticeable feature is that the gap between females and males increases significantly between the ages of 15 and 39. This could be largely due to pregnancies since after the age of 40, the gap between males and females narrows. The highest admission rates for both males and females are in the band 85 years and older.

**Figure 2: Number of days spent in-hospital by gender and age in 2013 & 2014**

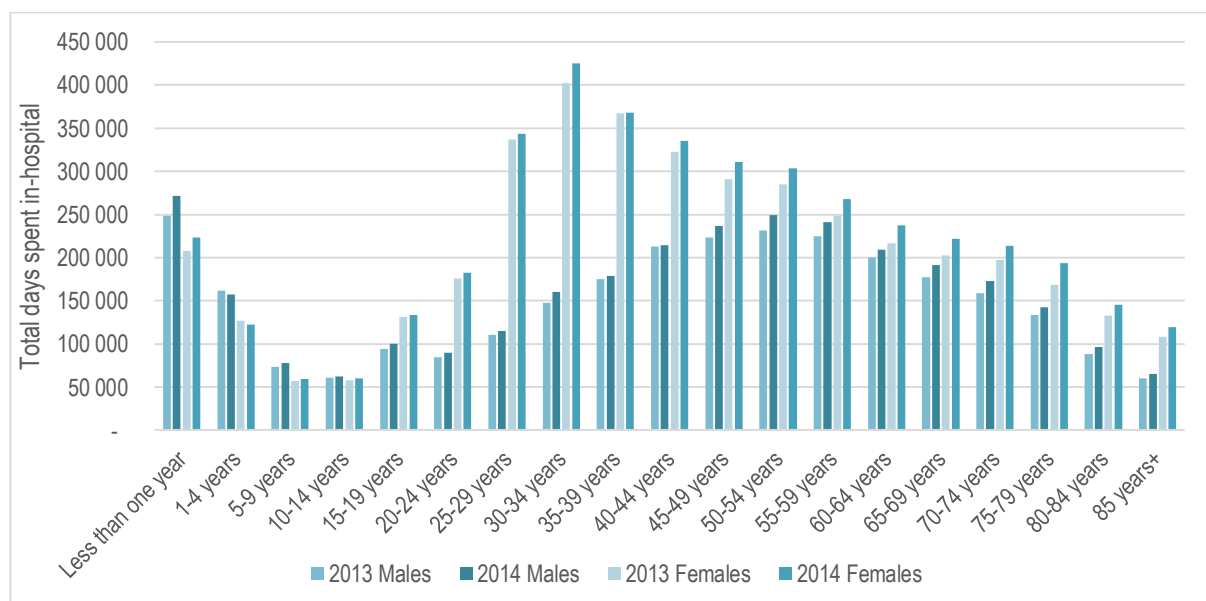


Figure 2 shows the number of days beneficiaries (both male and female) spend in-hospital after being admitted for the 2013 and 2014 financial years. On average, females spend more days in-hospital compared to males, however between the ages of 50 and 59, males spend much longer than females in-hospital. Females spend the largest amount of time in-hospital between the ages of 25 and 39 while males spend the largest amount of time in-hospital between ages of 50 and 59.

**Figure 3: Average number of days spent in-hospital per admission by gender and age in 2013 & 2014**

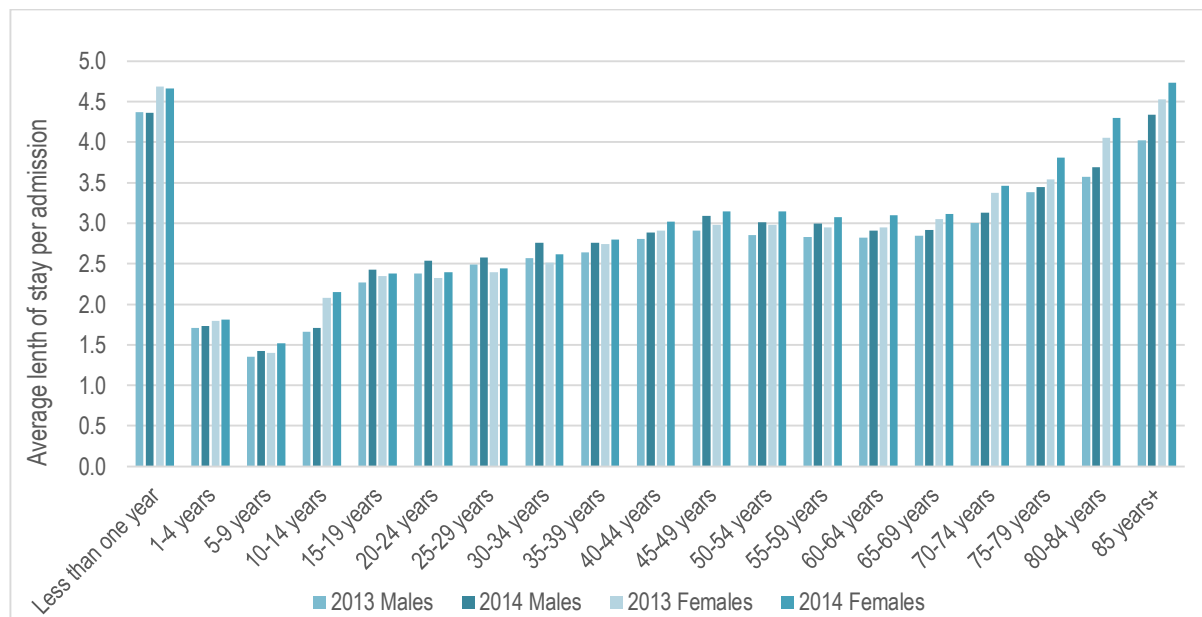


Figure 3 shows the number of days an individual spends in-hospital per admission. The average length of stay across all ages and gender was 3.1 days in 2014. Both males and females spend the longest time in-hospital when they are older than 85 years. This is likely due to their increased risk of having chronic diseases. The under ones on average spend a similar time in-hospital to the 85 year olds and older. On average, across all ages, males are more likely to spend a longer time in-hospital compared to females.

**Table 4: Number of inpatient days per 1 000 beneficiaries by benefit option type in 2013 & 2014**

Benefit Option Type	Day case (*)			Long stay		
	2013	2014	% change	2013	2014	% change
Traditional + PMBs & other Chronic @ DSP	77,22	76,88	-0,4%	845,61	887,40	4,9%
Savings + PMBs & other Chronic @ DSP	125,51	126,54	0,8%	894,03	970,69	8,6%
PMBs & other Chronic	79,17	78,49	-0,9%	599,17	632,60	5,6%
Savings + PMBs & other Chronic	94,21	96,40	2,3%	781,04	813,74	4,2%
Traditional & PMBs Only @ DSPs	39,97	41,78	4,5%	473,77	517,10	9,1%
PMBs Only	92,57	95,30	3,0%	616,92	667,31	8,2%
Hybrid (EDO + primary)	107,13	106,77	-0,3%	728,71	747,74	2,6%
PMB Exempt	16,96	19,35	14,1%	217,27	173,83	-20,0%
Traditional + PMBs & other Chronic	51,27	51,36	0,2%	831,98	850,19	2,2%
<b>Totals</b>	<b>87,40</b>	<b>88,04</b>	<b>0,7%</b>	<b>778,81</b>	<b>816,07</b>	<b>4,8%</b>

\* Assumed each admission lasts a whole day for the day case as the specific length of times spent are not known

Table 4 shows the number of patient days per 1000 beneficiaries spend in-hospital for the 2013 and 2014 financial years by benefit option type. For long stay admissions, the PMB Exempt benefit option type recorded a decrease in number of in patient days while the rest of the benefit option types recorded increases.

The Traditional + PMBs & other Chronic @ DSP benefit option type had the highest increase which increased by 9.1% in number of days in-hospital per 1 000 beneficiaries.

**Table 5: Average cost per day by benefit option type in 2013 & 2014**

Benefit Option Type	Day case (*)		% change	Long stay		% change
	2013	2014		2013	2014	
Traditional + PMBs & other Chronic @ DSP (R)	6 309,27	6 706,81	6,3%	4 901,04	5 254,48	7,2%
Savings + PMBs & other Chronic @ DSP (R)	6 668,54	8 198,97	22,9%	5 491,31	5 480,36	-0,2%
PMBs & other Chronic (R)	6 306,02	6 958,77	10,4%	6 140,34	6 269,46	2,1%
Savings + PMBs & other Chronic (R)	6 707,86	7 252,70	8,1%	5 813,44	6 178,45	6,3%
Traditional & PMBs Only @ DSPs (R)	5 609,45	5 929,75	5,7%	4 928,22	5 395,34	9,5%
PMBs Only (R)	6 144,49	6 934,86	12,9%	6 867,50	7 394,45	7,7%
Hybrid (EDO + primary) (R)	6 639,52	7 106,70	7,0%	6 455,45	6 834,62	5,9%
PMB Exempt (R)	4 673,76	5 293,99	13,3%	4 011,38	5 667,44	41,3%
Traditional + PMBs & other Chronic (R)	7 892,98	8 634,85	9,4%	4 754,33	5 049,99	6,2%
<b>Totals (R)</b>	<b>6 545,34</b>	<b>7 213,98</b>	<b>10,2%</b>	<b>5 442,90</b>	<b>5 748,82</b>	<b>5,6%</b>

\* represents the average cost per admission for the day case as the specific length of times spent are not known

Table 5 shows the average cost per day for the 2013 and 2014 financial years by benefit option type. For long stay admissions, the cost for the PMB Exempt benefit option type increased significantly, increasing by 41.3% increase from 2013 to 2014. This option has very few members and is prone to such fluctuations.

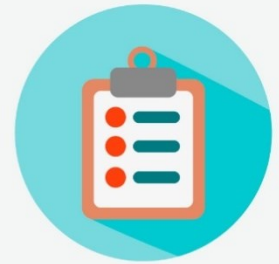
#### 4.1.1 Hospital admissions by admission type

The results that follows reports on the number of admissions and the average cost per admission by admission type. The results are shown according to the hospital admission category (Surgical, medical, ambulatory, maternity and emergency room) and contains information for the 2013 and 2014 financial years.

Due to data challenges discussed earlier, the average cost per day was not calculated as some schemes failed to provide accurate length of stay. Its also unclear how schemes allocated admissions between the various types of admission categories. The total admissions for these five categories therefore do not exactly match the total admissions discussed earlier.



# SURGICAL ADMISSIONS



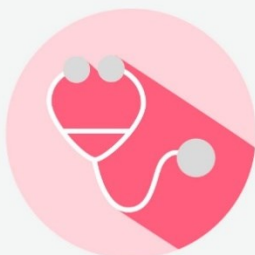
2013		2014		% CHANGE
NUMBER OF ADMISSIONS				pabpm
352 862	Day Case	356 825		0.1%
384 297	Long Stay	388 512		0.0%
AVERAGE COST PER ADMISSION (R)				
7 936.96	Day Case	8 492.97		7.0%
31 990.44	Long Stay	35 394.68		10.6%



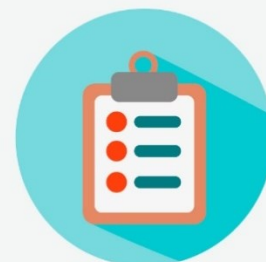
Long stay admissions for surgical admissions were more than the number of day case admissions in 2014. The number of admissions for day case admissions increased by only 0.1% pabpm while the number of admissions for long stay admissions remained relatively unchanged pabpm.

The average cost per day case admission was lower than the average cost per long stay admission. The average cost per day case admission increased by 7.0% while the average cost per long stay admission increased by 10.6%.





# MEDICAL ADMISSIONS



2013		2014		% CHANGE
NUMBER OF ADMISSIONS				pabpm
945 720	Day Case	918 184		-3.9%
1 061 028	Long Stay	1 090 405		1.7%
AVERAGE COST PER ADMISSION (R)				
2 563.93	Day Case	2 765.83		7.9%
19 303.76	Long Stay	20 603.97		6.7%



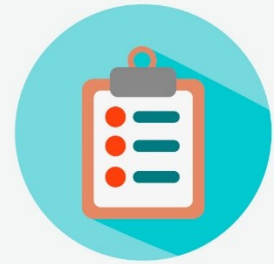
The number of medical admissions was fairly evenly split between day case admissions and long stay admissions with long stay admissions being slightly higher. The number of day case admissions decreased by 3.9% pabpm while the number of long stay admissions increased by 1.7%.

The average cost per admission for day case admissions was smaller than the long stay admissions. The average cost per admission for day case admissions increased by 7.9% and the increase in the average cost per admission for long stay was 6.7%.





# MATERNITY ADMISSIONS



2013		2014		% CHANGE
NUMBER OF ADMISSIONS				pa/fbpm*
4 420	Day Case	3 319		-25.9%
127 961	Long Stay	129 522		-0.2%
AVERAGE COST PER ADMISSION (R)				
4 405.55	Day Case	5 753.03		30.6%
17 884.99	Long Stay	19 109.51		6.8%



Most maternity admissions were long stay admissions. There was a decrease of 25.9% per average female beneficiary in the number of day case admissions while the number of long stay admissions decreased slightly by 0.2% per average female beneficiary.

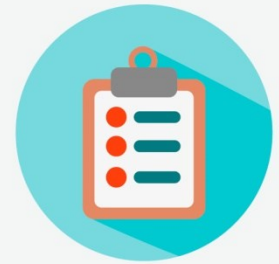
The average cost per admission for day case admissions was significantly lower than the average cost per admission for long stay admissions. The average cost per day case admission increased by 30.6% while the average cost per long stay admission increased by 6.8%.

\*per average female beneficiary per month

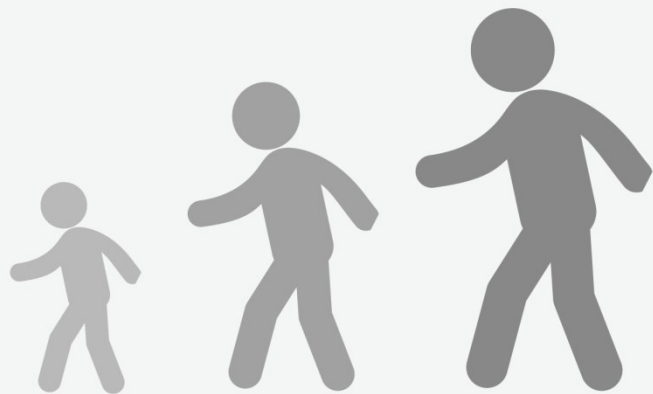




# AMBULATORY ADMISSIONS



2013		2014		% CHANGE
NUMBER OF ADMISSIONS				pabpm
24 846	Day Case	24 923		-0.7%
1 823	Long Stay	1 794		-2.6%
AVERAGE COST PER ADMISSION (R)				
3 077.80	Day Case	3 224.36		4.8%
6 410.69	Long Stay	4 566.96		-28.8%



The number of long stay admissions was much less than that of day case admissions in 2014. The number of admissions for day cases reduced by 0.7% pabpm. Similarly, the number of admissions for long stays decreased by 2.6% over the same period.

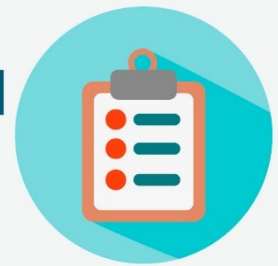
The average cost per day case admission increased by 4.8% while the average cost per long stay admission decreased by 28.8%. This decrease does not reflect a fall in costs but is largely due to the small number of long stay admissions.







# EMERGENCY ROOM ADMISSIONS



2013		2014		% CHANGE
NUMBER OF ADMISSIONS				pabpm
60 726	Day Case	66 086		7.7%
90 078	Long Stay	99 068		8.8%
AVERAGE COST PER ADMISSION (R)				
1 009.43	Day Case	1 092.96		8.3%
22 289.17	Long Stay	23 676.49		6.2%



There were significantly more long stay admissions compared to day case admissions at emergency rooms in 2014. The number of admissions for day case admissions increased by 7.7% pabpm while the number of admissions for long stay admissions increased by 8.8%.

Long stay admissions cost more per admission than day case admissions. The average cost per day case admission was 8.3% higher in 2014 while the average cost per long stay admission increased by 6.2% in 2014.



## 4.2 Providers

The data for providers mainly focussed on the number of visits (and whether or not they were in-hospital/out-of-hospital) and the number of consumables and medicines dispensed. The total number of visits to providers was 68 824 388 in 2013 and 71 435 900 in 2014.

The average cost per visit was R689 in 2013 and R744 in 2014. The total number of items (medicines or consumables) dispensed was 212 366 520 in 2013 and 223 161 203 in 2014. The average cost per item dispensed was R88.69 in 2013 and R92.18 in 2014.

**Table 6: Number of visits per 1 000 beneficiaries by benefit option type in 2013 & 2014**

Benefit Option Type	In-hospital		% change	Out-of-hospital		% change
	2013	2014		2013	2014	
<b>Traditional + PMBs &amp; other Chronic @ DSP</b>	2 116,8	2 242,6	<b>5,9%</b>	6 507,0	6 705,6	<b>3,1%</b>
<b>Savings + PMBs &amp; other Chronic @ DSP</b>	2 010,3	2 139,6	<b>6,4%</b>	6 892,5	7 048,3	<b>2,3%</b>
<b>PMBs &amp; other Chronic</b>	1 287,0	1 359,5	<b>5,6%</b>	2 207,4	2 379,9	<b>7,8%</b>
<b>Savings + PMBs &amp; other Chronic</b>	2 141,1	2 224,7	<b>3,9%</b>	6 115,0	6 258,0	<b>2,3%</b>
<b>Traditional &amp; PMBs Only @ DSPs</b>	1 126,7	1 263,1	<b>12,1%</b>	4 039,0	4 034,2	<b>-0,1%</b>
<b>PMBs Only</b>	1 930,0	2 014,1	<b>4,4%</b>	1 227,0	1 348,6	<b>9,9%</b>
<b>Hybrid (EDO + primary)</b>	2 189,4	2 266,7	<b>3,5%</b>	5 820,9	5 804,0	<b>-0,3%</b>
<b>PMB Exempt</b>	282,7	303,8	<b>7,5%</b>	1 631,4	1 782,4	<b>9,3%</b>
<b>Traditional + PMBs &amp; other Chronic</b>	2 088,6	2 160,8	<b>3,5%</b>	6 743,6	6 745,8	<b>0,0%</b>
<b>Totals</b>	2 004,3	2 107,7	<b>5,2%</b>	5 950,8	6 062,7	<b>1,9%</b>

Table 6 shows the number of visits to providers per 1 000 beneficiaries for the 2013 and 2014 financial years by benefit option type. All benefit option types had an increase in in-hospital visits from 2013 to 2014. The increase in out-of-hospital visits was lower than in-hospital visits with some options recording marginal decreases.

The largest increase for out-of-hospital visits was on the PMB Exempt and the PMBs - only benefit option types with increases of 9.3% and 9.9% respectively.

It's also important to note that the PMBs only had a very small portion of the beneficiaries. This option had a risk profile that was significantly worse off compared to other options. This in part, explains some of the utilisation trends observed.

**Table 7: Average cost per visit by benefit option type in 2013 & 2014**

Benefit Option Type	In-hospital		% change	Out-of-hospital		% change
	2013	2014		2013	2014	
<b>Traditional + PMBs &amp; other Chronic @ DSP (R)</b>	953,47	1 029,04	<b>7,9%</b>	493,72	532,54	<b>7,9%</b>
<b>Savings + PMBs &amp; other Chronic @ DSP (R)</b>	1 139,40	1 225,77	<b>7,6%</b>	572,54	610,64	<b>6,7%</b>
<b>PMBs &amp; other Chronic (R)</b>	1 185,66	1 267,82	<b>6,9%</b>	583,19	603,81	<b>3,5%</b>
<b>Savings + PMBs &amp; other Chronic (R)</b>	1 169,34	1 258,38	<b>7,6%</b>	599,15	649,69	<b>8,4%</b>
<b>Traditional &amp; PMBs Only @ DSPs (R)</b>	979,91	1 041,87	<b>6,3%</b>	427,56	455,24	<b>6,5%</b>
<b>PMBs Only (R)</b>	1 238,98	1 355,58	<b>9,4%</b>	472,79	533,42	<b>12,8%</b>
<b>Hybrid (EDO + primary) (R)</b>	1 354,26	1 442,20	<b>6,5%</b>	654,96	699,90	<b>6,9%</b>
<b>PMB Exempt (R)</b>	1 131,56	1 149,53	<b>1,6%</b>	514,99	525,88	<b>2,1%</b>
<b>Traditional + PMBs &amp; other Chronic (R)</b>	936,62	975,19	<b>4,1%</b>	485,27	527,84	<b>8,8%</b>
<b>Totals</b>	1 103,59	1 184,16	<b>7,3%</b>	549,53	591,04	<b>7,6%</b>

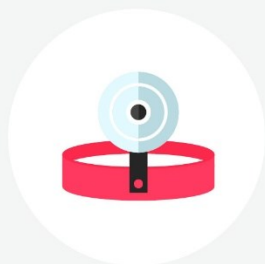
Table 7 shows the average cost per visit by benefit option type for the 2013 and 2014 financial years. The average cost per visit across all benefit options increased with the largest increase on the PMBs Only benefit option type.

The PMB Exempt benefit option type recorded the lowest increases in the average cost of a visit for both in-hospital and out-of-hospital increasing by 1.6% and 2.1% respectively.

#### 4.2.1 Utilisation at providers by discipline

The data that follows shows the number of visits to providers and the number of items dispensed along with the costs associated for the visits. The data is split by discipline group for providers and shows information for the 2013 and 2014 financial years.

The discipline classes used below are as per the 2015 Annual Statutory Report which were provided by the Board of Health Funders.



# GENERAL PRACTITIONERS



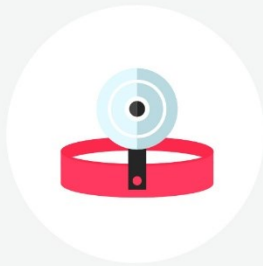
2013		2014		% CHANGE
<b>NUMBER OF VISITS</b>				<b>pabpm</b>
1 394 892	In Hospital	1 407 541		-0.2%
23 316 289	Out of Hospital	23 599 025		0.2%
<b>AVERAGE COST PER VISIT (R)</b>				
590.83	In Hospital	633.90		7.3%
291.63	Out of Hospital	310.44		6.5%
<b>NUMBER OF ITEMS DISPENSED</b>				
7 176 263	Consumables	7 331 135		1.1%
35 095 567	Medicine	34 780 656		-1.9%
<b>AVERAGE COST PER ITEM DISPENSED (R)</b>				
13.15	Consumables	13.28		1.0%
31.85	Medicine	33.41		4.9%

The bulk of visits to general practitioners occurs outside hospitals. In 2014, there were slight changes in the number of visits to general practitioners, decreasing by 0.2% for in-hospital visits and increasing by 0.2% for out-of-hospital visits.

The average cost for an in-hospital visit is approximately double that of an out-of-hospital visit. The average cost per visit increased by 7.3% for in-hospital visits and 6.5% for out-of-hospital visits.

More medicines are dispensed by general practitioners compared to consumables. The number of consumables dispensed by general practitioners increased slightly by 1.1% while the number of medicines dispensed decreased by 1.9%.





## SUPPLEMENTARY & ALLIED HEALTH PROFESSIONALS



2013		2014		% CHANGE
<b>NUMBER OF VISITS</b>				<b>pabpm</b>
2 993 650	In Hospital	3 320 772		9.8%
9 630 077	Out of Hospital	10 376 881		6.6%
<b>AVERAGE COST PER VISIT (R)</b>				
616.34	In Hospital	640.45		3.9%
665.18	Out of Hospital	708.10		6.5%
<b>NUMBER OF ITEMS DISPENSED</b>				
5 078 525	Consumables	5 129 004		-0.1%
161 124 722	Medicine	171 923 500		5.6%
<b>AVERAGE COST PER ITEM DISPENSED (R)</b>				
84.99	Consumables	89.14		4.9%
101.00	Medicine	104.15		3.1%

The majority of visits to supplementary and allied health professionals were out-of-hospital. There were significant increases in the number of in-hospital and out-of-hospital visits to supplementary and allied health professionals; with increases of 9.8% and 6.6% pabpm respectively.

On average, visits out-of-hospital cost slightly more than in-hospital visits. The average cost per visit in-hospital increased by 3.9% while the average cost per visit out-of-hospital increased by 6.5%.

The bulk of the items dispensed by supplementary and allied health professionals were medicines. The number of consumables dispensed decreased slightly by only 0.1% while the number of medicines dispensed increased by 5.6%.





# DENTISTS



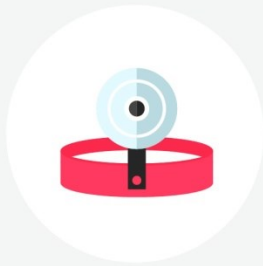
2013		2014		% CHANGE
<b>NUMBER OF VISITS</b>				<b>pabpm</b>
15 611	In Hospital	16 158		2.4%
3 444 449	Out of Hospital	3 477 966		-0.1%
<b>AVERAGE COST PER VISIT (R)</b>				
1 466.98	In Hospital	1 607.75		9.6%
823.20	Out of Hospital	875.92		6.4%
<b>NUMBER OF ITEMS DISPENSED</b>				
82	Consumables	146		76.2%
1 406	Medicine	1 007		-29.1%
<b>AVERAGE COST PER ITEM DISPENSED (R)</b>				
213.82	Consumables	146.95		-31.3%
34.05	Medicine	47.77		40.3%

A very large portion of visits to dentists were out-of-hospital. There were small changes in the number of in-hospital and out-of-hospital dentist visits; increasing by 2.4% and decreasing by 0.1% respectively.

In-hospital visits on average cost more than out-of-hospital visits. The average costs per visit increased by 9.6% and 6.4% for in-hospital visits and out-of-hospital visits respectively.

Medicines dispensed by dentists formed the bulk of items dispensed in 2014. Considering the number of visits to the dentist, they did not dispense many items, hence the big changes from 2013 to 2014 in the number of items dispensed as well as the average cost per items.





# MEDICAL SPECIALISTS



2013		2014		% CHANGE
<b>NUMBER OF VISITS</b>				<b>pabpm</b>
4 719 800	In Hospital	5 030 934		5.5%
4 149 229	Out of Hospital	4 207 984		0.4%
<b>AVERAGE COST PER VISIT (R)</b>				
827.57	In Hospital	887.01		7.2%
819.55	Out of Hospital	889.23		8.5%
<b>NUMBER OF ITEMS DISPENSED</b>				
1 184 004	Consumables	1 192 353		-0.4%
665 383	Medicine	607 632		-8.3%
<b>AVERAGE COST PER ITEM DISPENSED (R)</b>				
58.01	Consumables	58.70		1.2%
462.19	Medicine	381.41		-17.5%

There were more in-hospital visits to medical specialists than out-of-hospital visits. In-hospital visits increased by 5.5% pabpm from 2013 to 2014 while out-of-hospital visits increased by 0.4% over the same period.

The average cost per visit to medical specialists for both in-hospital and out-of-hospital were similar. The average cost per visit increased by 7.2% and 8.5% for in-hospital visits and out-of-hospital visits respectively.

More consumables were dispensed by medical specialists compared to medicines dispensed. The number of items dispensed decreased with the greatest decrease being medicines.





# SURGICAL SPECIALISTS



2013		2014		% CHANGE
<b>NUMBER OF VISITS</b>				<b>pabpm</b>
1 820 622	In Hospital	1 915 042		4.1%
1 815 300	Out of Hospital	1 830 993		-0.2%
<b>AVERAGE COST PER VISIT (R)</b>				
2 411.68	In Hospital	2 606.57		8.1%
736.67	Out of Hospital	794.22		7.8%
<b>NUMBER OF ITEMS DISPENSED</b>				
338 759	Consumables	499 049		3.5%
355 638	Medicine	522 179		3.9%
<b>AVERAGE COST PER ITEM DISPENSED (R)</b>				
266.15	Consumables	276.46		3.9%
136.77	Medicine	140.70		2.9%

There was a fairly even distribution of in-hospital and out-of-hospital visits to surgical specialists. In-hospital visits increased by 4.1% while out-of-hospital visits decreased by 0.2% in 2014.

The average cost per visit to surgical specialists increased for both in-hospital and out-of-hospital consultations increasing at 8.1% and 7.8% respectively. In-hospital visits cost more than three times the cost of out-of-hospital visits.

Surgical specialists dispensed more medicines at an average cost of R141 per item than consumables which cost R276 on average. There were modest increases in the average cost of items dispensed.







# ANAESTHETISTS



2013		2014		% CHANGE
<b>NUMBER OF VISITS</b>				<b>pabpm</b>
874 979	In Hospital	908 887		2.8%
110 775	Out of Hospital	115 746		3.4%
<b>AVERAGE COST PER VISIT (R)</b>				
2 330.56	In Hospital	2 556.36		9.7%
2 019.04	Out of Hospital	2 114.71		4.7%
<b>NUMBER OF ITEMS DISPENSED</b>				
9 961	Consumables	9 758		-3.1%
4 045	Medicine	4 555		11.4%
<b>AVERAGE COST PER ITEM DISPENSED (R)</b>				
162.15	Consumables	168.77		4.1%
49.88	Medicine	49.64		-0.5%

Most of the visits to anaesthetists were in-hospital. There was a small increase in the number of anaesthetists visits from 2013 to 2014 with in-hospital visits increasing by 2.8% and out-of-hospital visits increasing by 3.4%.

The average cost of in-hospital visits rose by 9.7% from 2013 while the average cost of out-of-hospital visits increased by 4.7%. The number of consumables dispensed by anaesthetists decreased by 3.1% and the medicines increased by 11.4%. The cost per consumable dispensed increased by 4.1% while the cost per medicine dispensed decreased by only 0.5%.





# DENTAL SPECIALISTS



2013		2014		% CHANGE
<b>NUMBER OF VISITS</b>				<b>pabpm</b>
23 351	In Hospital	22 140		-6.2%
711 183	Out of Hospital	724 322		0.8%
<b>AVERAGE COST PER VISIT (R)</b>				
2 615.34	In Hospital	3 031.36		15.9%
1 029.24	Out of Hospital	1 109.87		7.8%
<b>NUMBER OF ITEMS DISPENSED</b>				
2 440	Consumables	1 954		-20.8%
1 620	Medicine	1 502		-8.3%
<b>AVERAGE COST PER ITEM DISPENSED (R)</b>				
87.50	Consumables	125.38		43.3%
47.47	Medicine	44.54		-6.2%

The majority of visits to dental specialists were out-of-hospital. From 2013 to 2014, there was a decrease of 6.2% in the number of in-hospital visits while there was a 0.8% increase in the number of out-of-hospital visits. The average cost per visit in-hospital was almost three times the average cost of the out-of-hospital visit. The average cost per visit for in-hospital and out-of-hospital consultations increased by 15.9% and 7.8% respectively.

The number of consumables dispensed by dental specialists exceeded the amount of medicines dispensed. The number of consumables dispensed by dental specialists decreased by 20.8% while the number of medicines dispensed decreased by 8.3%.





# PATHOLOGY



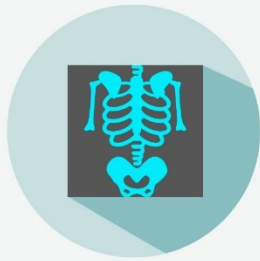
2013		2014		% CHANGE
<b>NUMBER OF VISITS</b>				<b>pabpm</b>
3 756 798	In Hospital	3 949 981		4.0%
5 651 609	Out of Hospital	5 931 964		3.9%
<b>AVERAGE COST PER VISIT (R)</b>				
734.84	In Hospital	784.94		6.8%
552.28	Out of Hospital	590.12		6.9%
<b>NUMBER OF ITEMS DISPENSED</b>				
228 567	Consumables	241 113		4.4%
60 940	Medicine	62 730		1.9%
<b>AVERAGE COST PER ITEM DISPENSED (R)</b>				
44.61	Consumables	47.14		5.7%
205.50	Medicine	291.00		41.6%

Most of the visits to pathologists were out-of-hospital. The visits in 2014 for pathology were 4% higher for those in-hospital while out-of-hospital visits grew by 3.9% pabpm.

On average, in-hospital visits cost more than out-of-hospital visits. The average cost per visit in-hospital increased by 6.8% while the average cost for a visit out-of-hospital increased by 6.9%.

Pathologists dispensed more items in the form of consumables compared to medicines. The number of consumables dispensed increased by 4.4% and the number of medicines dispensed increased by 1.9%.





# RADIOLOGY



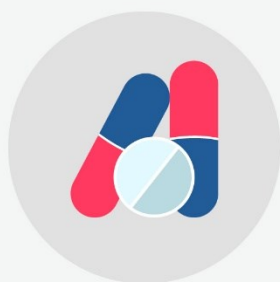
2013		2014		% CHANGE
<b>NUMBER OF VISITS</b>				<b>pabpm</b>
1 340 782	In Hospital	1 399 767		3.3%
2 183 607	Out of Hospital	2 234 119		1.2%
<b>AVERAGE COST PER VISIT (R)</b>				
1 555.44	In Hospital	1 690.89		8.7%
1 231.64	Out of Hospital	1 332.24		8.2%
<b>NUMBER OF ITEMS DISPENSED</b>				
342 238	Consumables	374 737		8.3%
234 622	Medicine	252 874		6.6%
<b>AVERAGE COST PER ITEM DISPENSED (R)</b>				
86.23	Consumables	96.59		12.0%
245.49	Medicine	262.40		6.9%

Most of the visits to radiologists were out-of-hospital. From 2013 to 2014, there were increases in utilisation of radiology increasing by 3.3% and 1.2% for in-hospital visits and out-of-hospital visits respectively.

The average cost per visit was higher for in-hospital visits than out-of-hospital visits. The average cost per visit in-hospital increased by 8.7% while the average cost per visit out-of-hospital increased by 8.2%.

The majority of items dispensed by radiologists were consumables. The number of consumables dispensed by radiologists increased by 8.3% while the number of medicines dispensed increased by 6.6%.





# OTHER HEALTH SERVICES



2013		2014		% CHANGE
<b>NUMBER OF VISITS</b>				<b>pabpm</b>
390 316	In Hospital	444 437		12.6%
426 321	Out of Hospital	455 970		5.8%
<b>AVERAGE COST PER VISIT (R)</b>				
3 062.38	In Hospital	3 270.90		6.8%
1 695.68	Out of Hospital	1 879.28		10.8%
<b>NUMBER OF ITEMS DISPENSED</b>				
230 009	Consumables	260 836		12.2%
97 153	Medicine	107 239		9.2%
<b>AVERAGE COST PER ITEM DISPENSED (R)</b>				
913.31	Consumables	1 034.95		13.3%
453.91	Medicine	449.61		-0.9%

In 2014, the number of in-hospital and out-of-hospital visits were relatively similar. The number of visits to other health services increased by 12.6% and 5.8% for in-hospital visits and out-of-hospital visits pabpm respectively.

The average cost of an in-hospital visit cost almost double that of out-of-hospital visits. The average cost per visit increased by 6.8% for in-hospital visits and increased by 10.8% for out-of-hospital visits.

The number of consumables dispensed by other health service professionals far exceeded the number of medicines dispensed. The number of consumables dispensed increased by 12.2% while the number of medicines dispensed increased by 9.2%.



### 4.3 Medicines

This section refers to medicines and consumables dispensed out-of-hospital. The total number of items dispensed was 212 366 560 in 2013 of which 14 752 285 were consumables and 197 614 235 were medicines. The total number of items dispensed was 223 161 203 in 2014 of which 15 063 860 was consumables and 208 097 343 were medicines.

The average cost per item dispensed was R88.69 in 2013 and R92.18 in 2014. The average cost per consumable dispensed was R66.38 in 2013 and R72.25 in 2014. The average cost per medicine dispensed was R90.36 in 2013 and R93.62 in 2014.

**Table 8: Number of items dispensed per 1 000 beneficiaries by benefit option type in 2013 & 2014**

Benefit Option Type	Consumables		% change	Medicine		% change
	2013	2014		2013	2014	
Traditional + PMBs & other Chronic @ DSP	2 452,51	2 441,55	-0,4%	30 158,78	30 634,79	1,6%
Savings + PMBs & other Chronic @ DSP	1 779,29	1 700,55	-4,4%	27 219,73	28 630,05	5,2%
PMBs & other Chronic	442,19	441,67	-0,1%	5 475,38	5 847,50	6,8%
Savings + PMBs & other Chronic	1 250,98	1 310,51	4,8%	20 450,58	21 517,93	5,2%
Traditional & PMBs Only @ DSPs	849,57	1 293,34	52,2%	13 221,12	20 866,96	57,8%
PMBs Only	348,84	405,37	16,2%	5 358,50	5 760,56	7,5%
Hybrid (EDO + primary)	1 131,83	1 137,82	0,5%	16 569,49	16 969,94	2,4%
PMB Exempt	918,45	1 073,38	16,9%	1 089,51	1 289,00	18,3%
Traditional + PMBs & other Chronic	2 054,43	2 157,94	5,0%	24 360,65	24 693,95	1,4%
<b>Totals</b>	<b>1 705,16</b>	<b>1 722,91</b>	<b>1,0%</b>	<b>22 841,47</b>	<b>23 800,91</b>	<b>4,2%</b>

Table 8 shows the number of items dispensed per 1 000 beneficiaries for the 2013 and 2014 financial years. There was a steep increase in the number of consumables dispensed in the Traditional + PMBs & other Chronic @ DSP benefit option type with increases of above 50%.

There were decreases in the number of consumable dispensed for three benefit option types. The Savings + PMBs & other Chronic @ DSP benefit option type have the most significant decrease of 4.4%.

**Table 9: Average cost per item dispensed by benefit option type in 2013 & 2014**

Benefit Option Type	Consumables			Medicine		
	2013	2014	% change	2013	2014	% change
Traditional + PMBs & other Chronic @ DSP (R)	56,09	63,02	12,3%	64,90	70,13	8,1%
Savings + PMBs & other Chronic @ DSP (R)	76,56	84,43	10,3%	94,44	97,18	2,9%
PMBs & other Chronic (R)	154,77	160,63	3,8%	139,28	133,59	-4,1%
Savings + PMBs & other Chronic (R)	61,67	66,22	7,4%	112,11	116,48	3,9%
Traditional & PMBs Only @ DSPs (R)	59,20	45,13	-23,8%	82,66	53,50	-35,3%
PMBs Only (R)	85,89	97,89	14,0%	83,50	88,31	5,8%
Hybrid (EDO + primary) (R)	94,35	98,61	4,5%	147,75	151,56	2,6%
PMB Exempt (R)	126,64	151,48	19,6%	78,65	77,09	-2,0%
Traditional + PMBs & other Chronic (R)	59,14	67,60	14,3%	95,32	100,91	5,9%
<b>Totals ®</b>	66,38	72,25	8,9%	90,36	93,62	3,6%

Table 9 shows the average cost per item dispensed for the 2013 and 2014 financial years by benefit option type. The average cost per item dispensed for consumables decreased on the PMBs & other Chronic benefit option type while it increased for the other benefit option types. The average cost of medicines dispensed was lower in 2014 for the PMB Exempt and the Traditional & PMBs Only @ DSPs and PMBs & other Chronic benefit option types.

The PMBs & other Chronic @ DSP benefit option type had a very significant decreases of 23.8% and 35.3% in the average cost consumable and medicine respectively. The overall impact was to reduce the effect of the higher number of in items dispensed noted earlier.

## 5. Conclusion and Recommendations

Hospitalisation recorded marginal decreases in measures of utilisation, there were lower admission rates and the shorter length of stay reduced. However the average cost of hospitalisation was significantly higher in 2014 compared to 2013. In 2014, the average cost per admission was up 10.4%. The average cost per day in-hospital was 6.1% higher in 2014.

The in patient days provided by some schemes was largely in accurate. Data adjustments had to be made using the data that was more accurate. Schemes are encouraged to review their data more before submitting to the CMS. However, valuable conclusions can still be made from this data. The CMS intends to use these utilisation statics to formulate a contribution inflation index to track what affects contribution increases over time.

It's important that data is collect and reported in a consistent way. It is recommended that the CMS engages with schemes so at to improve the quality of data. The number of in-patient days should be reported accurately. Schemes need to consistently report on admission by admission categories in cases where patients are transferred from one admission setting to another such as a transfer from emergency room to surgical theatre.

The utilisation of providers increased at a rate of 2.7% in 2014. Higher increases were observed for in-hospital visits. The average cost of each visit to a provider increased 8% in 2014, with higher increases recorded for in-hospital visits. The average cost of each visit in-hospital was significantly higher than the average cost out-of-hospital for most providers.

Expenditure on medicines out-of-hospital reordered the most modest growth. The average cost per item dispensed increased 3.9% in 2014. The average number of items dispensed pabpm was up by 4%.

This analysis is limited to health-services that have been paid for by schemes. It therefore does to include expenditure paid out of pocket. To get a better understanding of actual healthcare trends out of pocket payment utilisation should not be ignored.



## 6. References

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