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ARTICLE

General practitioner as a gatekeeper and medical scheme benefit design in South Africa.

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ABSTRACT

General Practitioners (GPs) serve a gatekeeper function in many healthcare systems. Cost containment strategies in the health care ecosystem usually focus on the role of GPs as the point of entry. The healthcare expenditure as the proportion of total healthcare spent on medical schemes in South Africa has been declining over time. This could be attributed to a shift in benefit design and product development employed by schemes. The aim of this study was to investigate GP health spending by medical schemes, the average spent per GP visit, the level of co-payment that members are subjected to and the GP to member ratio in South Africa. The study design was a cross-sectional study which was performed by linking annual statutory returns data, claims data and provider distribution data collected on an annual basis by the Council for Medical Schemes. The data was further mirrored to the Practice code numbering data received from the Board of Healthcare Funders (BHF). A total of 79 medical schemes claims data was included in the analysis. The average number of visits per beneficiaries was 3. The distribution of GPs claiming from medical schemes follow the distribution of beneficiary by province. The ratio of claiming GPs per 1000 beneficiaries was 2. These results further revealed a shift in benefit design and that medical scheme members bypass GPs directly to specialist services which is a secondary level of care, thus undermining the role of GPs as gatekeepers. It is concerning that GP consultation is attracting a co-payment of as high as 39%. Reprioritisation and emphasis on the role of a GP as gatekeepers as a function of the benefit design process is key to improving quality of care.

Keywords: *General Practitioners, Gatekeeping, Primary Health Care, Benefit Design, Medical Schemes.*

INTRODUCTION

General Practitioners *(GPs)* serve a gatekeeper function in many healthcare systems. Cost containment strategies in the health care ecosystem usually focus on the role of GPs as the point of entry in accessing care. *Greenfield et al. (2016)* argue that gatekeeping has a beneficial effect on service utilization, health outcomes, healthcare costs, and patient satisfaction. They also outlined the pros and cons of gatekeeping and policies in various countries concerning gatekeeping by exploring several studies. Among the emerging issues from their study, they discussed the controversy around gatekeeping: Finance and ethics, Patient choice and satisfaction, Inequalities, GP-specialist divide, etc. According to their analysis gatekeeping ensures that patients see specialists only for conditions that could not be managed by a GP and are referred to an appropriate specialist, and it saves specialists' time for more complex cases.

According to *Greenfield et al. (2016)*, lack of data makes it hard to decide on how best to implement gatekeeping. Evidence in private health care in South Africa depict an unreceptive picture in the use of preventative and primary health care services as key components of benefit design. The healthcare expenditure as a proportion of health care spent on medical schemes in South Africa has been declining over time. This could be attributed to a shift in the benefit design and product development process employed by schemes.

The present study was aimed at investigating GP health spending by medical schemes, the average spent per GP visit, the level of co-payment that members are subjected to and the GP to beneficiary ratio *(density ratio)*.

MATERIAL AND METHODS

The data used were sourced from the annual statutory return submissions, which schemes submit to the Office of the Registrar. The data were captured on the annual statutory return's portal, then exported into Microsoft Excel spreadsheets *(Microsoft Corp., USA)*. Data analysed included open and restricted schemes' claims data for the 2018 performance years. The data mainly focused on the utilisation of GP services, such as GP consults and the average cost of the event. Inclusion criteria were schemes that submitted complete data on the variables of interest.

The study design was a cross-sectional study, which was performed by linking annual statutory returns data, claims data and provider distribution data collected on an annual basis by the Council for Medical Schemes *(CMS)*. The data was further mirrored to the Practice code numbering data received from the Board of Healthcare Funders *(BHF)*. The data mainly considered a general practitioners *(GPs)*; the referral process between respective providers was not assessed.

The data were populated by selecting a discipline code closely linked to the General practitioner consult. Similarly, no comparison was done between the GP in-hospital *(IH)* event and the out of hospital *(OOH)* event.

RESULTS

Claims data from a total of 79 medical schemes was considered in the analysis with a primary focus on the utilisation of GP services, thus the study accounted for 7,749 GPs.

The average number of visits per beneficiary was 3. The analysis conducted further assessed the distribution of beneficiaries and GP in the nine provinces. Figure 1 depicts the proportion of both beneficiaries and GPs for each of the nine provinces. The results revealed that the distribution of GPs' claiming from medical schemes follows the distribution of beneficiaries by province. The ratio of claiming GPs per 1000 beneficiaries was 2.1.

Historical data depicts that GPs' services accounted for more than fifteen percent *(15%)* of benefits paid. However, this has declined to less than six percent *(6%)* in recent years *(Figure 2)*.

Table 1 depicts the amount paid per visit for a GP consultation between open and restricted schemes. The Median GP consultation was R424.00 *(IQR: R365.00-R463.00)*.

There were no significant differences between open and restricted schemes. The interquartile range was slightly higher for restricted schemes when compared to open schemes. This was seen in the maximum amount paid for a GP consultation per visit, which was R659.00 compared to that of open schemes of R458.00. Two restricted schemes paid more than R500.00 per GP visit. Table 2 depicted the level of

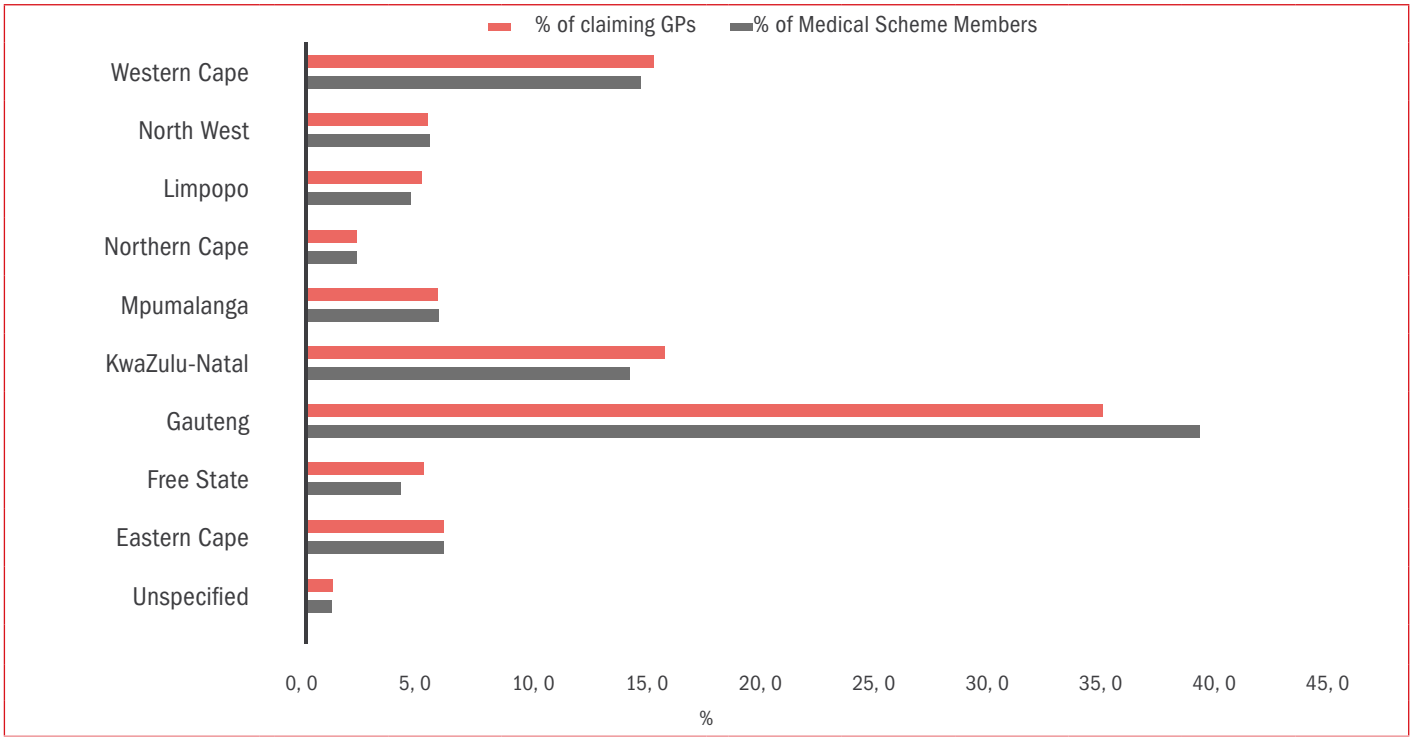

Figure 1. Proportion of lives and GPs per province.

co-payments for a GP consult. This ranged between three and thirty-nine percent of the amount claimed for open schemes compared to three and thirty-two percent for restricted schemes. Figure 3 below further depicted one restricted scheme that attracted co-payments of more than 20%, there were four open medical schemes that attracted a similar level of co-payments. Figure 4 depicts the level of co-payments per GP visit and the average amount paid, stratified by province.

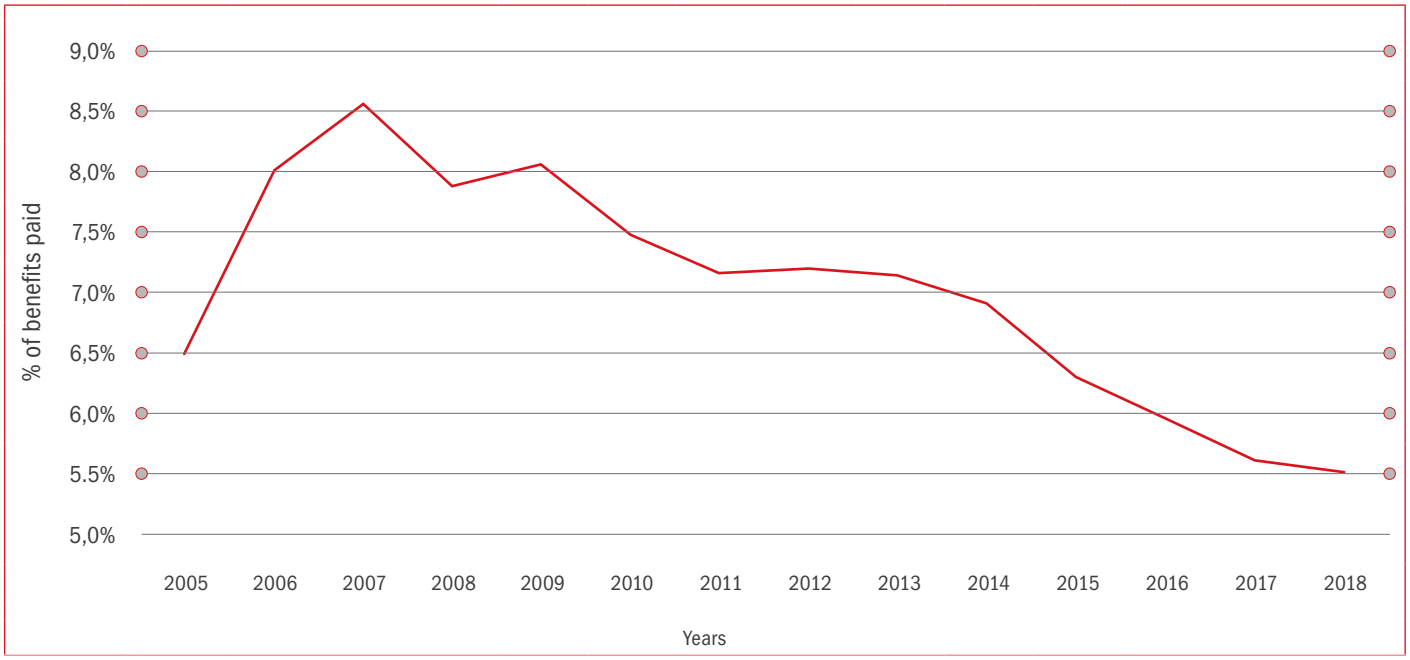

Figure 2. Benefits Paid towards GP services as % of all benefits paid (2005-2018).

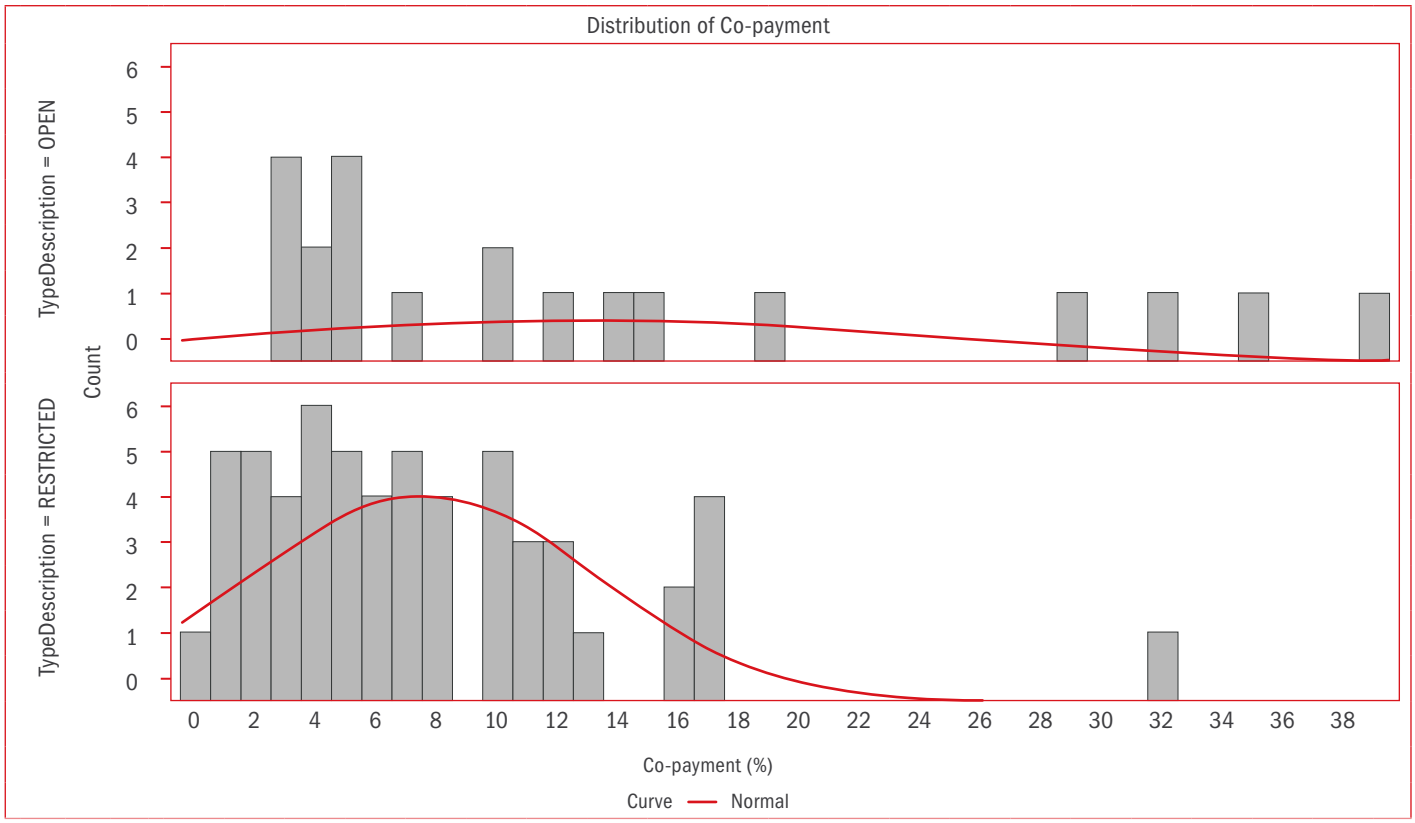

Figure 3. Distribution of co-payment (%) for GP visits by scheme type.

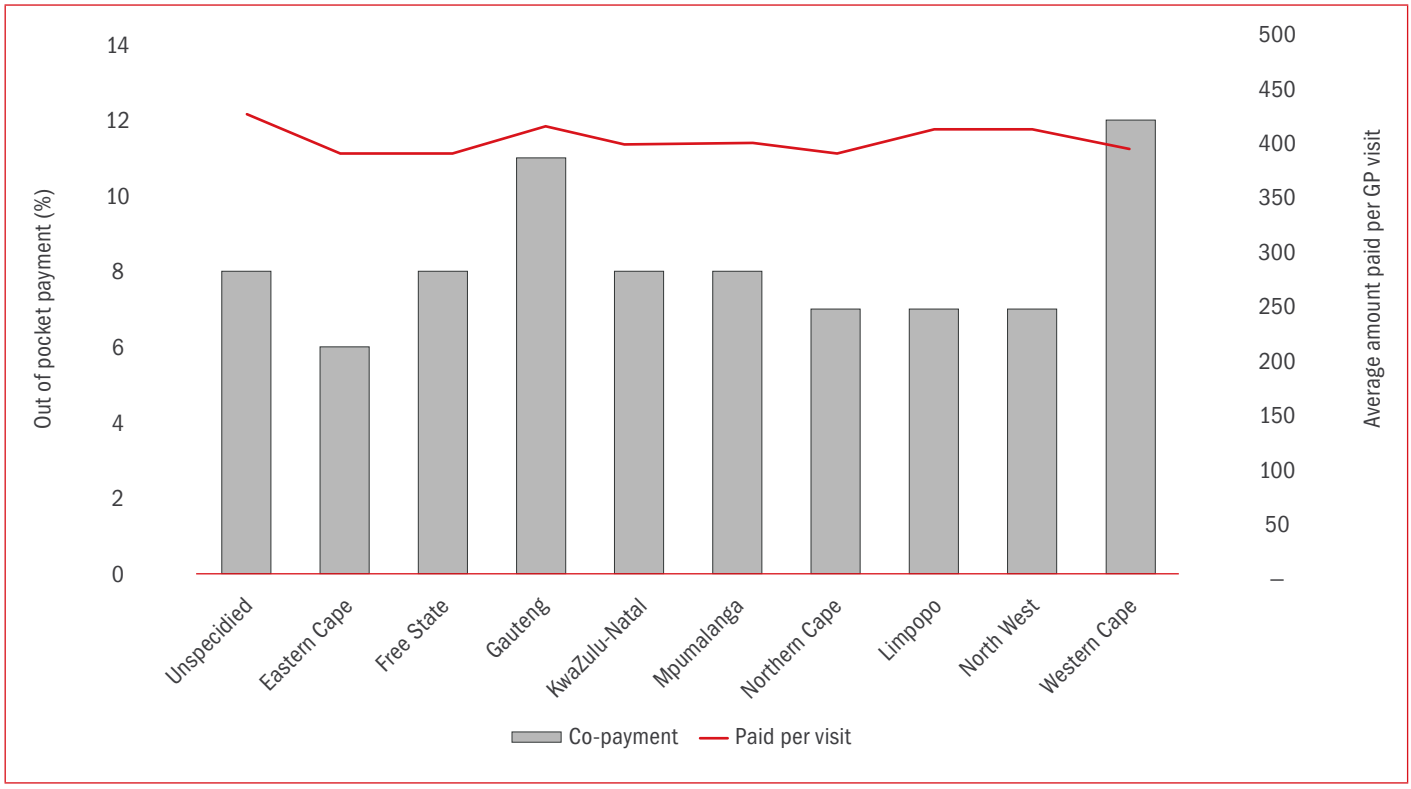

Figure 4. Paid per GP visit and level of Co-payment per province.

Table 1. Descriptive statistics on Cost per GP visits and level of Co-pay

Scheme Type	Variable	N	Minimum	p25	p50	p75	Maximum
OPEN	Paid per visit	21	264,92	348,98	428,75	445,58	457,99
	Co-pay (%)		3	4	7	15	39
RESTRICTED	Paid per visit	58	229,34	365,67	423,27	463,96	658,93
	Co-pay (%)		0	3	6	10	32
INDUSTRY	Paid per visit	79	229,34	359,99	423,9	456,77	658,93
	Co-pay (%)		-	4	6	11	39

PPV= Paid Per Visit (Rand)

Table 2. various reasons or types of co-payments.

Reference price co-payments: Reference pricing is a system by which products that are generically or therapeutically equivalent are grouped together, and a maximum reimbursement price is determined for the group.
Charges above scheme rates: Medical schemes typically reimburse medicines at a default dispensing fee or at rates contracted with providers. Any amount charged in excess of the sum of the SEP and the applicable dispensing fee results in a co-payment in the form of an overcharge to the member.
Non-DSP co-payments: Medical schemes can contract with preferred providers or designated service providers (DSPs) to provide services to their members at advantageous rates and within specified parameters. Penalties, in the form of co- payments, are sometimes applied when members opt to obtain medicines from non-DSPs.
Benefit design co-payments include all co-payments that result from the application of benefit design rules, excluding charges above the scheme's reimbursement rate.
Set co-payments applicable to specific benefits: Predetermined co-payments, in the form of a fixed percentage or value, can be applied to selected benefit types.

DISCUSSION

This study showed the there has been a decline in the healthcare spending of GP service, this finding is supported by various literature in that the benefit design in medical schemes has become more hospi-centric than offering on preventing and primary health care types of benefits. Various reasons have led to a reduction in primary care health benefits, some of which are unintended consequences. The recently published health market enquiry report revealed that PMB provisions on catastrophic coverage to the exclusion of primary health care promotes hospi-centric care *(Competition Commission, 2019; Kaplan & Ranchod, 2015)*.

This study also revealed high levels of co-payments that medical scheme members are subjected to; this adds a financial burden to beneficiaries. An earlier research study conducted by CMS also revealed an estimate of the out of pocket payment *(OOP)* to be between R10 billion to R15 billion in the region *(CMS, 2015)*. The CMS annual report depicted the actual co-payment of 15.7 billion in 2018 *(excluding Medical Savings Account component) (CMS, 2019)*. This data is also an underestimate, as members of medical schemes do not always disclose nor report all co-payment to schemes. Thus, the true value could also be higher than R15 billion.

Multiple reasons may result in a co-payment by a beneficiary of a medical scheme. Some benefit design measures may cause a transfer of risk or cost to members, in the form of co-payments at the point of dispensing *(Mediscor, 2019)*. To minimise this effect, members, providers and prescribers are often guided and incentivised to make clinically appropriate and cost-effective medicine choices.

The CMS annual report depicted that over seventy percent *(70%)* of medical scheme members visit a GP on an annual basis with an average number of three *(3)* visits. The top five reasons for a GP consultation reported by the second-largest restricted medical scheme in South Africa *(GEMS, 2018)* were: Acute upper respiratory infections, Acute bronchitis, Influenza, Essential hypertension, and Acute sinusitis. For the period, a significant number of GP consultations, which accounted for 11% of GP consults, were mainly for acute upper respiratory infections. The second-highest one that accounted for four percent *(4%)* was bronchitis.

The top 10 reasons for a GP visit reported by an open scheme medical scheme were: Acute upper respiratory infection, Essential *(primary)* hypertension, Acute bronchitis unspecified, Influenza due to unidentified influenza virus with other respiratory manifestations, Low back pain, Urinary tract infection site not specified, Myalgia, Acute tonsillitis unspecified, Encounter for general adult medical examination, and Acute sinusitis unspecified.

The top main reason *(in terms of volumes)* for a GP consult was acute upper respiratory infection and this was similar that reported by *GEMS (2018)*. Acute bronchitis, influenza, essential *(primary)* hypertension. The two schemes accounted for more than two million lives which represented nearly thirty percent of covered lives in 2018.

The results of this study revealed a shift in benefit design and that medical scheme members are bypassing GPs, thus undermining the role of GPs as gatekeepers. Gatekeeping should be a complementary mechanism in a system that implements integrated care, with a softer division between primary and secondary care that enables those who need specialist care to access it quickly *(Greenfield et al. 2016)*.

Greenfield et al. (2016) echoed that gatekeeping policies should be revisited in terms of giving patients more choice and facilitate more collaborative work between GPs and specialists. It is concerning that GPs consultation is attracting a co-payment of as high as thirty-nine percent. Reprioritisation and emphasis on the role of GPs as gatekeepers as a function of the benefit design process is key to improving quality of care. There is indeed a significant role that medical schemes can play in educating members on benefits offered and the exclusions thereof. This will assist to ensure that members know what they are covered for and can optimise on choosing on benefit options that meet their healthcare needs.

REFERENCES

Competition Commission. Health Market Inquiry Final Findings and Recommendations Report. 2019. Available at: http://www.compcom.co.za/wp-content/uploads/2014/09/Health-Market-Inquiry-Report.pdf.

Council for Medical Schemes. CMS Annual Report 2018-2019. 2019. Available at: http://www.medicalschemes.com/files/Annual%20Reports/CMSAR2018_19.pdf.

Council for Medical Schemes. Out of Pocket Payments by Medical Scheme Members. 2015. Available at: http://www.medicalschemes.com/files/Research%20Briefs/RBOPPStudy2013.pdf.

Government Employees Medical Scheme. Annual Integrated Report. 2018. Available at: file:///C:/Users/Kimun/Downloads/Full%202018%20Annual%20Integrated%20Report.pdf.

Greenfield G, Foley K, Majeed A. Rethinking primary care's gatekeeper role. Br Med J. 2016; 354:i4803.

Kaplan J, Ranchod S. An actuarial perspective on medical scheme benefit deign. Actuarial Society 2015 Convention. 2015. Available at: https://static.iono.fm/files/p65/att_20151209_142912_src.pdf.

Mediscor. Medicine expenditure trends 2017 – 2018. Mediscor Medicines Review. South Africa: Mediscor; 2019.