

# **Factors that influence medical scheme insured consumers to co-pay for prescription medicines at private community pharmacies in Pretoria, Gauteng Province, South Africa**

Ntobeko Magnate Mpanza

Student No: 3406054

A mini-thesis submitted in partial fulfillment of the requirements for the degree of Master of Public Health at the School of Public Health, University of the Western Cape



Supervisor: Dr Hazel Bradley

Co-supervisor: Prof Richard Laing

September 2016

## KEYWORDS

- Co-payment
- Dispensing doctor
- Generic medicines
- Medical schemes
- Pharmacists
- Policy enforcement
- Prescription
- Private Sector
- Regulator
- Single Exit Price



## ABSTRACT

**Background:** South African medical scheme members needlessly purchase high cost originator prescription medicines which attract out of pocket co-payments at pharmacies. This is despite availability of low priced generic medicines that are paid for in full by medical schemes. Co-payments result from misalignment between prices of the dispensed medicine and that of the alternative medicine which appears on the medical scheme's formulary list and for which the scheme is prepared to pay for in full. To establish what factors caused such misalignment, perspectives of medical scheme members and key informants which included pharmacists, regulators and representatives of medical schemes were explored. The study focused on co-payments for prescription medicines dispensed at private sector retail pharmacies in Pretoria, South Africa.

**Aim:** The aim of the study was to explore views about co-payments and identify factors that motivate and influence Pretoria medical scheme members to co-pay when purchasing prescription medicines at pharmacies, despite being insured by medical scheme insurance organizations.

**Methodology:** An exploratory qualitative research study was performed. Semi-structured interviews were conducted among purposefully selected medical scheme members (12) and 9 key informants. Key informants consisted of dispensing pharmacists (6), regulators of health professionals and medical schemes (2) and a senior official (1) with experience in the regulation of medicines and operations within medical scheme organizations. From a total of twelve interviewed medical scheme members, eight were interviewed at preselected retail pharmacies after they had made a co-payment and the other four selected because they did not make a co-payment. To ensure diversity in views about co-payments and related factors, dispensing pharmacists, co-paying and non co-paying medical scheme members were accessed from six pharmacies that are located in two separate locations of different socioeconomic status in Pretoria, that is, the Pretoria East suburban area and Pretoria city

centre which is close to Pretoria central station and taxi routes. Three pharmacies were identified from each of the two different geographical locations, one independent and two corporate pharmacies per socioeconomic area. One pharmacist was interviewed from each of the selected pharmacies and medical scheme members were accessed from across the six pharmacies. The remainder of the key informants such as the regulators, were interviewed during office hours at venues of their choice which included areas of work. A pilot study was conducted among medical scheme members and pharmacists to test the applicability of interview tools. All interviews were conducted face-to-face by the researcher and recorded. The electronic record was independently compared with the researcher's enhanced notes for data accuracy. Codes identified during data analysis were derived from the interview notes and recordings and translated into organized text for theme development in a manner that referenced them to each study objective. Themes were arrived at after combining similar codes which were noted as representing a particular description for use during data interpretation and report writing.

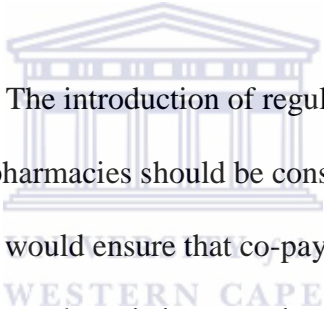


**Ethics:** Ethical clearance was sought from the UWC Senate Research Committee and granted. Prior to conducting interviews, written consent was obtained from all participants. Research details were explained and also provided on the participant information sheet wherein voluntary participation was emphasized. Anonymity and confidentiality was maintained throughout.

**Results:** All patients and pharmacists expressed confusion about the medical scheme rules and related co-payments. There were differing co-payment perspectives among scheme members depending on socioeconomic status, with affordability being a key factor among those of lower socio-economic status whilst convenience and lack of comprehensible information about co-payments was prioritised amongst those members of higher socioeconomic status. Key influences on patient's purchasing decisions were health professionals (both doctors and pharmacists), with friends, family members and

advertisements less influential. Patients and medical schemes generally preferred to utilise large chain pharmacies and patients, in particular, had a poor perception of the quality of generics. In general, the first prescribed medicine was highly favoured by patients and this influenced medicine preferences during subsequent prescriptions, especially for non communicable disease (NCD) medicines.

Pharmacists did not apply the generic substitution policy in a manner that benefited the consumer because the lowest priced generic was frequently not kept as pharmacy stock. Co-payments appeared to create a divide between corporate and independent pharmacies. Some regulators tended to blame patients, pharmacists and medical schemes rather than the lack of adequate enforcement of national policies and regulations. Inadequate monitoring and enforcement of pro-consumer policies were found to be the main factors that contributed to co-payments.



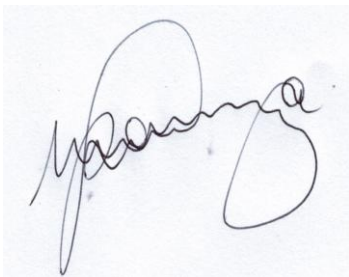
**Conclusions and Recommendations:** The introduction of regulations on minimum requirements for stock available at private sector retail pharmacies should be considered to ensure availability of the lowest priced generic at all times. This would ensure that co-payments are reduced and the desired consumer benefits that should accrue from the existing generic substitution policy are realized and maximized. To prevent perception-based and self-initiated co-payment behavior among consumers, vigorous and continued education about the value and equivalence of generics should be championed at the highest level of government with the execution of this critical responsibility not left to those with profit driven motives. Consumers might benefit from extensive education about the purchasing choices made at pharmacies and, in particular, the negative financial consequences associated with choosing a preferred but highly priced originator versus a low cost generic medicine which is used to treat the same ailment. Enforcement of policies by dedicated government agencies could further protect consumers from preventable high cost of healthcare and of medicines in particular.

## DECLARATION

I declare that *Factors that influence medical scheme insured consumers to co-pay for prescription medicines at private community pharmacies in Pretoria, Gauteng Province, South Africa* is my own work, that it has not been submitted for any degree or examination in any other university, and that all the sources I have used or quoted have been indicated and acknowledged by complete references.

**Name: Ntobeko Magnate Mpanza**

**Signed: NM MPANZA**



---

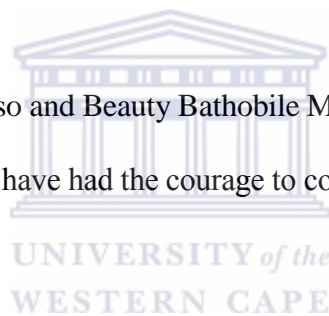
**Date: 19 September 2016**

## ACKNOWLEDGEMENTS

I wish to thank the technical and administrative staff at UWC School of Public Health and the main library for their time, patience and support throughout my journey. Most of all my immense gratitude goes to Prof van Wyk for his motivation and Corinne for always going an extra mile to ensure that our experience and exposure to UWC is positively memorable.

To my supervisors Dr Hazel Bradley and Prof Richard Laing, thank you for your guidance and for always making time to impart your knowledge and share invaluable insights into my study during our numerous Skype sessions, despite your very busy schedules. I remain indebted to your experienced views on the topic of my research.

Finally, I wish to thank Naledi, Nkanyiso and Beauty Bathobile Mpanza for their unconditional support and love and without whom I wouldn't have had the courage to complete this programme.



## TABLE OF CONTENTS

TITLE .....	i
KEYWORDS.....	ii
ABSTRACT .....	iii
DECLARATION .....	vi
ACKNOWLEDGEMENTS .....	vii
TABLE OF CONTENTS .....	viii
LIST OF FIGURES AND TABLES .....	x
ABBREVIATIONS .....	xi
DEFINITIONS.....	xii
 CHAPTER 1- INTRODUCTION.....	 1
1.1. INTRODUCTION.....	1
1.1.1 CO-PAYMENTS IN PRIVATE SECTOR SETTINGS .....	2
1.1.2 POTENTIAL IMPACT OF CO-PAYMENTS.....	3
1.1.3 SOUTH AFRICAN CONTEXT.....	4
1.2. PROBLEM STATEMENT.....	7
1.3. STUDY RATIONALE .....	7
1.4. AIMS AND OBJECTIVES.....	8
 CHAPTER 2 – LITERATURE REVIEW .....	 9
2.1 INTRODUCTION.....	9
2.2 FACTORS THAT INDIRECTLY INFLUENCE CONSUMER PURCHASING CHOICES FOR MEDICINES .....	9
2.3 CONSUMER FACTORS WITH A DIRECT INFLUENCE ON CO-PAYMENT OUTCOMES....	11
2.4 CONCLUSION.....	15
 CHAPTER 3 – METHODOLOGY .....	 16
3.1. STUDY DESIGN .....	16
3.2. STUDY SETTING.....	16
3.3. STUDY POPULATION.....	16



<b>3.4. SAMPLING .....</b>	<b>17</b>
<b>3.5. DATA COLLECTION.....</b>	<b>19</b>
<b>3.6. DATA ANALYSIS .....</b>	<b>20</b>
<b>3.7. VALIDITY AND RELIABILITY.....</b>	<b>20</b>
<b>3.8. STUDY LIMITATIONS.....</b>	<b>21</b>
<b>3.9. ETHICS.....</b>	<b>21</b>
<b>CHAPTER 4 – RESULTS .....</b>	<b>23</b>
<b>4.1 INTRODUCTION.....</b>	<b>23</b>
<b>4.2 VIEWS AND REASONING ABOUT CO-PAYMENTS .....</b>	<b>24</b>
<b>4.3 HOW MEDICAL SCHEME MEMBERS CHOOSE PHARMACIES AND MEDICINES.....</b>	<b>30</b>
<b>4.4 PERCEIVED INFLUENCE OF HEALTH PROFESSIONALS ON MEDICINE SELECTION ....</b>	<b>31</b>
<b>4.5 PHARMACISTS VIEWS ABOUT CO-PAYMENTS AND PURCHASING CHOICES OF CONSUMERS.....</b>	<b>34</b>
<b>4.6 VIEWS ABOUT LEGISLATIVE INTERVENTIONS AND DISPENSING PRACTICES AS THEY RELATE TO CO-PAYMENTS .....</b>	<b>38</b>
<b>4.7 CONCLUSION.....</b>	<b>43</b>
<b>CHAPTER 5 – DISCUSSION.....</b>	<b>46</b>
<b>5.1 INTRODUCTION.....</b>	<b>46</b>
<b>CHAPTER 6 – CONCLUSION AND RECOMMENDATIONS.....</b>	<b>51</b>
<b>REFERENCES.....</b>	<b>53</b>
<b>APPENDICES .....</b>	<b>73</b>

## LIST OF FIGURES AND TABLES

<b>Figure 1:</b> Distribution of pharmacists and medical scheme Member Interviewees between pharmacies.....	<b>17</b>
<b>Table 1:</b> The Study Population and Interview Locations.....	<b>23</b>



## ABBREVIATIONS

CMS	Council for Medical schemes
DSP	Designated Service Provider
HIC	High Income Corporate Pharmacy Purchaser
HII	High Income Independent Pharmacy Purchaser
LIC	Low Income Corporate Pharmacy Purchaser
LII	Low Income Independent Pharmacy Purchaser
OOP	Out of pocket payment
PEE	Pharmaceutical Economic Evaluations
SAPC	South African Pharmacy Council
SEP	Single Exit Price



## DEFINITIONS

- **Co-payments:** Out of pocket payment charges at the point of service that meets part of the service cost– (CMS, 2015).
- **Co-insurance:** Co-insurance is the percentage (rather than specific amount) of the cost of a service that the patient is responsible to pay and a co-payment is a fee that patients must pay for each health service received - (Bodenheimer, 2005).
- **Deductible:** A deductible is the sum of money patients must pay to physicians or hospitals each year before the insurance company begins to pay for services - (Bodenheimer, 2005).
- **Levy:** In 2012, The South African Pharmacy Council published Rules relating to the services for which a pharmacist may levy a fee and guidelines for levying such fee or fees, in terms of sections 35A(b)(iii) and 49(4) of the Pharmacy Act, 1974 (Act 53 of 1974) as amended - (SAPC,2012).
- **Mandatory Generic Substitution:** is a medicine plan feature that limits the ingredient cost of a medicine charge to that of the lowest cost alternative. Where there is a generic interchangeable medicine (a generic equivalent) then the generic medicine will be dispensed or the plan member will be reimbursed up to the cost of the generic equivalent. This plan feature helps to limit cost within a group insurance medicine program, paying a lower cost for a chemically equivalent medicine - (Canadian Benefits Consultants. Co, 2015).
- **Medical Insurance:** Medical Health insurance models operate on a for- profit model, outside of the protection of the regulation of the Medical schemes Act, and different people pay

different premiums depending on their risk profile - (Francis, K., 2013\_ Helen. Suzman. foundation).

- **Medical scheme:** Medical schemes, under the protection of the regulation of the Medical schemes Act, have a large part to play in ensuring the right of access to healthcare. Medical schemes are registered under the jurisdiction of the Council for Medical Schemes (CMS) and are required to charge members the same premiums for the same benefits. This prevents price discrimination against older or less healthy members. (Francis, K., 2013\_ Helen Suzman .foundation).
- **Medical scheme Member:** Refers to both the principal member and beneficiaries. Members' refers to principal members, or those paying the contribution. 'Beneficiaries' are all those with cover on the medical scheme, including families of the principal members – (McLeod and Ramjee, 2007).
- **Moral hazard:** The tendency for entitlement to benefits under health insurance to act as an incentive for people to consume more and 'better' health care than they would if they were not covered by insurance – (McIntyre et al., 2010).
- **Out of pocket payment:** Out-of-pocket expenditures reported in MEPS represent self-reported payments for coinsurance and deductibles, as well as cash outlays for services, supplies, and other items not covered by health insurance – (Hwang et al., 2001).
- **PMB:** The Medical schemes Act of 1998 says that medical schemes must, according to law, at least pay for the treatment of a certain list of conditions as well as a list of procedures (270

altogether). These conditions and procedures are called PMBs (prescribed minimum benefits).

- **Regulator:** This term is used to describe an official who is employed to perform National regulatory functions in a regulatory authority institution. The promulgation of regulations, the collection of licensing and registration fees, and the enforcement of the national law and its regulations are legally delegated to an agency usually called the national drug regulatory authority - (Management Sciences for Health, 2012).
- **Total health expenditure:** is the sum of public and private health expenditures as a ratio of total population. It covers the provision of health services (preventive and curative), family planning activities, nutrition activities, and emergency aid designated for health but does not include provision of water and sanitation - (World Bank, 2015).



## CHAPTER 1- INTRODUCTION

### 1.1. Introduction

According to Dukes et al., (2003) the rapid global growth of expenditure on healthcare is of particular concern. Concerns are based on a lack of empirical evidence to support the high reimbursement rates and utilization of funds for healthcare services and related commodities that are accompanied by claims of certain benefits to patients (Shah et al., 2004; Sinha and Batra, 1999; Andrea et al., 2011; Azores, 2013). Medicines are some of the healthcare commodities that significantly contribute to the high cost of healthcare (Blonqvist and Xu, 2001). Globally, although governments and funders continue to introduce cost containment measures for medicines, costs continue to escalate. In Canada, medicines expenses rose more than four– fold from 1985 to 2004 and in Portugal the percentage of medicine costs doubled in relation to healthcare expenses between 1980 to 1998 (Andrea et al., 2011; Coombes et al., 2004). Several explanations have been offered for high and rising health care costs and these include perspectives that suggest that, among other things, high and rising costs are created by the weakness of a competitive free market and information asymmetry within the health system, excessive costs of administering the health system, absence of strong cost-containment measures, and by the undue market power of health care providers (Bodenheimer, 2005; Tang et al., 2008).

Generally, high expenditure is observed more in private sector settings than in the public sector with the most rapid growth in cost observed in prescription medicines and administrative costs of private health insurance (Bodenheimer, 2005). The consequences of high private healthcare costs and their influence on healthcare insurance are categorized into three mechanisms by some authors. They suggest that rising costs increase the number of uninsured people as a result of 1) termination of insurance support by employers to their employees (Gabel et al., 2002; Gabel et al., 2003; Gabel et al., 2004; Hsu et al., 2006); 2) the tendency for employees to decline employer-offered health insurance because they cannot afford the employee share of the premium (Gabel, 1999); and 3) people dropping out of insurance in response to increased costs and eligibility reductions (Weil, 2003; Kaiser Commission on Medicaid and the Uninsured, 2004).

In an attempt to control high expenditure on prescription medicines, health insurance organizations have introduced co-payments and formularies which most members believe only serve the purpose of saving money for health insurance companies (Gruber, 2006; Ganther-Urmie et al., 2004; Simon et al., 1996). For those who remain insured, many medical aid insurance schemes do not provide medicines benefits or do so with substantial co-payments, resulting primarily in out of pocket

payments for medicines purchased in the private sector (Cameron et al., 2012; Yip and Hsiao, 2009; Van Doorslaer et al., 2007; WHO, 2004).

### **1.1.1 Co-payments in private sector settings**

According to Gruber (2006), high levels of co-payments among the insured undermine one of the primary reasons that people insure themselves in the first place, that is, to protect themselves from financial ruin should they become ill. A study in Nigeria reported that private health expenditure as a percentage of total healthcare costs was 64% in 2014 and 96% of nearly all Out of Pocket (OOP) expenditure was for payments that included medicines (Onah and Govender, 2014).

In South Africa, out of pocket payments are also higher in private sector facilities that mainly service medical scheme insured members (Mills et al., 2012; Coovadia et al., 2009). Several pro-consumer policies such as the Medicines and Related Substances Act 101 of 1965 (Medicines Act), Pharmacy Act 53 of 1974 (Pharmacy Act) and Council for Medical Schemes Act of 1998 (Schemes Act) are available in South Africa. Collectively, these laws offer consumers transparent pricing information for all medicines sold in private sector facilities, the right to information about the cheapest available prescription medicine (s) and 100% reimbursement for formulary medicines used in the treatment of prescribed minimum benefit (PMB) conditions (CMS, 2014). The PMBs are based on a positive list of medical conditions and medical schemes are mandated to cover the costs related to the diagnosis, treatment and care of; (i) any emergency medical condition, (ii) a limited set of 270 medical conditions (referred to as Diagnosis Treatment Pairs), and (iii) 25 chronic conditions (defined in the Chronic Disease List) (NDoH, 2015:14).

The benefit packages from medical scheme organizations differ from scheme to scheme thus making it necessary for each member to understand terms and conditions of cover offered to them. This means that full financial cover towards day to day costs which include medicines vary between schemes. Most schemes expect medical scheme members to purchase medicines that appear on the scheme's formulary list of medicines in order for 100% reimbursement to be guaranteed. Medical scheme members, who do not adhere to this requirement, render themselves liable for additional costs such as co-payments for medicines dispensed at pharmacies. Other schemes allocate funds into each member's savings account to cater for day to day costs such as physician consultations and dispensed medicines. The amount of money allocated to this account determines the member's share of the maximum allowable expenditure towards outpatient day to day costs that include prescription



medicines. Once these allocated funds are depleted, the member becomes fully responsible for incurred day to day costs, even though they continue to contribute monthly towards the medical scheme. During the financial year 2013, a total of R11.1 billion of which 35% is from medicines expenditure, was paid by the medical schemes from the Member savings accounts (CMS, 2015).

The reported rate of co-payments among the privately insured is indicative of possible under-utilization of already available pro-consumer policies or perhaps it could be that the existing legislative provisions are inadequate in their ability to protect medical scheme members from co-payments. Other factors could be lack of knowledge about the existence of such policies, purchasing behavior which reflects medical scheme member perceptions about the quality of differently priced medicines and even the possible influences of healthcare professionals at prescriber and dispenser levels. Some views suggest that South African legislation and other tools have not yet gone far enough to regulate the entire private healthcare sector in a manner that prevents co-payments among medical scheme members and further creates an environment where schemes remain viable (NDoH, 2015). Lack of such legislative measures could be contributing to the reason why medical schemes are forced to increase medical scheme member contributions each year just to sustain the costly fee for service method used to reimburse private sector service providers in South Africa.

In 2015, the annual average increase in member contributions was reported to be 9.2%, almost double CPI (4.6%) at the time (NDoH, 2015). In support of these views, Harris et al., (2011) suggested that being medically insured in South Africa is linked to financial catastrophe. For example, it is reported that in 2005 spending per private medical scheme member was nine fold higher than public sector expenditure (Coovadia et al., 2009; McIntyre et al., 2010). According to McIntyre et al.,(2008) the increased level of user fees and the fee for service reimbursement method contributed to the substantial and vigorous promotion of the growth of the costly private health sector in South Africa.

### **1.1.2 Potential impact of co-payments**

The catastrophic proportions of out of pocket and co-payment effects on the quality of life of those affected and its burden on the citizens is best described by Piette, Heisler and Wagner (2004) in which a number of diabetic patients did not follow prescription instructions, and even cut back on food and borrowed money just to pay for prescription medicines. Co-payment coping mechanisms extend to consumers even selling household assets, as observed in certain African settings. In Zambia, 23% of people that experienced co-payments resorted to selling household assets in order to meet the co-

payment costs and in Burkina Faso the figure was reported to be 68% (Leive and Xu, 2008). People in Zimbabwe also sold their houses, borrowed money and even stopped taking medication as a result of associated high costs (Onah and Govender, 2014). According to the South African Council for Medical Schemes (2015), excessive out of pocket payments have the potential of pushing patients into poverty because of the adverse effects of illness on their earnings and general welfare. In South African settings, coping mechanisms and self reported effects of co-payments on prescription medicines among medical scheme members are yet to be well appreciated. In order to understand co-payments from the context of medical scheme insurance and the effects they have on members, it is necessary to explore the phenomenon and its related factors from perspectives of medical scheme members who experience co-payments, before any pro-consumer interventions can be proposed.

Ataguba and Goudge (2012) conducted a South African study that assessed the extent to which medical scheme membership leads to a reduction in out-of-pocket (OOP) payments. The study concluded that medical scheme members had higher out of pocket payments when compared to non members and the proposed solution was a National Health insurance system. The study however never explored co-payment causing factors from the perspective of insured medical scheme members who pay cash for prescription medicines that are dispensed at private retail pharmacies.

### **1.1.3 South African context**

The South African health system is divided into public and private sectors. In 2012, the country had an estimated 52 million residents, 85 % of which were supported by the public sector and 15% by the private sector (Ataguba, 2012). According to the National Treasury Budget Review (2014), the general government health expenditure for 2013 represented 12.87 % of the total government budget and 47.9 % of total health expenditure on health was for services provided at State facilities. Donor or non-governmental organizations' contributions to health expenditure have been between R5 billion and R6 billion per annum (Bletcher et al., 2011).

The bulk of private sector funding is received from medical scheme members through monthly contributions (66%) and out –of-pocket payments (Bangalee and Suleman, 2015). In 2013, about 110 registered medical schemes had about 3,815,431 enrolled principal members, excluding dependents (Section 27, 2014). Between 2013 and 2015, the number of medical schemes had decreased due to mergers which resulted in fewer medical schemes in 2015. According to the Council for Medical scheme's 2015 report, during this period the private sector was serviced by 83 medical schemes which catered for 16.2% (8.8 million lives i.e. the sum total of principal members and their

beneficiaries) of the total South African population (CMS, 2015).

According to Council for Medical schemes (2015), in 2013 a total of R124.6 billion claims were submitted to medical schemes for the reimbursement of services offered to the insured members. This figure is considered to be an under estimate of the total cost of healthcare by scheme members considering that some members do not claim once they realize they have exhausted their medical benefits (CMS, 2015). According to Bletcher et al. (2011), despite South Africa spending around 8.6% of Gross Domestic Product (GDP) on health, overall health outcomes of South Africans remain inadequate.

Around 2012, the annual growth rate of pharmaceutical expenditure in South Africa was 10 %, with generic pharmaceuticals having 33 % market value share and a growth rate of 11 % (CMS, 2013). In comparison, 3.8 billion of the total 4.3 billion prescriptions dispensed in the U.S. in 2014 were filled using generic medicines which means that generic medicines then accounted for nearly nine out of every 10 (88%) prescriptions dispensed in the United States, yet generic prescriptions accounted for only 28% of total medicine spending (Seventh Annual Edition, 2015). In South Africa, various factors are thought to contribute to this low market share for generic and high expenditure in the private sector market. Within this context, South African medical scheme members would be expected to be taking full advantage of money saving options and policies such as availability of transparent prices for medicines sold in the private sector and the availability of formulary lists of low priced generic medicines from medical schemes.

Studies have shown that patients tend to decide and behave differently depending on their insurance status and level of co-payment they were exposed to (Ganther –Urmie et al., 2004). In South Africa, perceptions about factors that influence purchasing choices among medical scheme members in particular, have not been explored. The fact that South African Department of Trade and Industry (DTI) commissioned a healthcare inquiry<sup>1</sup> to investigate high private sector healthcare costs in 2013 indicates that the South African health system requires more investigation and attention. This study will however be limited to the purchasing behavior of medical scheme members and associated payments at selected private sector pharmacies.

---

<sup>1</sup> The market inquiry in the private healthcare sector was conducted by the competition commission in terms of Chapter 4A of the Competition Act, 89 of 1998 (as amended) (the Act) and in keeping with the purpose and functions of the Commission set out in section 2 and section 21 of the Act respectively. Available from <http://www.compcom.co.za/healthcare-inquiry/> and Government Gazette No. 37062: 29 November 2013

### **1.1.3.1 Origins of out of pocket payments in the South African private sector**

Historically, private healthcare in South Africa was funded by out of pocket payments until 1889 when the first medical scheme became effective, however by 2005 annual expenditure on medical schemes per member contribution and out of pocket payments were already approximately R9500 per beneficiary in 2005 (Coovadia et al, 2009). It does seem as though medical schemes were first introduced to provide South African consumers diversity in accessibility to healthcare whilst protecting them from out of pocket payments, however something must have changed along the way because insured patients started paying more out of pocket in addition to the mandatory monthly contributions.

According to Council for Medical schemes (CMS) during the financial year 2013, a minimum value of R12.2 billion was paid by medical scheme members out of pocket. This figure represents claimed amounts and therefore does not account for payments not recorded by the scheme where 1) the member did not claim because benefits (usually day to day benefits) may have been exhausted and 2) Cash payments received upfront by service providers prior to submitting the claim to the scheme, are excluded. In the latter case, service providers submit claims which do not include these co-payments which would otherwise have already been received in cash from the medical scheme member. The CMS are of the view that the level of out-of-pocket expenditure is partly influenced by medical scheme benefit design (CMS, 2014).

### **1.1.3.2 Purchasing and sale of medicines at South African pharmacies**

Prices of all registered scheduled medicines that are sold for human use in private sector facilities are regulated in terms of the Medicines Pricing regulations which endorse transparency in pricing of scheduled medicines. This legislation requires each medicine to be allocated a price referred to as the Single Exit Price (SEP) by the National Department of Health. These prices are made available at the department of Health website [www.mpr.gov.za](http://www.mpr.gov.za) at no cost to the general public. To uphold the principles of the transparent pricing policy, the SEP is not allowed to change until the medicine reaches the point of sale e.g. the pharmacy. During dispensing, pharmacists are generally at liberty to determine additional fees to be charged for medicines purchased at their premises, with patients also able to purchase medicines at any pharmacy of their choice. Pharmaceutical manufacturers are however not allowed to charge anything below the Single Exit Price for the sale of any registered scheduled medicine.

Since May 2004, the maximum dispensing fees were regulated and during the same period discounts and rebates in the sale of medicines were outlawed. Pharmacists and other dispensers registered in terms of Section 22 C 1 (a) of the Medicines and Related Substances Act 101 of 1965 are therefore legally allowed to add a dispensing fee to each dispensed ‘scheduled’ medicine, provided it doesn’t exceed the legislated amount. Because the legislated dispensing fee is set at a maximum, dispensers are legally allowed to charge a lower dispensing fee than that which is regulated. The main requirement is to keep the price, that is, the SEP at which the medicine was purchased from the manufacturer unchanged. Because of the dispensing fee differences between pharmacies, it is common to find different final medicine prices at pharmacies. Although the final price to the patient may differ, the discretion as to where the medicine is purchased still remains with the patient, always.

## **1.2. Problem Statement**

According to Ataguba and McIntyre (2013) South African medical scheme members spend more on co-payments that include medicines than non-scheme members. Therefore, South African consumers with medical aid insurance apparently purchase costly prescription medicines which cause them to co-pay substantially at private facilities, this despite the availability of cheaper substitutes.

## **1.3. Study Rationale**

In 2013, among the top 50 cost-driving individual prescription medicines dispensed to medical scheme members, 14 were generic medicines, 29 had no generic equivalents and 07 were originators that have generic equivalents (Mediscor, 2013). The latter seven originator medicines which have generic equivalents are substitutable with cheaper versions that seem not to be opted for by medical scheme members. This substitutable category of medicines and factors which influence their purchase despite the availability of medicines that provide money saving options constitute the main focus of the study. According to Ataguba and Gouge (2012: 650) differences in utilisation observed between scheme members and non-scheme members are due to moral hazard or adverse selection. The unintended consequence of having to co-pay for medicines amongst medical scheme members is underutilization of generic essential medicines. Studies have shown that co-payments are associated with decreased use of all medicines (Goldman et al., 2004; Sinnott et al., 2013; Gatwood, 2014). In South Africa, although studies on health seeking behavior which results in general co-payments have been conducted, those that explored co-payments relative to perceptions about quality and prices of medicines, particularly from perspectives of medical scheme members that are medically insured, are limited (Patel et al., 2012).

## **1.4. Aims and Objectives**

### **1.4.1 Study aim**

The aim of the study was to explore views about co-payments and identify factors that motivated and influenced Pretoria medical scheme members to co-pay when purchasing prescription medicines at pharmacies, despite being insured by medical scheme insurance organizations.

### **1.4.2 Study objectives**

The study objectives were to:

- Describe consumer attitudes towards the relationship between price and perceived quality of prescription medicines (generic versus originator; economic vs expensive);
- Explore reasons why consumers chose to purchase expensive medicines that attracted more payment for prescription medicines dispensed at retail pharmacies;
- Explore consumer views about the influence of health professionals (prescribers and dispensers) on the purchasing decision that occurred at the pharmacy during dispensing;
- Explore views of pharmacists about purchasing choices of consumers, relative to product availability, price and type of medicine (generic versus originator; economic versus expensive) and perceived medicine quality;
- Explore views of policy makers and medical scheme industry managers regarding legislative interventions and practices that concern the dispensing and purchasing of prescription medicines by consumers.



## **CHAPTER 2 – LITERATURE REVIEW**

### **2.1 Introduction**

A combination of factors contribute to co-payments that are caused by dispensing and purchasing of specific prescription medicines at pharmacies. These include indirect factors beyond the control of the purchaser and direct factors that are due to the nature of the selected insurance and preferences that inform choices made by the insured member at the dispensing point. These choices are largely beyond just price considerations (Kohli and Buller, 2013; Ganther-Urmie et al., 2004). Indirect factors that influence what eventually gets dispensed are introduced before the purchasing step, by decisions made at the level of the manufacturers, the prescribing physicians and the dispensing pharmacy.

### **2.2 Factors that indirectly influence consumer purchasing choices for medicines**

Upstream advertising by manufacturers to stakeholders along the pharmaceutical supply chain has already been proven to affect consumer purchasing choices downstream (Mela et al., 1997; Hawkins and Mothersbaugh, 2009). This occurs when consumers get subjected to prescribing and pharmacy procurement choices that favor certain medicine brands (Moffatt and Elliot, 2007; Sismondo, 2007). In general, certain commercially inclined decisions by health professionals have a negative impact on consumers who may be misled to believe that the best decision has been taken on their behalf (Patel et al., 2012). In many cases this has adverse financial consequences because patients rarely question the cost of the commodity or health service they receive. Usually the inclination is for patients and healthcare service providers to believe that healthcare prices are not their concern (Dukes et al., 2003).

Information asymmetry between patients and health professional and limited understanding of the characteristics of individual products, cause consumers to often purchase a different medicine than they would if they were better informed (Roberts and Reich, 2011). Such information asymmetry that exists between prescribers, dispensers, and consumers regarding the quality, safety, efficacy, and value for money of individual medicines, allows prescribers and dispensers to give consumers advice which prioritize increased profits for their businesses rather than the buyer's interests (Cameron et al., 2012; WHO, 1997).

#### **2.2.1 The impact of marketing to health professionals**

According to some studies (Goldacre, 2012; Godlee, 2012 ; Smith, 1991), pharmaceutical manufacturers' marketing strategies are very influential on the prescribing trends of health

professionals. Pharmaceutical manufacturers use small gifts such as pens and notepads, sponsored dinners and conferences, and support many other activities undertaken by physicians to entice them to prescribe a particular brand (Shamim -ul-Haq et al., 2014). How doctors respond to these incentives determine the quality and efficiency of health care, health and wellbeing of patients, and the nation's health-care costs (Fuchs, 1974; Everette and Antony, 2005; Yip and Hsiao; 2009). By virtue of issuing the prescription, the doctor exerts power and influence in the final purchasing decision of the patient. The patient's level of knowledge about medicines and effect of pro-consumer policies have potential to determine the severity of financial consequences of the doctor's written prescription during dispensing and presentation at the point of sale.

According to Shamim-ul-Haq et al., (2014), many doctors do not consider taking gifts as unethical. Physicians however do agree that by accepting gifts and sponsorships, in return the pharmaceutical company indirectly requires them to prescribe in favour of the sponsor's brand (Corckburn and Pit, 1997; Shamim-ul-Haq et al., 2014; Couturier et al., 2000). In such a relationship, the doctor's loyalty to the brand is expected and somehow anticipated by the manufacturer in return for the acceptance of gifts and offers. The impact of marketing to prescribers becomes problematic in circumstances where consumers totally relinquish decision making power to the health professionals, typical patient behaviour in a paternalistic relationship between the doctor and the patient (Shrank et al., 2009; Merks et al., 2014; Abukres et al., 2014). This behavior is also prevalent among ill patients who feel more dependent on the views of trusted professionals (Quill, 1983). Since doctors may or may not take into account the costs of the treatments they prescribe, those susceptible to advertising induced prescribing are themselves potentially subject to (provider) moral hazard as much as those patients who over utilize healthcare services (Doran et al., 2004). This assumption about the prescriber is however applicable only if the doctor is aware of the consequences of his or her behaviour.

### **2.2.2 The effect of pharmacy stock availability on co-payments**

According to Goldman et al., (2004), price related complexities at pharmacies mean that the price an insured consumer will pay for a given medicine depends not only on which benefit package they belong to but also at which pharmacy the medicine is dispensed. Generally, the profit margins of retail pharmacies are dependent on the percentage of the price of a medicine thus making it an incentive to stock and sell more expensive medicines to obtain greater profits (Seiter, 2010). Because of this, stock availability at pharmacies is heavily influenced by economic incentives (markup and volume of sales), a factor which determines dispensing practices of pharmacy personnel (Radyowijati



and Haak, 2003). These practices rarely cater for the financial needs of patients and impact on the purchaser. The pharmacy stock implication on the purchaser is that, as much as the prescription is written by the doctor, the product that gets dispensed or purchased depends on medicines available at the pharmacy. Even if the doctor wrote the lowest priced generic which does not attract a co-payment, this might change at the pharmacy depending on the alternative the pharmacist decides to dispense. The reciprocal relationships between pharmacy owners, medicine wholesalers and pharmaceutical sales representatives further exacerbate the profit driven procurement tendencies in a manner that potentially impacts negatively on purchasers (Kamat and Nichter, 1998; Xie et al., 2010). According to Patel et al., (2012), in South Africa, procurement of pharmacy medicines is based, among other things, on the perceived ability of the consumers to pay. Evidently, where profits are more important than the provision of reasonably priced medicines, the pharmacy is less likely to keep the cheapest alternative medicine (Cameron et al., 2012). Also, for as long as higher priced versions continue to be bought, pharmacies will continue to keep them. Conversely, prescribers and dispensers who benefit from the sale of higher-cost medicines (e.g., when margins are set as a percentage of the price) may also encourage the perception that generics are less effective and/or unsafe and that originator brand products are superior (Cameron et al., 2012; Seiter, 2009). Evidence from other countries already suggests that patients purchasing medicines in the private sector pay, on average, 2.6 times more for originator brands than for their lowest-priced generic equivalent and this price differential can sometimes be more than 10-fold when higher-cost originator brands are the only products available at a given dispensing point (Cameron et al., 2012; Cameron et al., 2009). Without a doubt, co-payments are inevitable in such dispensing facilities.

## **2.3 Consumer factors with a direct influence on co-payment outcomes**

### **2.3.1 The influence of the chosen insurance for healthcare cover on service provider charges**

Although insurance companies are payers and try to reduce reimbursements to healthcare providers and suppliers of medicines, they also want to generate more money from purchasers of insurance i.e. medical scheme members (Bodenheimer, 2005). For the insured, the chosen benefit option during membership enrolment may render them more prone to higher monetary value increases on monthly contributions and or more co-payments than if they had chosen a different benefit option (Simon et al., 1996; Hsu et al., 2006). Where insured members choose not to co-pay but instead to take fewer medicines than were prescribed in order to save money, evidence suggests that lower rates of medicine adherence are observed, this as a result of less generous medicine benefits (Sinnott et al., 2013; Rector and Venus, 2004; Tseng et al., 2004; Steinman et al., 2001; Cox et al., 2001). Benefit

design selection therefore requires considerable attention because it determines the level of cover and the extent of co-payments (if any) to the insured (Gruber, 2006; Shrank et al., 2007; Barros and Bertoldi, 2008). The variety in the options offered by schemes and the changing different health needs of each member necessitates that terms and conditions of benefits are well articulated and understood by insurance scheme organizations and members respectively. Because patients cannot easily compare the widely differing costs of medical services offered for different conditions, they are unlikely to anticipate what the average cost would be for their typical needs. This is closely linked to the knowledge or lack thereof of information about how the selected benefit option relates to incurred healthcare costs which are determined by healthcare needs. This is probably the reason Bodenheimer (2005), contends that it is flawed in certain cases to make patients responsible for some of their costs on the basis of the assumption that they have sufficient information on charges by different providers. This is in addition to the assumption that they have the ability and understanding of the expectation to seek lower priced services.

### **2.3.2 How co-payments are linked to medical insurance**

According to Hsu et al., (2006) and Simon et al., (1996), an influential school of thought has a group of advocates who thought that consumers must be responsible for some share of their healthcare costs either through deductibles, co-insurance or co-payments. Those who advocate for these cost sharing methods suggest that because of moral hazard, patients who receive free care utilize more services than cost sharing patients (Newhouse et al., 1981; Manning et al., 1987; Gruber, 2006). Moral hazard is the inclination for consumers to over consume because they do not directly bear the costs of consumption (Cameron et al., 2012). In theory, the expectation from cost sharing advocates is that increasing the share of costs paid by patients would create an incentive for more efficient use of care (Phelps, 2000; Rubin and Mendelson, 1995; Zweifel and Manning, 2000; Gruber, 2006). Under these circumstances, a reduction in medicine consumption is a goal for so-called non-essential medicines, or medication of limited therapeutic value. There is however evidence to suggest that essential medicines are also affected during treatment reduction (Schafheutle et al., 2002; Soumerai et al., 1987; Stuart and Grana, 1998).

According to Rasell (1995), cost sharing has a negative effect on health outcomes, especially among people who are less healthy or of lower socioeconomic status. Similar anti-cost sharing views suggest that although the insured whose benefits are limited and might achieve lower pharmacy costs, their hospital and emergency department costs were higher, resulting in no significant difference in total medical costs between the insured with capped benefits and those with uncapped benefits (Hsu, et al.,

2006). In other words, if co-payments are used as a method to decreasing costs incurred by medical scheme organizations for medicines dispensed to their members, evidence suggests that the behaviour of beneficiaries defeats the very purpose as higher hospitalization costs are incurred later on. Overall, even though the patient's purchasing behavior is influenced by scheme packages, the latter cannot be entirely divorced from other influences that originate further up the medicine supply chain (Roeser et al., 2012).

### **2.3.3 The influence of preferences by the insured member**

#### **2.3.3.1 Medication preferences**

For various reasons that are based on perception, purchasers tend to prefer certain medicines and certain service providers over others (Farber et al., 2002; Sofaer and Firminger, 2005).

It is usually hoped that the financial incentives make patients more selective in their use of prescription medications, even though it is known that achieving this goal depends on a patient's willingness to respond to these incentives (Ganther-Urmie, 2004; Farber et al., 2002). In most cases the acknowledgement of the price advantage of generic medicines compared to their branded counterparts tends to be cancelled by perceptions that generics are more likely to cause side effects or are of lower quality compared to branded medicines. This is confirmed by Tootelian et al., (1988) and Al-Gedadi et al., (1996) who reported that consumers in California and Malaysia said branded medicines were viewed as being more effective, having less potential for adverse effects, and providing greater value than their generic counterparts.

Although the majority of consumers tend to have mixed reactions towards the acceptance of generic medications, it is reported that where patient confidence and knowledge pertaining to generic medicines use have increased, particularly in developed countries, mass educational efforts, financial incentives, and greater communication among patients and health care professionals were seen as major drivers to the uptake of generic medicines (Hassali et al., 2009). The implementation of mandatory generic substitution policy was observed to successfully increase the pharmaceutical sales of generic medicines in settings where it was implemented. In a study conducted in Sweden in 2008, five years after the introduction of the mandatory generic substitution policy, the results showed that in most therapeutic groups there was an increase in the volumes of substitutable pharmaceuticals sold since the introduction of the reform, ranging from one third to three times the initial volume; whereas the volumes of non-substitutable pharmaceuticals had leveled out or declined (Anderson et al., 2008). In a study that explored choices of medically insured consumers for preferences between formulary

medicines versus non formulary medicines, 53.6% of respondents reported that they paid extra to purchase the non- formulary medicine even though 39.7% agreed that formulary medicines were less expensive than non-formulary medicines (Ganther-Urmie, et al., 2004). In this study most respondents did not believe that formulary medicines were safer or more effective than non-formulary medicines (Ganther - Urmie et al., 2004). This finding could suggest that insured members do not understand the concept of formulary medicines. According to Tootelian et al. (1988), based on such results private insurers may face some objections to programs requiring use of generic medicines as a means of reducing cost of healthcare.

#### **2.3.4 Perceptions about medicine prices and quality**

Medication cost and quality thereof were reported to be ranked high as important elements considered in the purchasing decision for prescription medicines (Shrank et al., 2009; Sermak et al., 2013; El-Dahiyat and Kayyali, 2013). In a study conducted in Austin and San Antonio, consumers felt that compared with branded medicines, generic medicines were of lower quality, more risky, less effective (Sheperd, 1988). Generally, the price difference of 20% to 90% between originators and generics creates an assumption that generics are inferior, when in fact the difference is due to the cost of introducing originators into market (Vogler, 2012). Perhaps this is what persuades other purchasers to consider other factors beyond price when purchasing prescription medicines. A study by Schafheutle et al.(2002) proved this by reporting that cost was not the overriding influence that resulted in purchasers incurring charges during the purchase of prescription medicines. Instead other factors, such as symptom or disease severity, effectiveness, or necessity of treatment, played a more important role in disease management decisions of these patients. In other studies, consumers are reported to be less concerned about price when purchasing medicines. According to McIntyre (2010), consumers have no real understanding of healthcare matters hence tend to judge the quality and perhaps also the efficacy of a medicine on the basis of price. For such patients, a higher price is thought to indicate better quality and, vice versa, a low price (as in the case of generics) is believed to signify a lower standard (McIntyre, 2010; Cunningham, 2009; Sofaer and Firminger, 2005: 517). These studies reveal diversity in consumer views regarding medicines prices and quality of medication. Perceptions about the value of a medicine, its quality and price are factors yet to be investigated in a Pretoria setting among medical scheme members.

#### **2.3.5 Service provider preferences**

Purchasers of prescription medicines tend to utilize service providers, that is, pharmacies based on their preferences (Lieberman et al., 2011; Rudolph and Montgomery, 2010). Such preferences have

potential to render purchasers liable for additional payments when purchasing medicines, especially if the pharmacy charges co-payments. According to Rudolph and Montgomery (2010), 94.7% of insured consumers used their preferred pharmacy to get prescription medicines. Factors unrelated to price seemed to contribute to these preferences. The factors that attract consumers to a community pharmacy are known to include convenience, having a positive relationship with the pharmacist, and pharmaceutical services, with the importance of a particular patronage factor depending on the type of pharmacy (Ortiz et al., 1987; Gagnon, 1977; Smith and Coons, 1990; Lipowski, 1993). Whilst convenience was almost a universal patronage factor, purchasers who preferred independent pharmacies were influenced by the reliability of the pharmacist whereas those who preferred chain pharmacies were influenced by price and other products and services offered inside the pharmacy (Smith and Coons, 1990). In addition, residence in a more affluent neighborhood, a higher level of educational attainment, and older age were significant predictors in the model for traditional independent pharmacies, with gender, insurance coverage, and number of prescriptions not regarded as significant predictors (Lipowski, 1992).

In a study that investigated an association between the level of medicine information provided in community pharmacies and business performance as measured by consumer satisfaction and consumer loyalty, results showed that patronage and loyalty to the pharmacy were likely to increase if the pharmacy personnel provided more information about medicines (Whitehead et al., 1999). Among the insured, although using a single community pharmacy created close patient-pharmacist relationships and improved health outcomes, consumers tended to divert from this choice because of prescription medicine price concerns and insurance diversification (Xu, 2002).

## **2.4 Conclusion**

A number of studies conducted elsewhere have shown that co-payments could potentially be outcomes of a myriad of factors, some of which are outside of the scope of this study. Nonetheless, this study will attempt to better understand co-payments from perspectives of those who are on the receiving end of the phenomenon, the consumer.

## **CHAPTER 3 – METHODOLOGY**

### **3.1. Study design**

A flexible and exploratory qualitative research study was conducted to explore experiences and reasoning of those who were exposed to co-payments during the purchasing and dispensing of prescription medicines at private sector retail pharmacies and to describe factors that caused the phenomenon to exist at these pharmacies in Pretoria South Africa. The research approach was ideal for the desired elaborate responses expected from study participants. The relevance and strength in qualitative research methods were the ability to allow the researcher to document and interpret the different ways in which participants described their experiences and made sense of their co-payment realities (Baum, 1995).

### **3.2. Study setting**

The study was conducted in the country's capital city Pretoria, also known as the city of Tshwane. Pretoria is located in Gauteng, the richest of the nine provinces in South Africa (Socio-Economic Review and Outlook, 2011). In 2011, Pretoria had over 2,9 million residents, with a racial distribution of 75.40% Black African, 20.08% Whites, 2.01% Coloureds or mixed race, 1.84% Indians and or Asians, and the category of 'other' taking up the remaining 0.67% (City of Tshwane Metropolitan Municipality, 2011). In 2012, 26,994 professional personnel were listed as active by the South African Pharmacy Council, 13,031 of which represented the category of pharmacists (SAPC, 2013). By 2013, almost 13 321 pharmacists were actively registered and 7 115 of these were in Gauteng province (SAPC, 2013). Given the estimated population of 12, 272, 263 in Gauteng, the figure suggests that in 2013 about 1725 residents were being serviced by 1 pharmacist in the province.

### **3.3. Study population**

The purposively sampled study population consisted of nine key informants, who included dispensing pharmacists and regulators, and twelve medical scheme members. The diversity in data sources was incorporated to ensure data triangulation and richness in the collected information about co-payments. The role of key informants was to provide views about co-payments in relation to existing medicine policies, dispensing practices and consumer related experiences at South African private sector retail pharmacies. Medical scheme members provided insights and understanding of factors that have an influence on co-payments, as they understood them from personal experiences.



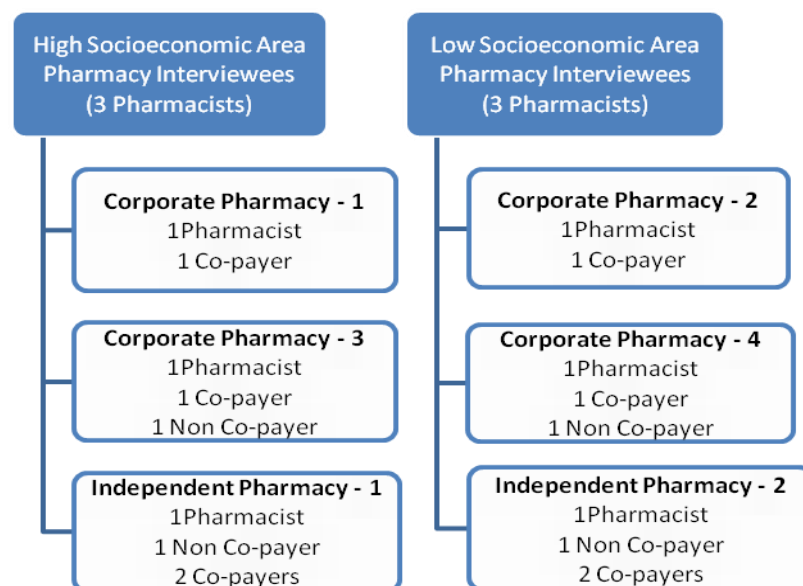
### 3.4. Sampling

Purposeful sampling was adopted in the study. Triangulation through use of multiple data sources was incorporated to ensure reliability of the results and to improve the quality of the research. The sampling methodology used in the study is considered to be one of the strengths of this research because of the diversity in the views that contributed to the collected data about co-payments. Six pharmacists and twelve medical scheme members were interviewed at six purposively sampled private community pharmacies. The pharmacists together with three additional interviewees who played the role of regulator each were regarded as key informants in the study. All key informants, were interviewed at their areas of work during office hours. Saturation, whereby data collection continues until no new information emerges, is the ideal strategy in qualitative research, however, this was not utilized in this study due to the limited scope and time allocated for this mini-thesis.

#### 3.4.1 Pharmacy selection

The interviews for medical scheme members and pharmacists were conducted at six pharmacies which were selected from two different socioeconomic locations. Two corporate pharmacies and one independently owned pharmacy were selected from each location (3x2) (**Figure 1**). The interviewed medical scheme members had purchased medicines at these pharmacies and the interviewed pharmacists had dispensed medicines at the same selected pharmacies. Because of the diversity in the socioeconomic statuses of the populations being serviced at the sampled pharmacies, the data collected from the twelve medical scheme members who were evenly distributed between the two locations, was expected to be rich.

**Figure 1: Distribution of Pharmacists and Medical Scheme Member Interviewees between Pharmacies**



### **3.4.2 Selection of Medical Scheme Members**

Of the twelve medical scheme members who were interviewed, eight were co-payers and four were non co-payers for purchased prescription medicines. It was originally planned that medical scheme members would be evenly selected from the six pharmacies to ensure equal representation. However, the number of available medical scheme members willing to participate in the study immediately after interacting with the researcher, determined the final selection and distribution of interviewees between the selected pharmacies. The distribution of medicals scheme member interviewees between pharmacies is shown in **Figure 1**. Selected interviewees were medical members who either purchased expensive prescription medicine (s) which attracted a co-payment or cheaper alternative (s) which did not attract a co-payment. The codes for medical schemes members are shown in **Appendix 1**.

### **3.4.3 Selection of key informants**

A total of nine key informants were interviewed. The first set of key informants consisted of three “regulators” who had combined extensive experience as senior policy makers and managers of medical schemes. One of the three key informants performed a dual role as a former regulator of medicines and the current representative of medical scheme members. This particular key informant was interviewed on two separate days and the results section represented quotes from these interviews by using two different identifier codes, R2 and R3.

#### **3.4.3.1 Key Informants – Policy makers and managers (Representatives of organizations)**

The three key informants in this category were selected for their seniority within their respective organizations and combined experience and expertise on matters of regulation of medicines, health professional and practices within the medical scheme industry. These interviewees consisted of senior officials from the South African Pharmacy Council, Board of Healthcare Funders and Council for Medical Schemes. One key informant has extensive experience and understanding of private sector medicines regulation and practices of medical scheme organizations.

#### **3.4.3.2 Key Informants - Pharmacists Interviews**

Six key informant pharmacists, one from each of the six selected pharmacies were interviewed. To ensure diversity in views about co-payments and richness in data, pharmacists and medical scheme members were interviewed from the same six selected pharmacies. One pharmacist was interviewed per pharmacy. The codes for the pharmacists interviewed are shown in **Appendix 1**.



### **3.5. Data collection**

Individualized face to face semi-structured in-depth interviews which allowed the researcher to observe and note non-verbal cues whilst allowing discussions, were conducted. The characteristic probes of in-depth interviews allowed exploration of views during descriptions of co-payment experiences among medical scheme members and views from the regulators and pharmacists at a much deeper level (Doody and Noonan, 2013; Petty et al., 2012; Aluwihare-Samaranayake, 2012). The literacy level of the participants made it possible to conduct all interviews in English. Interviews were recorded using a recording device and interview notes were captured in a diary during and immediately after each interview.

Interview guides and the non-rigid open ended questions of the semi-structured interviews further allowed the researcher flexibility to adjust the interview questions relative to responses from the interviewees whilst ensuring that the study objectives were achieved (Appendices 2A, 2B & 2C). Semi-structured in-depth interviews were ideal because participants were able to express themselves freely in their own words in an environment that encouraged rapport between the interviewer and the interviewee.

At each pharmacy, customers were approached as they were about to exit the pharmacy to find out if they were medical scheme members who had just collected one or more prescription medication and their selection was based on whether they had co-paid or not. Those that met the criteria were invited to participate in the study. The interviews were conducted after the informed consent form had been signed. To maximize exploration of different perspectives, different medical aid insurance companies were represented among the sample of interviewed medical scheme members (Kitzinger, 1995; Kamat, 2006; Ritchie et al., 2003; Prosser et al., 2005).

Although most medical scheme members were willing to participate in the study, most of them were not physically and or emotionally ready to fully participate in the interview on the same day they were approached. Those who requested to be asked the rest of the questions a little later were granted their wish provided the interview was conducted immediately after visiting the pharmacy. This was done to ensure that recall bias among the purchasers was minimized.

#### **3.5.1 Pilot interviews**

The pilot interviewees were sought from pharmacies located at geographical areas of similar socioeconomic status to those of the research setting. After conducting the pilot interviews, the

interview guide questions were shortened and questions structured in a manner that allowed strict focus on the study objectives. This maximized the limited time spent with interviewees and ensured that the study objectives were covered much earlier and quicker. Initially during data collection, pilot interviews were conducted to test the interview tools. The researcher had planned to write the notes during the interview process to ensure that all the observations were captured immediately as they occurred. The writing of notes during the interview proved to be disruptive.

### **3.6. Data analysis**

Data analysis began concurrently with data collection. During data analysis, the interview notes were supplemented when reviewing the recording for purposes of identifying quotable quotes. The electronic record was independently compared with the enhanced notes for data accuracy. Identified codes and themes that emerged from data were organized into subthemes in a manner that referenced them to each study objective. During the last stages of data analysis, names of identified themes were confirmed and coherently organized to present findings. As part of reflexivity, the researcher declared her personal experiences during the encounter with the interviewees.

### **3.7. Validity and reliability**

Validity and reliability were achieved through recording of interviews and triangulation during sampling respectively. By recording the interviews with a recording device the researcher ensured that used quotes were valid whilst the variety of co-payments views from regulators, pharmacists and medical aid scheme members ensured that the results were reliable. The implications of data collection tools such as interview guides were tested by conducting pilot interviews and then standardized to ensure dependability and credibility of collected data. Prior to conducting the next interview, the interview guide was revised to incorporate lessons learnt from previous interviews.

During the pilot interviews, the researcher wrote elaborative notes on the diary. Because of the disruptive nature of this approach the researcher later opted to capture the notes immediately after each interview. Pilot interviews were conducted with two pharmacists and two consumers of prescription medicines, prior to the finalization of interview guides.

During data analysis, and for ease of auditability, a definition of each identified code was created. By using an inductive perspective, even during data analysis where meaning is derived from generated data collected from respondents rather than from theories and keywords of interest to the researcher,

the researcher ensured that a verifiable and systematic procedure for analyzing qualitative data was used towards producing reliable and valid findings (Hsieh and Shannon, 2005).

### **3.8. Study limitations**

Due to the limited scope of this minithesis research and the short period available to reach completion, the researcher did not plan to continue data collection to saturation, although there is recognition that this is best practice in qualitative research. Nonetheless, it was noted that the later interviews elucidated very little new information, particularly those with medical scheme members.

The differences in co-payment experiences between chronic and acute treatments were not proactively accommodated for in the study methodology. The researcher acknowledges that co-payment views from patients who purchased chronic medication on the day of the interview could have differed from those of purchasers of acute medication. Chronic patients could have also derived their views from previous experiences as opposed to confining responses to their latest purchasing experiences.

The effect of price shopping could have influenced the pharmacy choices of those who were categorized as non co-payers on the day of the interview. This price shopping factor could have influenced the co-paying status and categorization of the interviewed medical scheme member under the results section. This is because the process of price shopping could have been explored by these potentially price sensitive medical scheme members prior to the interview with the researcher. Such a process might have occurred as the member was attempting to secure a better price from the different pharmacies that offered the same prescribed medicine and sold it at different prices.

Therefore, because a question on price shopping was not incorporated onto the interview guide for medical scheme members, it is possible that on the day of the interview, price shopping had occurred among those medical scheme members that appeared to be general non co-payers.

Sorensen (2000), described the influence of price shopping by stating that *'the incentive to price-shop is strongest for prescriptions that must be purchased frequently hence price ranges for one time prescriptions are estimated to be 34% larger between competitor items than those for prescriptions that must be purchased monthly'*.

### **3.9. Ethics**

Ethical clearance was obtained from the University of the Western Cape Senate Research Committee

prior to conducting the study (**Appendix 3**). The voluntary decision to participate in the study was verbally emphasized and reiterated on the participant information forms (**Appendices 4A & 4B**) and consent form (**Appendix 5**) to ensure that interviewees did not feel coerced to enroll. To ensure anonymity, real names of the participants were not used in the findings section of the final report. Instead, pseudonyms were allocated to each participant to ensure confidentiality and that collected information could not be traced back to specific individuals. Medical scheme participants might have experienced discomfort and anxiety during discussions about medicines that remind them of their disease states. The researcher provided adequate referral services such as contact details of nearby psychologists, councilors and social workers. The liberty for participants to withdraw at any stage during the study without fear of being prejudiced was communicated upfront.

Given that the researcher is employed as a regulator at the National Department of Health and is responsible for policy implementation, some key informants, especially pharmacists could have been doubtful of the true intention of the interviews. To alleviate anxiety amongst key informants, the researcher was transparent in explaining that the interview contents and the results were used only for the purposes of the UWC Masters study and where the study would be distributed, the names of interviewees would not be disclosed. As the study aimed to explore a phenomenon that causes financial loss, the researcher aimed to share recommendations of the final report with all the enrolled study participants, first to enable medical scheme members to have access to valuable money saving options for use during future purchases of prescription medicines dispensed at pharmacies, and secondly to allow regulators and dispensing pharmacists access to consumer views about co-payment experiences. The final report will also be emailed and hand delivered to the Cluster Manager responsible for the National Department of Health communications directorate as well as to recipients enlisted within the email communication list at the Pharmaceutical Economic Evaluations (PEE) directorate of the National Department of Health.

## CHAPTER 4 – RESULTS

### 4.1 Introduction

The findings from medical scheme members, pharmacists, regulators and representatives of schemes and dispensing pharmacists will be presented in this section (**Table 1**).

**Table 1: The Study Population and Interview Locations**

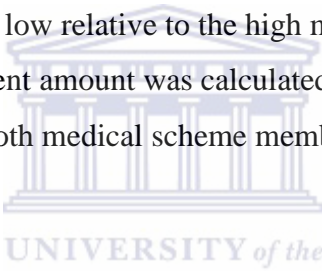
A: MEDICAL SCHEME MEMBER INTERVIEWEES			
Interviewees from Pharmacies Located in a Low Socioeconomic Area (6)	Corporate Pharmacy Interviewees		
	LES_M11 Low Income Corporate Co-payer	EST_M10 Low Income Corporate Co-payer	
	MAL_M2 Low Income Corporate <i>Non Co-payer</i>		
	Independent Pharmacy Interviewees		
	MOR_M5 Low Income Independent Co-payer	DIR_ M1 Low Income Independent Co-payer	
	FRI_M7 Low Income Independent <i>Non Co-payer</i>		
Interviewees from a High Socioeconomic Located Pharmacy (6)	Corporate Pharmacy Interviewees		
	KER_M12 High Income Corporate Co-payer	NEL_M4 High Income Corporate Co-payer	
	DUM_M8 High Income Corporate <i>Non co-payer</i>		
	Independent Pharmacy Interviewees		
	BAB_M9 High Income Independent Co-payer	FUT_M3 High Income Independent Co-payer	
	MAN_M6 High Income Independent <i>Non Co-payer</i>		
B: REGULATOR INTERVIEWEES			
Regulators and Representatives of schemes and pharmacist (3)	Interviewee Code	Interviewee Description	
	Regulator 1	Representative of Pharmacists	
	Regulator 2	Representative of Medical Schemes	
	Regulator 3 (Also Regulator 4)	Regulator of Medical Schemes	
	Regulator 4 (Also Regulator 3)	Former regulator of Medicines	
C: PHARMACISTS INTERVIEWEES AND PHARMACY LOCATION			
Pharmacists (6)		High Socioeconomic Area Location	Low Socioeconomic Area Location
	Corporate Pharmacy Interviewees	VER_P6 High Income located Corporate Pharmacy Pharmacist	SUN_P3 Low Income located Corporate Pharmacy Pharmacist
		DIS_P2 High Income located Corporate Pharmacy Pharmacist	KAL_P4 Low Income located Corporate Pharmacy Pharmacist
	Independent Pharmacy Interviewees	CRO_ P5 High Income located Independent Pharmacy Pharmacist)	KEM_P1 Low Income located Independent Pharmacy Pharmacist

Five main themes linked to the study aim and objectives are discussed in this section. The first theme focuses on feelings about co-payments and reasoning thereof. Theme two describes medicine preferences and perceptions about quality, price and type of pharmacy where medication was purchased. Theme three discusses influences of prescribing doctors and dispensing pharmacists on the purchasing of medicines and sources of information about medicines. The fourth theme concerns pharmacists' views about co-payments and purchasing choices of consumers. Theme five represents reasoning by key informants about co-payments within the context of legislative interventions and practices.

## 4.2 Views and reasoning about co-payments

### 4.2.1. Feelings and views about co-payments

Medical scheme members expressed feelings of unhappiness towards co-payments as they deemed the monthly contributions paid to medical schemes adequate to cater for charges at pharmacies. They perceived consultation frequency to be low relative to the high monthly payments to schemes. Lack of understanding about how the co-payment amount was calculated and its unpredictability between and within pharmacies was expressed by both medical scheme members and dispensing pharmacists as main causes of confusion:



**Co-payments upset me because I pay my medical aid every month and I don't even get to use all the money that I pay them. I don't even know how they calculate this amount. How do they even decide how much you must pay and for what because this levy always changes. They never even offer any explanation.**  
(NEL\_M4 High Income Corporate Co-payer)

**I have noticed that prices are different at different pharmacies.** You'd find that the pharmacy doesn't charge you, but the next time you get the same Demazin they ask you to pay an extra R16.00. **The confusing thing is that they never asked me to pay the last time I bought it and I don't understand that.** (DIR\_ M1 Low Income Independent Co-payer)

**I am not happy about co-payments, that I can say, but also you want the business to be profitable.** From my experience, I can't say I know how the co-payment is calculated. **We don't have information on these things.** You find that the medical aids will decrease their price but our price continues to increase and then the patient has to co-pay. **For instance, you find that a medicine that didn't require a co-payment suddenly requires a co-payment a month later and I fail to understand this.** Sometimes it affects us because some people don't have money for transport to go home and you end up giving them money. **I don't understand how a month interval causes co-payments for something that didn't have any.** (VER\_P6 High Income located Corporate Pharmacy Pharmacist)

The medical scheme members appeared to have greater expectations of benefits from the monthly contributions that are paid towards medical insurance than they currently receive. To them when the co-payment was charged at pharmacies, the experience caused them to question the value of medical aid insurance. Because of limited interaction between schemes and pharmacies especially with regards to matters related to co-payments, pharmacists also found it challenging to predict co-payments particularly after the schemes have amended their reimbursement criteria which could include formulary lists of medicines that are reimbursable in full.

The scheme members expected to be informed upfront about co-payment causing changes that are made at the level of the medical scheme as opposed to being surprised about the co-payment charge at the pharmacy during the purchasing process. Also, additional information on the exact names and location of pharmacies that have agreed to offer medicines that are fully reimbursable by the scheme, could be of great value to medical scheme members. The challenge in this regard could however be that the arrangement between the scheme and the pharmacy might not necessarily require the pharmacy to always stock the lowest priced generic.

According to the interviews, those members who had previously approached schemes to seek clarity on co-payments, stated that they did so because the amount was unaffordable and they needed assistance. The interaction with schemes was frequently deemed unhelpful whilst others who were approached by their schemes stated that the offered explanations were incomprehensible. According to one key informant, efforts to manage high cost of healthcare and the absence of legislated price benchmarks for services offered by healthcare service providers, were some of the reasons that caused schemes to behave in ways that made them unpopular with medical scheme members:

**I always have to co-pay and I don't even know why I must pay extra.** The money was too much and I can't afford it. I had to go and ask my medical aid because I couldn't afford it any more. I even went to their offices to find out why I pay so much extra money, **but they are useless. Remember, I already pay monthly and again I have to pay this levy at pharmacy X.** (MOR\_M5 Low Income Independent Co-payer)

**..every year they come and try to explain these co-payments. Sometimes you don't even understand because what they say becomes so complicated. They say you haven't reached the gap and the threshold and all those things. And then you just listen but you don't understand what is going on. Even today I don't even know what's the threshold, when do I get into that threshold, when do I come out of the threshold, then when that threshold is over then how much do they pay.** (FUT\_ M3 High Income Independent Co-payer)



What we have found is that medical schemes are **behaving in a manner that gives them a bad name amongst medical scheme members because they are faced with huge payments on the claims side** and the quantum of those services is not regulated. So **the medical schemes are chasing their tail to pay for these services which include medicines, hospital costs and specialists. They use money from members to pay for those services, meaning, if the costs of the services keep on increasing, and these are not regulated and service providers charge whatever they feel like charging, without adhering to any benchmark, they charge as they feel like, using a fee for service model, then we as medical aids are chasing that** hence the member ends up paying more. **What scheme's end up doing is to try and find ways and means of decreasing what we pay out.**  
(Regulator 2)

It was interesting, but not surprising, to note that high income area medical scheme members did not necessarily share the same co-payment concerns as their low income area medical scheme member counterparts and neither did the two groups respond the same way when they experienced co-payments. Whilst medical scheme members from low socioeconomic pharmacy locations were more proactive in seeking more information that could assist them to avoid the co-payment, the medical scheme members from high income locations did not. This was probably because of the differences in the pressure exerted by the affordability status between the two groups. The results also seemed to suggest that medical scheme organizations were more likely to proactively approach high income members at their workplace in efforts to provide some sort of information and less likely to do so for low income medical scheme members. Interestingly, despite efforts by schemes the information they provided still remained incomprehensible to respective members.

The medical scheme members who described the co-payment experience in relation to how they managed to deal with the charged amount, explained that they either searched for the pharmacy that did not charge them the co-payment or else they resorted to forgoing treatment when the amount was unaffordable. Others said that they opted not to solicit any form of discussion on the topic because they were concerned about the possibility of further upsetting their poor state of health which existed at the time of visiting the pharmacy:

My son had flu and they gave me a prescription, when I got to **the pharmacy they told me to pay a levy.** When I asked them why I should pay when I have a medical aid, they just said I must just pay the levy. **So I decided to go to another pharmacy. There, I didn't have to pay even a single five cent.** (FRI\_M7 Low Income Independent Non Co-payer)

**When I don't have the money I just leave it and don't buy my medication because sometimes I don't have the money to pay.** They just always tell you about this levy. **Pharmacies are not helpful** because all they say is that if you don't have the money then you won't get the medicines. (MOR\_M5 Low Income Independent Co-



payer)

**What if you ask and you find that you don't understand** what they are telling you when they explain why you are co-paying, (pause) what if you just don't even understand? **Remember you are already upset because you are sick and because you are sick you don't want to be more upset.** So what you do is to just pay what they want and get your medicines and you don't want to ask about it because they just upset me. (NEL\_ M4 High Income Corporate Co-payer)

The views from interviews suggested that co-payments have a much deeper effect on medical scheme members. These unexpressed feelings lead to avoidance behavior being preferred in cases where the member would rather pay, not because they liked the co-payment but rather because of fear of potential psychological disturbances that might occur from lack of understanding of the offered explanation.

#### 4.2.2. Reasoning about co-payments

Interviewees reasoned that the mindset when one is in a state of ill health rendered one unable to address co-payments effectively because the focus is on getting better. According to some regulators, the medical scheme member's status, that is, being insured, was perceived as responsible for creating price insensitivity which causes an illusion and conviction among the insured that someone other than the purchaser was responsible for the payment of the medicine being purchased. These views were described by Medical Scheme members and the regulator as shown below where they suggested that:

**When you are sick you are not thinking about money. All you need is to get better and anything that makes you want to argue, like co-payments, will upset you even more than you are already.** Your state of mind is such that you just want to get your medication and leave. The last thing you want is to not get your medication. So if you have to pay then you just pay. (NEL\_M4 High Income Corporate Co-payer)

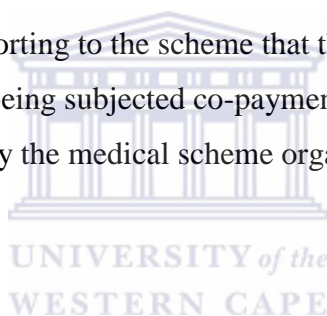
Sometimes **when you know that the medical aid is paying you end up not thinking about money** and that in fact you are the one paying. You forget that they are paying with your money. (KER\_M12 High Income Corporate Co-payer)

The consumer, especially those on medical aids, they don't feel the pinch directly because "if I'm sick and I'm supposed to get this medicine, the medicine has to be prescribed and as a member I have to get it, all I think about is that the medical scheme has to pay". **If the consumer was feeling the pinch and where the consumer was paying directly for these medicines and there was no third party (/like the medical scheme/) paying on their behalf, maybe the consumer would take much more interest** like one would take much more interest when they are deciding to buy a car or a house because it would be affecting you directly. In this case, **it's not affecting the**

consumer directly, it's via, via, via. (Regulator 3)

The views from both co-paying and non co-paying medical scheme members suggested that moral hazard could be a contributing factor to co-payments. Also, to some extent the regulator views appeared to suggest that medical scheme members are to blame because they attract co-payments unto themselves by virtue of adopting a certain attitude after enlisting themselves for insurance.

Some medical scheme members theorized that the medical scheme organizations caused them to be forced to purchase medicines at those pharmacies that charge co-payments. These members cited that the co-payment experiences at these pharmacies are probably not known by the scheme. Other interviewees believed that if the medical scheme member complied with the scheme's requirements by declaring their chronic medical condition to the scheme, the member then becomes prone to co-payments as a result of the introduced limitation to the member's treatment choices thereafter. These members believed that the declaration of a chronic condition to the scheme was not necessarily in the interest of the member because by reporting to the scheme that they are on chronic medication, these compliant members get penalized by being subjected co-payments if they decided to choose medication that was not approved of by the medical scheme organization with whom they were registered:



I have never co-paid at other pharmacies. **I only co-pay at big corporate pharmacies because** it is preferred by my medical aid. **The scheme told me to go there. Maybe they didn't know that I have to pay there.** (KER\_ M12 High Income Corporate Co-payer)

I have seen co-payments more on chronic medication than acute which is why most people do not sometimes want to get their chronic medication listed as such with the medical aid. This is because **if the patient enlists themselves as chronic then they would be confined to the choices of medicines that are selected by the scheme. This makes it more likely to co-pay once you are listed as a chronic patient because you can't choose what you like without co-paying.** But if you don't tell them that you want your medication to be chronic then it means when you go to the pharmacy, the pharmacy will be paid for from the savings account which then to some extent protects you from the co-payment. That is why when you are registered as a chronic patient you have to adhere to what your medical scheme decides if you want to avoid a co-payment. (MAN\_M6 High Income Independent Non Co-payer)

The attempt to reason out why co-payments were experienced at pharmacies which were preferred by schemes, seemed to lead members to rather assume that schemes were not aware of the charged co-payment amount. Interestingly, the confirmation of this assumption was never followed up with the scheme. It is not clear to what extent the less than ideal communication relationship between schemes

and members, was a contributing factor to this kind of behavior by the member. It was also observed that whilst some members associated co-payments with chronic versus generic medication, others linked the phenomenon to the type of pharmacy where the medicine was dispensed i.e. whether the co-payment charging pharmacy was an independent or corporate pharmacy. This could be due to the confusion surrounding the very essence about trying to understand co-payments and causes thereof. The benefits which are designed to cater only for the insured chronic patients, if any exist, could be lost due to such confusion about co-payments.

Those medical scheme members who did not experience co-payments said that they were not sure why they were not charged the co-payment or not even asked to pay extra. Despite this absence of a co-payment, they described the experience as not necessarily comforting because of the lack of proper explanations from the dispensing pharmacist. Some of these non-co payers stated that their medical scheme was sneaky by allowing them to evade co-payments earlier in the year, especially because later in the same year the member might still be expected to take full responsibility of the dispensed medicine costs if the funds allocated by the scheme at the beginning of the year were not utilized prudently by the member:

**I don't know why I don't co-pay, it's not like the pharmacists will explain to you anything even if you co-pay or don't co-pay. I am a client and things should be explained and noted on the receipt. Even the reason must be provided if the pharmacy charges more** than what is stipulated by the medical aid. (DUM \_ M8 High Income Corporate Non Co-payer)

**I hardly experience a co-payment because I belong to a medical aid which is very tricky because they pay from my savings account.** This allows you the member to choose either generic or the original and **once your savings are up (/finished/) then you might need to co-pay because there is an amount that is outstanding from the left over savings.** However I always see co-payments from my mother and her medical aid she belongs to. (MAN\_M6 High Income Independent Non Co-payer)

**I have never co-paid for my chronic medicines. Maybe because I never buy expensive medicines and also because I only go to this one doctor that I was told to use by my medical aid.** I usually leave my prescription at the pharmacy and only come back later to collect my medication. It is convenient for me because both the doctor and this pharmacy are close to my place of work. **What happens is that I get my medicines packed and ready for collection at the pharmacy after giving them my prescription. Then I come and collect my medication later without paying anything.** (MAL\_M2 Low Income Corporate Non Co-payer)

The non co-payment experience by some medical scheme members could well be a reflection of the differences in benefit designs between and within medical scheme organizations. Due to the limited explanation about benefit design matters and how they have an influence on co-payments, medical

scheme members tend to be confused about how best to manage their savings account and even the purchasing of their prescription medicines which include chronic medication, especially in such a way that benefits are maximized.

Generally, all of the interviewed medical scheme members expressed lack of understanding of the reason for the existence of co-payments. To them, medical schemes were expected to take full responsibility by co-paying on behalf of the member. Although pharmacists expressed concerns about co-payments, profitability seemed more important to them. The regulators said that languages and methods used to interact with medical scheme members were not appropriate because messages that may include explanations about co-payments were lost in translation or explanation.

### **4.3 How medical scheme members choose pharmacies and medicines**

#### **4.3.1. Pharmacy type and location as factors that influence purchasing behavior**

Medical scheme members stated that large pharmacies that were easily accessible were preferred for purchasing of medicines. On the other hand small independent pharmacies were believed to have limited stock whilst pharmacies nearer to residential places were preferred because of savings on traveling costs. Prior use and experience with medication was regarded as being influential in subsequent purchases:

**I never go to one man pharmacies for prescription medication. I always go to corporate, chain pharmacies. I assume that corporate pharmacies will always have your prescription unlike small pharmacies.** Small pharmacies have limited stock capabilities and chances are high that a small pharmacy will give me an alternative medicine which was not prescribed by the doctor. (DUM\_M8 High Income Corporate Non Co-pay)

**I don't like co-payments but then I would not waste money to go to a far pharmacy which does not have a co-payment because I still have to use money to get to that pharmacy.** No I don't want that. At least it must not be expensive for me to get to the pharmacy that does not charge me. (MOR\_M5 Low Income Independent Co-payer)

The convenience of a pharmacy seemed to be a key factor when medicine purchasing is considered. The results suggest that this factor may even override cost considerations during the purchasing of prescription medicines. The possible inconvenience of not finding the prescribed medicine at the pharmacy seems to be one of the important factors considered by purchasers of medicines.

#### **4.3.2. Perceptions about good quality medication and price**

Perceptions about the quality of generics and originators were mixed, however, the majority believed

that generics were inferior and originators were of better quality because they acted fast in relieving symptoms. High prices were associated with better quality by those who regarded originators as superior:

**To be quite honest with you I question generics and whether they are inferior or weak or what. I'm not sure if these medicines are of the same quality as the originator. I actually think generics take much longer to work. Also, why do they make them so cheap?** (LES\_M11 Low Income Corporate Co-payer)

My assumption is that **for someone to do a generic they tweak the process of developing the medicine**. So I don't know what reactants are used to develop this same thing. Maybe **they use hydrochloric acid instead of sulphuric acid**. I wouldn't know whether there are impurities but I would assume the doctor knows these things. (DUM\_M8 High Income Corporate Non Co-payer)

**The quality between the generic medicines and originator medicines, they are the same except for price differences. Sometimes generics are made by the same company that makes the originator.** The originator is sometimes the same thing as what is called a generic except that **the two appear different because they are packaged differently and not priced the same** by the same manufacturer. So, **there is no difference between generics and originators**, people need to be educated. (MAN\_M6 High Income Independent Non Co-payer)

Medical scheme members expressed mixed feelings and views about their understanding of the quality and effectiveness of generics and originators. The preference for originators seemed to be caused by this confusion especially about the generics. The fact that in efforts to make sense of the differences between generics and originators, medical scheme members resolve to suspecting the manufacturing processes of generics, could be indicative that education can play a role in addressing this confusion and the negativity expressed towards generics.

Generally, medical scheme members preferred corporate pharmacies that were closest to their work or place of residence and relied on previous experiences for purchasing of medicines. They associated good quality medication with rapid effect and high price. Most interviewed respondents believed that originator medicines were of better quality than generics.

#### **4.4 The perceived influence of health professionals on medicine selection**

##### **4.4.1. The influence of prescribing doctors**

The patients stated that they felt comfortable to use prescription medication that the prescribing doctor claimed to be using themselves. The sharing of personal experiences seemed to reassure medical scheme members of the effectiveness of the prescribed medicine. Some medical scheme members expressed concerns about advice from doctors who used words such as *'let's try this'* during

consultation. They believed that this suggested that the doctor was not sure of what they were talking about:

I was with the ophthalmologist. I had an eye problem and when I got there they told me this is the best eye drop ever, I take it too. **They tell you that they take it every day. So now I'm stuck with it** because I also tried it, it works, it's good, so I'm on it all the time. But then it has to be a doctor I know, who makes me feel comfortable. (FUT\_M3 High Income Independent Co-payer)

Even **when the doctor gives me something I always make sure that I get a second opinion from someone I trust. I usually ask my sister who is a pharmacist.** Doctors make me paranoid because when you read the package insert you realize that you were prescribed medicines for psychos (/psychosis medication/) and you then wonder , **maybe the doctor wants you to be their patient for life and they want you to continue coming to them all the time, I don't trust them.** But what can you do when all else fails, when you need sanity in your life. You go to the doctor and then you somehow feel better when he has told you something. Remember you can always go back to them to complain if something goes wrong whilst taking the medication they prescribed to you. (NEL\_ M4 High Income Corporate Co-payer)

**The doctor gambles with our lives but you have to accept what he says because if you don't get better and you go back to him he will ask you whether you took the medicines he prescribed for you the same way he told you.** Eish, who can argue with these doctor's (giggling)? Sometimes I think doctors treat us like guinea pigs though and give us medicines to check if medicines work or not. I think they are guessing sometimes. (LES\_M11 Low Income Corporate Co-payer)

In order to feel comfortable about the prescription, patients seem to desire being given reassurance of some sort by the prescribing doctor. This was observed among patients who were told by the prescriber themselves that they had personal experience with use of the same prescribed medicine. The prescribing doctor who offered reassurance didn't seem to be expected to have a very close relationship with the patient in order for their view to be trusted. Even though generally, there appeared to be limited trust in the prescribing doctor, patients still believed that what they were told during consultation must be adhered to as instructed, even though the behavior was costly as would be the case if the co-payment was charged for the prescribed medicine. To some extent this could suggest that patients adhere to the dispensing doctor's instructions grudgingly or out of fear of the doctor's authority. The patient's perception of the doctor's opinion could well be one of the factors that expose them to co-payments, especially if the prescribed medicine costs more than that which is preferred and therefore reimbursable in full by the medical scheme.

Overall, the interviews revealed that the health professional with the closest relationship with patients had the greatest influence. This was regardless of whether the professional was a doctor or a



pharmacist. Medical scheme members stated that the words used by the prescriber during consultation determined the extent to which the doctor's advice was trusted. According to some medical scheme members, the perceived level of knowledge of the doctor was assessed during the consultation interaction. In cases where the doctor was not trusted, medical scheme members stated that they resorted to pharmacists they trusted the most to validate the information received from the consulted prescribing doctor. Pharmacists were otherwise considered to be useful sources of advice on matters related to medicines.

#### 4.4.2. The influence of pharmacists

Prior to purchasing prescription medication, medical scheme members stated that they preferred to confirm the doctor's prescription with a pharmacist they trusted or by reading the package insert. The second opinion from the trusted pharmacist became the influencing factor that determined whether the prescribed medicine would be purchased or not. The medical scheme member who expressed preference for such advice believed in the dispensing professionals' knowledge about different available medicine options. The scheduling status of a medicine was also expressed as important in determining which professional's advice was sought, between the doctor and the pharmacist:

**I would always check with my relative who is a pharmacist whether what the doctor gave me is ok.** I have also learnt that I need to read the package insert of the medicine so that I know what danger I am in when I take these medicines. I hate medication so I want to know how to take it and what exactly it is for and what it would do to me. **If my relative agrees with the doctor then I go to the pharmacy and buy the medication.** Sometimes they ask me to pay R100 and R70 levy. But at least I know what I am taking. (NEL\_M4 High Income Corporate Co-payer)

**Pharmacists have a better understanding about medicines.** They know what will cure me. **Pharmacists do not only have option A like doctors but they also have Option B on medicines.** (EST\_M10 Low Income Corporate Co-payer)

**...up to schedule 2 medicines, yes I do listen to advice from pharmacist but from schedule 3 medicines upwards, I prefer a doctor** and I wouldn't take what the pharmacist says. (DUM\_M8 High Income Corporate Non Co-payer)

The pharmacist who cared for other family members besides the purchaser was stated as the most preferred source of information or advice. According to information from interviews a good relationship with the pharmacists made cost to be less of an issue because what was being paid for was appreciated by the medical scheme member:

**I prefer to go all the way to my pharmacy where I used to stay. They care about you and you can discuss stuff with them and they even look after my mom and my dad.** So I know what I would be paying for with them. I

sometimes don't even co-payment. (LES\_M 11 Low Income Corporate Co-payer)

It was interesting to note that where the service offered at the pharmacy was appreciated, the purchaser was more than willing to take the pharmacist's advice and even pay extra even when it meant travelling costs were incurred.

#### **4.5 Pharmacists views about co-payments and purchasing choices of consumers**

##### **4.5.1. The influence of pharmacy stock on dispensing**

According to some pharmacists, available stock at the pharmacy determined which medicine got dispensed and viability of the pharmacy was prioritized when dispensing. Pharmacists stated that dispensed medicines were those preferred by head office or those manufactured by certain companies. Where the price of a medicine was higher than what the scheme was prepared to pay for, pharmacists suggested that the difference was paid by the medical scheme member in the form of a co-payment:

**Co-payments are paid to the business and this does not mean that the pharmacy is getting more than the cost of the medicine. If the medicine is R50.00 and I get R30.00 from the scheme, when the patient pays the R20.00 co-payment I still get the amount that I need for the cost of the medicine.** (SUN\_P3 Low Income Corporate pharmacy Pharmacist)

**At the pharmacy, if you don't agree to the price set by the scheme then the scheme's client will always co-pay. Affordability and viability plays a huge role on co-payments.** It is better to have lesser profit but many times because at least you get more members coming to your pharmacy. (CRO\_P5 High Income located Independent pharmacy Pharmacist)

**We have to dispense from our stock which is determined by the availability list.** The list is decided by the head office of the business. The list of preferred medicines is highlighted for us on the screen when we dispense. **We always have to make sure that stock is available for medicines that appear on the availability list. We have brown lines which we are not allowed to keep, blue lines which are mostly expensive and green lines which are the most preferred by the business.** Brown lines in particular are decided by the business. **Unless the patient asks for the brown line we just never keep it in our pharmacies.** What I have noticed is that our **business prefers certain manufacturers.** As the biggest pharmaceutical chain we have some leverage and we can negotiate with manufacturers. Manufacturing companies assist us with training and conferences. We usually have this big conference which is sponsored by manufacturers, it's very big. **The manufacturer sponsors us as a business and you can imagine when this happens you have to be loyal to the manufacturer.** (VER\_P6 High Income located Corporate pharmacy Pharmacist)



At pharmacies, stock availability seems to be mostly affected by profitability considerations and other stock management decisions that are taken at pharmacy head office level. The desire to prevent exposure of medical scheme members to co-payments does not seem to be one of the most influential factors that determine the dispensing of prescription medicines at pharmacies. The priority during dispensing seemed to be profitability of the business and relationships with pharmaceutical manufacturers and less so the purchaser and compliance with the medicals scheme's reimbursement requirements.

According to the interviewed pharmacists, co-payments appeared to be interpreted as a reflection of alliances and relationships that existed between the pharmacy and other stakeholders within the pharmaceutical supply chain in addition to observed preferences by purchasers of medicines. These reveal themselves in the stock which is kept at pharmacies. To some extent, the fact that nothing compels pharmacies to stop charging co-payments nor to adhere to medical schemes formulary list of medicines, could also be some of the factors that help to perpetuate the phenomenon.

#### **4.5.2. Pharmacists views about purchasing choices of consumers**

Information from pharmacist interviews revealed that consumers of chronic medication preferred to keep medicines which were originally prescribed to remain unchanged. According to pharmacists, this preference was caused by familiarity with the brand. One of the interviewed pharmacists was of the view that medical scheme members were not aware of co-payment causing changes that are intermittently made by medical schemes. The confusion about co-payments among members was stated to be caused by the misalignment between the medical schemes' reimbursement criteria and the tendency for chronic medical scheme members to prefer the exact same chronic medicine which was originally prescribed by the doctor:

**When the scheme introduces the new medicine which is cheaper, then that's when you find patients wanting to stick to that what they call the original- this is what they are used to. Usually when the change happens now the old one requires a co-payment because it becomes more expensive for the scheme, but members don't know that. That is why they get confused when they are asked to co-pay and all along they didn't pay anything for the same medicine. (CRO\_P5 High Income located Independent pharmacy Pharmacist)**

**When patients take medicines for a long period, brand loyalty develops. Brand loyalty may cause patients to start co-paying especially when medical schemes change their reimbursement criteria. Medical schemes will always pay for the cheapest generics. If the patient has been taking a medicine for a long time and they feel comfortable they never understand why they should be changed to another cheaper generic even**

**if the new generic makes them not to co-pay. They would then continue to take what they are comfortable with. If they do that, then they co-pay.** (KAL\_P4 Low Income located Corporate pharmacy Pharmacist)

Pharmacists expressed not only the importance of stock as a factor that determined dispensing practices at pharmacies but they also stated that consumers preferred to keep previously used and familiar chronic medication brands unchanged and this was considered to have a direct influence on dispensing. These pharmacists' experiences suggested that medical scheme members would rather pay more than change previously purchased chronic medication which is familiar to them. The pharmacist's comments about purchaser preferences were found to be interesting by the researcher because they seemed to suggest that pharmacists had no choice but to dispense whatever the purchaser demanded. Indirectly, these comments suggested that purchasers were the cause behind the charged co-payment. This area might require further qualitative investigation in order to establish the reasons for such decision making and more importantly the extent of such behavior among purchasers of medicines. The latter might require the application of quantitative research methods.

Other pharmacist views suggested that lack of knowledge about the medical scheme's reimbursement criteria were reasons why medical scheme members co-paid because when schemes implemented changes, the charge and subsequent payment tended to create confusion amongst members who then encountered co-payments due to lack of information on how to avoid the charged amount. The views of medical scheme members about schemes in general and as reflected elsewhere in this section suggest that these views by pharmacists are possibly factual and that indeed the insured are generally confused and therefore do not understand how medical scheme organizations operate.

Some pharmacists believed that consumers co-paid because they prioritized advice from prescribing doctors over attempting to avert co-payments when they get to the pharmacy. These pharmacists said they assisted the consumer to retain the prescribed medicine at no additional cost when others gave the patient their preferred medicine. The absence of some level of assistance from the pharmacist would have otherwise attracted a co-payment for the purchaser. Such pharmacist initiated contingency measures which are aimed at avoiding the co-payment were considered to be possible early in the year before funds allocated to the member by the medical scheme were depleted:

**Patients listen to the doctor instead of the pharmacist. When they come to us they rarely want to change the prescribed medicine even if it makes them co-pay. What we can do if the prescription is expensive is to make a plan so that they don't co-pay and then you explain to them what you have done for them. We also don't want to lose a customer. If you don't help them somehow, then a co-payment is guaranteed. We can only do this early in the year when the member has funds with the medical aid. It is very difficult to assist**

**them towards the end of the year when the money is used up.** (KEM\_P1 Low Income located Independent pharmacy Pharmacist)

I always choose the generic that will accommodate the patient because sometimes the patient is on a lower option. Otherwise I take whatever generic that is available in the pharmacy when I dispense. **When a patient says they want medicine X you give them because you don't know why they need it. You can also not just keep a medicine just because it is cheap but you keep what you know you will get a script for** (SUN\_P3 Low Income located Corporate pharmacy Pharmacist)

The inclination towards profitability at pharmacies seemed to compel some pharmacists to behave in ways that could be considered unethical and or an abuse of the system. Under such circumstances, professionalism amongst the pharmacy profession could be at stake, hence the need for immediate attention to address the unintended consequences of co-payments.

Other dispensing pharmacists believed that demands from some consumers resulted in co-payments and these were understood to be caused by certain beliefs about the medicine. Prior use of medication was also stated as influential in such purchasing behavior cases:

**Experience in use is the most important factor motivating consumers to ask for a specific medicine. So when they come and tell you to give them something specific, you don't want to argue with them, you just give it to them.** I think people are prepared to pay for what they believe works. Others would tell you that this medication works better for them. They sometimes tell you that you mustn't emphasize generics because they are the ones taking this medicine and they know what they are talking about. (KAL\_P4 Low Income located Corporate pharmacy Pharmacist)

The fact that patients sometimes prefer to use specific medicines which are then demanded during purchases at pharmacies, pharmacists tended again to focus on profitability as opposed to attempting to provide the medical scheme member with an accurate explanation about what exactly has caused the co-payment. The tendency by dispensing pharmacists to avoid explaining the reason for the experienced co-payment, means that the missing, but necessary, explanation when the member's choice of a medicine is not aligned to the scheme's reimbursement criteria never reaches the member who then remains confused. The extent of understanding of medical scheme rules among pharmacists is also not clear, hence further investigation in this area might shed some more light.

## **4.6 Views about legislative interventions and dispensing practices as they relate to co-payments**

### **4.6.1. Key informant Reasoning about co-payments**

**Interviewed regulators** said that co-payments were reflective of measures used by medical schemes for purposes of managing high cost of claims from healthcare service providers. They reasoned that schemes engaged certain providers to solicit better rates on behalf of members in order to reduce the financial impact and co-payments which resulted when the agreed upon rate did not match what the service provider charged the medical scheme member:

**What we have found is that medical schemes are behaving in a manner that gives them a bad name amongst medical scheme members because they are faced with huge payments on the claims side.** The fact that members are faced with more co- payments now is probably related to shrinking of benefits from medical schemes. **What schemes have done is, because they are forced to pay in full on invoice for PMB diseases, they then find themselves chasing a quantum they don't even know and which can change any time.** The medical schemes never know what the bill from service providers is going to be. **The scheme has no control over that quantum. So to manage the risk, medical schemes shrink the benefits and the member co-pays.** The medical schemes do this knowing that for an ordinary person it would be very difficult to opt out because of the emotional linkage of the member to the scheme. (Regulator 2)

Co-payments are a mechanism used by schemes to get the member to use specific providers. It's not an incentive but it's a disincentive to the member. **The rationale for a co-payment is to channel the member towards a certain provider. Schemes arrange with a special network for a cheaper rate than services offered elsewhere. The co-payment is therefore used to channel members to providers that have negotiated better rates with schemes.** (Regulator 4)

Interestingly, some regulators view co-payments as a tool to channel members to certain providers as opposed to using it for cost sharing purposes or to encourage generic use. This approach could possibly be peculiar to the South African context. To confirm this might require further investigation.

**Dispensing pharmacists** suggested that medical schemes were responsible for causing co-payments because when the reimbursement criteria is amended by the scheme, these changes are never communicated immediately to dispensing pharmacists. According to the views of these pharmacists, co-payments were unavoidable when the available stock no longer fits into the schemes' preferred list of medicines. Under such circumstances pharmacists stated that regardless of such misalignment between stock and reimbursement criteria, the available medicines must still be dispensed in order to get rid of the stock, this even when the dispensing process results in a co-payment which then gets charged to the purchaser:

**Other schemes contract with us and we enter into an agreement where for the scheme's clients we charge**

**them 30% less - We call them networks. Planning for these arrangements between the pharmacy and the scheme is not easy if the scheme changes and moves to the next item. So what do we do with what was previously preferred by the scheme.** Remember you already have this thing on your shelf, so even if it has a co-payment you still have to dispense it. What do we do? We have to dispense it anyway. (CRO\_P5 High Income located Independent pharmacy Pharmacist)

The arrangements between schemes and pharmacies appear to only focus on saving money for the scheme in addition to making profits or sustaining the pharmacy businesses. It appears as if these arrangements do not cater for the member's interests where the impact of the agreement on the purchasing member is considered. One would assume that if the member's interests were considered, a provision not to charge a member any co-payment would at least be part of the negotiation process between the scheme and the pharmacy. The nature of these agreements might be the reason why the medical scheme members are more upset with medical scheme organizations especially because schemes are the ones who collect monthly contributions from members but in return members do not seem to feel that they are getting value for their money. The member's feelings towards the schemes could therefore be due to the less than expected level of service offered by the schemes.

Some pharmacists said that the introduction of medicines pricing laws caused both the confusion among medical scheme members and the existence of co-payments. According to these pharmacists, because medicines became affordable post the introduction of the law, medical scheme members started to use more medicines. These individuals reasoned that during this period, schemes struggled to cope with the upsurge in medicine utilization, hence they resorted to introducing co-payments:

**Everyone was confused when government introduced the law to decrease prices of medicines. When the schemes started to get more people coming to the pharmacy and a lot of money had to be paid for many people even if medicine prices were low, schemes started to find ways to say we are no longer going to pay in full.** (SUN\_P3 Low Income located Corporate pharmacy Pharmacist)

The view that the very law which aimed to assist the general public to cope with high healthcare costs became the same reason for the purchaser to suffer, suggests that it is possible that the unintended consequences of the law were not considered as a threat to the successful introduction of this pro-consumer legislation.

Other key informants said that non healthcare costs were funded with money received from medical scheme members and this rendered schemes unable to adequately cover healthcare costs such as co-payments in full:

**You hear members say they've run out of benefits round about September, the next day you hear that schemes have sponsored a soccer team, have sponsored a marathon , a bike race etc, etc, with member's**

**money, then you become concerned about what exactly schemes are doing at the expense of the members?**

The question is, “is the scheme having the member’s interests at heart or there are other things that are happening with the member’s money that the people running the scheme benefit from, not the member?” If you begin to reflect on these issues, it is not pleasing to see. The medical schemes do this knowing that for an ordinary person it would be very difficult to opt out because of the emotional linkage of the member to the scheme. (Regulator 3)

It would be interesting to understand what the motivation is for such behavior by the medical schemes especially if one considers the fact that medical schemes are not for profit organizations and therefore the money used for sponsoring such events would be taken from member contributions. Also, the views of the regulator on this particular aspect, might be necessary to interrogate in more detail especially in further studies that aim to investigate the operations of medical scheme organizations.

The key informants, who stated that co-payments were a challenge but understandable, said that although not ideal, there was a good reason for their existence. Pro-pharmacist views stated that co-payments were for dispensing services offered at pharmacies whilst in support for schemes reasoning was that because medical insurance was intended for more catastrophic events which were unpredictable, services of a less catastrophic nature such as dispensing of medicines to out-patients may not be prioritized by schemes:

**Co-payments are not right but they are used for a particular purpose. Somebody must pay pharmacies in full though for medicines.** The medical aids must pay in full to pharmacists for co-payments to be taken away. The Designated Service Providers (DSPs) for example are a problem and schemes are behind them. They make independent pharmacies more disadvantaged compared to corporate pharmacies. Schemes must realize that when you need medical help you can lie anywhere and there might be no luxury to decide where to get help urgently. You may land at a place where you can’t even afford. There could be one pharmacy in that area, and it might not be a DSP pharmacy. The problem is, patients not using DSP services are penalized because they are not obliging with conditions from schemes to use particular channels. (Regulator 1)

Co-payments are a challenge. It’s a challenge because Prescribed Minimum Benefits (PMB’s) deal with the most catastrophic events so that’s why members must co-pay for non-catastrophic events. To the scheme, non-PMB events are of a lesser financial impact than PMB's, possibly because medical scheme members co-pay for non-PMB services as they are not priority to schemes. (Regulator 4)

There seems to be a view among some regulators that hospitalization costs must be prioritized by medicals schemes as opposed to out-patient healthcare costs. This approach to healthcare seems to believe in waiting for the patient to be sick and then offer them treatment as opposed to preventive or primary care which is cheaper. This area might require further investigation as if this is the South



African approach to healthcare, it is therefore not surprising that the overall cost of healthcare is so high in the country.

The interviewed regulators stated that the consumer cavalier attitudes towards issues of health and the close relationships between service providers and patients were factors that contributed towards co-payments:

**There is a tendency for people to be apathetic in their attitude when it comes to issues of health. But then again, service providers are much closer to the member. It is easy for them to blame a whole lot of things on medical schemes.** In many ways, the provider's side is where you are more likely to find someone not playing ball. The tendency is for service providers to ward off responsibility from themselves by shifting blame to other players. (Regulator 3)

Whilst consumers were considered indifferent by regulators on issues of healthcare, service providers seemed to be influential on medical scheme members because their position enabled them to exert an influence on patients in ways that potentially caused co-payments whilst making everyone else, such as the schemes look bad in the eyes of the patient. The apparent tendency for schemes to use money that is collected from members to fund non-healthcare costs that do not benefit the member, somehow dilutes any sympathy towards them, from the regulator's perspective. The pharmacy on the other end is left with the responsibility to sell the available stock which might attract a co-payment towards the member, especially when the scheme decides to change the formulary list which determines what gets reimbursed.

#### **4.6.2. Views of policy makers and medical scheme industry managers regarding legislative interventions and practices that concern dispensing and purchasing of prescription medicines**

The views from some key informants were that whilst government policies were relevant, they seemed to lack proper implementation in a manner that benefits consumers. Others stated that lack of monitoring and evaluation of current pricing policies caused co-payments because post implementation new methods were introduced by those being regulated without any immediate intervention from government. In addition, other key informants questioned benefits to medical scheme member when schemes negotiated better rates with service providers:

The structure of the current pricing regulations meant to have consistency in medicine prices where medicines are priced the same way in all the pharmacies offering the same service. **This idea was right to say healthcare must be available to everyone equally. However this pricing thing is not working. Players in the industry started to look for other ways of making money after the regulations were introduced.** These other ways are

about making more profits. Co-payments are part of this profit driven industry. Our laws in the country favour that we do things in a particular way. **Generic substitution for example makes pharmacists to charge patients whilst dispensing that very same generic. It is important to monitor and evaluate our policies because what we see with pricing of medicines is as a result of not preventing people from playing around with legislation.** (Regulator 1)

Co-payments have always been there but over the years they have been firmed up by the schemes **because schemes can see that it is one way of reducing what gets paid out. Manufacturers are however very much a part of this and unfortunately the government policy has a lot to do with it because government policy is promoting use of generic products.** Now, generic products are products that are priced lower than branded products and medical schemes **latch on to that and say our formulary is made out of generic products because they are cheaper to pay for and they are just as good as brand name products. We are not arguing against that. The problem here is, when you are subjecting the member to all this, ‘what is the benefit to the member in terms of contributions?’** because you as a medical scheme, if you are going to pay less for medicines in a particular year, to what extent is that having an impact towards the contribution that the member will pay because you would expect that, what the scheme benefits from should have an impact on the member’s contribution somehow. (Regulator 2)

The behavior and relationships that exist between different players in the healthcare industry and to some extent policies, appear to benefit everyone but the consumer. There might have to be further work conducted to establish what it is exactly that causes policies to be unsuccessful in achieving the desired outcomes. The reason could well be inadequate monitoring and enforcement of these policies.

Some regulators stated that, due to lack of monitoring, the benefits of the generic substitution policy to consumers were questionable. The generic substitution policy states that purchasers of medicines must always be informed of the benefits of generics at pharmacies when presenting with a prescription. During interviews recommendations were offered on areas to focus on if the introduction of policy is to be successful:

**Government policy on generic substitution is correct but the way it is utilized does not necessarily lead to a situation where the member benefits. So, in no way is a medical scheme going to move away from the issue of generic formularies.** Another thing with formularies is, it’s not just about the product but also how much of that product is going to be made available to the member and for how long. **It is pointless to put a medicine on the formulary and only make it available for a shorter duration than what is required in terms of clinical outcomes. That is what schemes usually do. In terms of clinical outcomes, the member will not get enough medication they are supposed to receive if the scheme only pays for a certain portion and leaves the rest for the member to pay.** What schemes do is to list medicines on the formulary but reduce treatment duration just to save money and that is very questionable. (Regulator 3)

**If there are no collateral issues, such as measures put in place to extract the benefit out of the introduced**



**policy, the kind with mechanisms that allow you to extract the benefits that should accrue to the people, then the introduced policy alone is only on paper, and what government hope for will not happen. Secondly if players are not embracing the policy for whatever reason and their intuition and their own abilities as human beings to plan things, they are not going to do things in a manner that's going to find traction because they've not embraced it and they are not buying into it. Which then means that key things when it comes to policy 1) You need to get buy in but you may not get buy in of everybody and because of that then 2) You have to have a mechanism of enforcing the policy, otherwise you are not going to accrue what you think you will benefit from the policy. (Regulator 3)**

**When introducing a policy it is important not to take a simplistic view in implementing and modeling it, otherwise it's easy to run into other problems which we have already experienced. We will definitely run into more problems when implementing other policies in future, the same way we did with previous policies if we continue to do so. A lot of sophistication is required when looking at introducing policies. And a lot of adequate thinking and the rest is very important. The issue we have in South Africa is that we might implement a tailor made version of what is copied from elsewhere in other parts of the world. Right now the private sector in South Africa looks good, there is no magic in it. It's just that they make sure that there are adequate resources and the public sector doesn't look good and that's because we've not ensured that there are adequate resources. (Regulator 3)**

Overall, the regulator key informants appeared to believe that consumer apathy, measures used by medical schemes to contain high cost of health care and lack of monitoring of policies were some of the main factors that exacerbated co-payments. The interviews however revealed that there are possible unethical practices during dispensing of medicines. This is where the country's generic policy is potentially used by some in ways that counter the very essence of the intention of the policy i.e. to benefit the consumer. To establish whether the perceived behaviors are indeed in existence and to measure the extent thereof, an explicit study in this regard would have to be conducted.

Based on responses of some of the regulator interviewees, there seems to be some level of acknowledgement among regulators that health policies and implementation thereof may not be achieving the optimum outcomes expected in South Africa. Such recognition by regulators could be one of the reasons why South Africa decided to introduce the National Health Insurance System.

## **4.7 Conclusion**

### **4.7.1. Different perspectives about co-payments**

Interestingly, even though all three categories of interviewees, i.e. medical scheme members, pharmacists and regulators, expressed concern about co-payments, they each approached the topic from different perspectives. According to the expectations of most insured members, medical scheme

organizations should be taking full responsibility of the co-payment by paying the amount charged at the pharmacy. There seemed to be misalignment between what medical scheme members expected from medical scheme organizations and the actual benefits which are offered to the medically insured.

The pharmacists on the other hand had co-payment views that appeared to revolve around profitability of the pharmacy business and less so on the experiences and impact of the co-payments on medical scheme members. To pharmacists, views about co-payments were not divorced from stock availability at the pharmacy. Based on the pharmacist interview results it appears that pharmacists often viewed co-payments as a profit making avenue for pharmacies rather than from the perspective of how medical scheme members were impacted financially or otherwise.

The regulators appeared to view co-payments as an undesirable outcome of the inappropriate communication methods which are used by medical schemes to provide medical scheme members with explanatory information about member benefits. The regulators blamed communication methods such as the language used during interactions with insured members and more importantly the use of jargon which cause valuable messages to be lost in translation.

#### **4.7.2. The impact of preferences by medical scheme members for certain pharmacies and specific medicine types**

Medical scheme members preferred big pharmacies that were closest to their work or place of residence and relied on previous experiences for decisions that inform purchasing of medicines. They associated good quality medication with rapid effect and high price. Most respondents believed that originator medicines were of better quality than generics.

The interviews further revealed that the health professional with the closest relationship with patients had the greatest influence on the purchaser's decision. This was regardless whether the professional was a doctor or a pharmacist. According to medical scheme members the words used by the prescriber during consultation determined the extent to which the doctor's advice was trusted. Based on the assessment of the prescriber during this consultation process, medical scheme members tended to make assumptions that resulted in the perceived level of knowledge of the doctor. In cases where the assessment resulted in the doctor being regarded as not trustworthy, medical scheme members stated that they resorted to pharmacists whom they trusted the most to validate the information received during the interaction with the prescribing doctor. Generally, pharmacists were considered to be useful sources of advice on medicine matters.

According to the interviewed dispensing pharmacists, consumers preferred to keep previously dispensed chronic medication to remain unchanged during the subsequent filling of the six monthly prescriptions. These pharmacists also stated that the lack of knowledge about medical scheme's reimbursement criteria were main reasons why medical scheme members co-paid because when schemes implemented changes on the criteria, these tended to create confusion amongst members. The confusion would then result in co-payments because medical scheme members would be misinformed about available measures that can assist them to avoid the extra payment.

Some regulator key informants seemed to unfairly blame the co-payment experience on the purchaser. They believed that co-payments were caused by the apathetic attitude of the consumer. Other key informants stated that medical schemes used undesirable measures to contain high cost of health care and that the lack of monitoring of policies further exacerbated co-payments within the scheme environment.

#### **4.7.3. The country's current policy environment.**

Whilst regulators understood that existing policies have good intentions and had potential to curb co-payments, there seemed to be an acknowledgement that more could be done in order for the current policies to be beneficial to the consumer. Even though interviews for medical scheme members did not include questions about policy, none of the responses from the insured mentioned legislative interventions. It is for this reason that the researcher believes that the earmarked National Health insurance regime is partly aimed to ensure that South African consumers generally benefit from the country's health system.

## CHAPTER 5 – DISCUSSION

### 5.1 Introduction

The study aimed to explore experiences and reasoning of medical scheme members exposed to co-payments for prescription medicines and to describe factors that caused the phenomenon to exist at private sector retail pharmacies. It was conducted in private sector retail pharmacies, an area familiar to the researcher because of her involvement in the regulation of private sector medicine prices in South Africa. The study results were derived from a limited sample of interviewees as is expected in qualitative research and therefore cannot be construed to represent the whole of South Africa. Nonetheless, interviews conducted among dispensing pharmacists from different socioeconomic statuses, regulators and medical scheme members from different medical scheme organizations and plans, highlighted a variety of co-payment perspectives worthy of noting and further interrogation.

The sampling approach used in the study is regarded as one of the strengths of this research because the diversity in the sources from where information on co-payments was collected makes the study results believable and trustworthy. In addition to the inclusion of a variety of interviewees with different perspectives, more than five medical scheme organizations were represented among the interviewed medical scheme members. Also, the selected pharmacies had to either belong in a category of corporate pharmacy or independent pharmacy in order to be included in the study and this was over and above their different locations and the differences in the wealth status of the patients that are served by these sampled pharmacies. Although the study focused on the experiences of medical scheme members, in addition, the views of regulators were also incorporated and this factor is believed to have made the study results rich because of the diversity of perspectives.

Overall, information from interviews suggests that co-payments were outcomes of an interplay between profit oriented pharmaceutical supply chain stakeholders, negative consumer perceptions about generics, preferences to purchase medicines at certain pharmacy types, especially corporate pharmacies and the inclination to only take advice offered by dispensing doctors. In hindsight, the researcher could have included prescribing doctors in the sample population, to establish whether the prescriber does in any way feel obliged to comply with the scheme's reimbursement criteria and whether co-payments paid by medical scheme members at pharmacies are in any way considered prior to the writing of a prescription. By exploring such information, the extent of the influence of the prescribing doctor on co-payments, could be better understood especially from the perspective that excludes the medical scheme member perceptions and preferences from the equation.

Lack of transparency in the pricing of services within the sector and inadequacy of government to enforce existing policies were other factors that seemed to contribute to the confusion among medical scheme members and the experienced occurrence of co-payment causing behaviors. The study results revealed that almost all of the interviewed medical scheme members from different levels of wealth statuses appeared to be generally confused about the co-payment practices.

Medical scheme members appeared resentful towards pharmacies but more towards schemes because co-payments were regarded as extra payment on top of the monthly contributions paid towards the insurance premium. Data from interviews revealed that, because pharmacy personnel had better access to consumers compared to the medical schemes, they had the opportunity to explain co-payments in a manner that somehow rendered schemes more responsible for causing the co-payment. Interestingly, low income area members were more concerned about affordability whilst high income area medical scheme members were more concerned about lack of comprehensible information being offered about co-payments. These differences between members indicate that although most interviewees were unhappy about co-payments, the economic status of the member could be a factor that determines the main area of concern which could then be addressed by medical scheme organizations or government through policy interventions. The role of schemes could be through provision of information without the use of jargon and or abbreviations. Further, aggressive and continued consumer education about generics would be ideal if done by government as opposed to being made the responsibility of service providers who may have a vested interest in the purchasing of profitable medicines.

At pharmacies, in most cases pharmacists do recommend a generic medicine as an alternative medicine to what the doctor has prescribed. Given that the South African generic substitution policy does not make it mandatory for qualified dispensers to dispense the lowest price generic, the pharmacist may opt to dispense the most expensive generic in order to pocket a higher dispensing fee. Currently, highly priced scheduled medicines attract the highest dispensing fee. Education to consumers could require reiterating messages that state that generics, regardless of price, are clinically interchangeable with original brand medicines and have the same quality, efficacy and safety profiles, nevertheless they are much cheaper in price and further provide the same therapeutic outcomes and can lead to substantial savings for healthcare systems (Hassalli et al., 2014). Consumers also need to be informed that generic prices vary and that branded generics may be far more expensive than unbranded medicines.

In this research the majority of interviewed medical scheme members preferred originators because they perceived generics to be of low quality and originators were considered more efficacious. These perceptions are in contradiction to efforts to minimize expenditure towards medicines by introducing generic substitution policies and the medical schemes rallying behind the dispensing of lowest priced generics at pharmacies. For schemes, the idea is to ensure that less is paid towards medicines with the hope that medical scheme members are not charged extra in the form of co-payment. The co-payment is therefore used by schemes as a disincentive for members to purchase medicines at pharmacies that dispense high priced medicines. This behavior by schemes is common elsewhere where insurers adopt formularies such as a three tier co-payment system where patients become liable to pay only the lowest co-payment for generic medicines (first tier), a middle co-payment for preferred brand name medicine (second tier) and the highest co-payment for the expensive non-preferred brand name medicine (third tier) (Huskamp et al., 2003, Kohl and Shrank, 2007, Shrank et al., 2006 and Shrank et al., 2007; Congressional Budget Office (CBO) Congress Of The United States, 2010).

In this study, interviewed pharmacists claimed to be more loyal to certain manufacturers instead of aligning themselves with medicine pricing and procurement expectations by medical scheme organizations and interests of their patients. The co-payment would therefore be inevitable if the pharmacist did not procure an 'appropriate generic' and also did not charge the 'right price' which the scheme is prepared to pay for the dispensed medicine. The information asymmetry resulting from lack of understanding by the member who remains confused when the co-payment is charged happens to be an area where more transparency is required. There is no legislation for example which compels pharmacists to know and offer accurate medical insurance related information to consumers. This is confirmed by Whitehead et al., (1999) who suggested that information provision at pharmacies generally does not include insurance option details and consequences about price and purchasing choices. Usually, information provided at pharmacies is limited to medicine consumption. While it would be desirable to have such insurance related information available at pharmacies, it is acknowledged that it might be difficult for the pharmacists to remain current with the frequent changes that occur at scheme level. The number of schemes and the associated changes per scheme would further be arguably an added challenge for pharmacists to cope with. Despite these potential challenges, pharmacies could still be compelled by government to offer for sale the lowest priced generic version of every therapeutic category of medicines at all times. Such interventions by government could contribute to attempts at ensuring that healthcare and medicines in particular are affordable in South Africa.



Preference for the most convenient pharmacy is a factor that seemed likely to predispose medical scheme members to co-payments. Previous studies confirmed, as was the case in this study, that pharmacy convenience is an important factor considered by consumers when deciding where to purchase medicines (Sorensen, 2000; Whitehead et al., 1999; Smith and Coons, 1990; Lipowski, 1993; Gagnon, 1977). According to Whitehead et al., (1999), convenience is generally accepted as the most likely patronage reason followed by “like the pharmacist,” “price” and pharmaceutical services,” with the importance of a particular patronage factor depending on the type of pharmacy. The fact that interviewed medical scheme members said they preferred convenient corporate pharmacies suggests that even if co-payments were charged at these pharmacies, patronage would be less likely to be affected. The well known and proven likelihood for medicine price differences at pharmacies, coupled with the patronage factor and pharmacy preferences could therefore either protect or predispose consumers to more or less co-payments, depending on the medicine being purchased especially because evidence suggests that no one pharmacy has the lowest prices across the board (Sorensen, 2000). In addition, the legally acceptable differences in South African dispensing fees at pharmacies also have potential to contribute to the reduction or increased cash payments in the form of co-payments by consumers. Notably, the study results suggested that preference for a specific pharmacy may be for more than geographical convenience but may also be for the quality of service provided.

In this study, interviewed patients trusted the health professional with whom they had a good relationship, regardless of whether they were pharmacists or doctors. These findings are aligned to a study performed by the Royal College of Physicians that opened a consultation to define the nature and role of medical professionalism in modern society, and in their report, rapport between patients and health professionals was emphasized. The report further suggested that doctors and pharmacists should embrace values that underpin the trust that the public ought to have in both professions (Wingfield, 2006) because this was expected by consumers. By conducting such studies doctors and pharmacists may have recognised the importance of a mutual trusting relationship with patients and the fact that mastery of discipline alone may be enough to gain patient trust.

Regulator views about the legislative interventions and dispensing practices suggested that co-payments were caused by lack of policing and enforcement of policies in South Africa. Consequently regulators suggested that over time, post policy implementation, the regulated entities developed ways to circumvent good policies without any responses from government to address these developing perversities. In Netherlands, a study conducted by Wettermark et al., (2009), confirmed that the effectiveness of most pharmaceutical policy strategies tended not to be thoroughly evaluated and

enforced. The study suggested that there is evidence that behaviour of healthcare providers including professionals was difficult to influence with traditional methods, hence more innovative ways of enforcing policy are necessary if benefits were to accrue as envisaged.

Studies conducted with the aim of demystifying policy implementation and enforcement have suggested that, to ensure policy effectiveness by influencing behaviour of health professionals and patients, Four abbreviated E's i.e. Education, Engineering, Economics and Enforcement are critical to effect (Grandfils and Sermet, 2006; Godman et al., 2008; Godman et al., 2009). The first E for Education includes educating patients and doctors in addition to the introduction of the requirement for prescribers to ensure that prescriptions do not attract co-payments; The second E for Engineering includes limiting contacts between prescribers, dispensers and manufacturers; The third E for Economy involves amending insurance and reimbursement systems to ensure that patients did not co-pay, and the fourth and last E for Enforcement covers compulsory prescribing restrictions and management of insurance companies (Grandfils and Sermet, 2006; Godman et al., 2008; Godman et al., 2009). In addition and in line with the views of some of the interviewed regulators in this study, Wettermark et al., (2009) proposed that it is of crucial importance to thoroughly evaluate in isolation the benefits and any potential negative outcomes of pharmaceutical policy, prior to implementation. The existing generic substitution legislation in South Africa can be used as an example in this regard.

Despite the good intentions of this law, pharmacies have found a loophole which enables them to dispense any generic regardless of price. By dispensing highly priced generics as opposed to the lowest priced generic which is the most preferred by medical scheme, the difference in price tends to be charged to the consumer in the form of a co-payment. Even though both parties remain compliant with the legal requirements of generic substitution, the challenge which causes a co-payment becomes that of a difference in the price of a medicine preferred by expense shy schemes and the price of a dispensed generic of a profit driven pharmacist. As proposed by Wettermark et al., (2009) the pre-evaluation of this good generic substitution policy could have exposed these nuances for later firming up of any gaps that might have rendered the policy less than optimum in achieving its goals post implementation. Policy evaluation post implementation would also be very important. The researcher's view is that whilst these proposals make sense, resource implications should be considered as an added component to pay attention to.



## CHAPTER 6 – CONCLUSION AND RECOMMENDATIONS

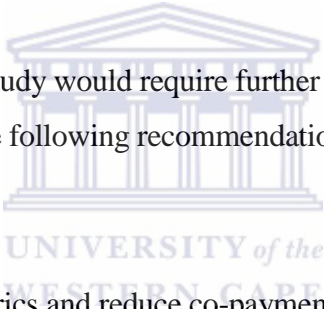
### 6.1 Conclusion

This study has highlighted that medical scheme members felt confused and generally lacked understanding about co-payment charges whereas the regulators were of the view that lack of monitoring of existing policies could be contributing to the development of undesirable phenomena such as co-payments. The information from the study further revealed that, from the perspective of the consumer, there is lack of transparency in the benefits offered to medical scheme members by schemes and pricing of services and commodities offered at pharmacies in the private sector. Retail pharmacists appeared to use co-payments as a form of income generation and as one their profit making methods for the pharmacy business.

Further studies on a larger scale might be necessary to validate the findings of this study especially in the area of pharmaceuticals.

### 6.2 Recommendations

Any of the insights highlighted in this study would require further investigation through quantitative research in order to confirm whether the following recommendations are appropriate or not. The recommendations are as follows:

- 
- Address perceptions about generics and reduce co-payments, rigorous and constant consumer education and introduction of mandatory procurement of the lowest priced generic at pharmacies should be considered by government;
  - Introduce a regulatory process to review the information that is offered to Medical Scheme members by schemes, prior to dissemination. The intention would be to ensure that the content is easy to understand and that it is free of the use of jargon and complicated terminology and abbreviations;
  - Maximise price competition between pharmaceutical manufacturers of medicines, collusion between manufacturers and pharmacies should be outlawed, especially because the arrangements do not seem to benefit the consumer;
  - Promulgate the mandatory requirement to monitor, evaluate and enforce pro-consumer policies at regular intervals to ensure that maximum gains accrue from immediate identification and

resolution of the unintended policy consequences and or any potential and or emerging perversities that may be identified as having a negative impact on consumers;

- Investigate the contribution of the prescribing doctor towards the extent of the co-payment i.e. to what extent do prescribers of prescription medicines consider formulary lists of medicines from medical scheme organizations.

To achieve all the above mentioned recommendations, the government should consider investing resources in monitoring and evaluation and enforcement of pro-consumer policies post implementation, particularly those with potential to reduce expenditure towards healthcare.



## REFERENCES

- Abukres, S. H., Hoti, K., Hughes, J. D. (2014). Patient attitudes towards a new role for pharmacists: continued dispensing. *Patient Preference & Adherence*, 8. Available from: <http://web.a.ebscohost.com.ezproxy.uwc.ac.za/ehost/pdfviewer/pdfviewer?sid=4605b28c-9afe-404b-839d-bc25e1e16a76%40sessionmgr4005&vid=1&hid=4114>
- Al-Gedadi, N. A., Hassali, M. A., Shafie, A. A. (2008). A pilot survey on perceptions and knowledge of generic medicines among consumers in Penang, Malaysia. *Pharmacy Practice*, 6(2), 93-7. Available from: <http://scielo.isciii.es.ezproxy.uwc.ac.za/pdf/pharmacin/v6n2/093-097.pdf>
- Aluwihare-Samaranayake, D. (2012). Ethics in qualitative research: a view of the participants' and researchers' world from a critical standpoint. *International Journal of Qualitative Methods*, 11(2), 64-81. Available from <http://ijq.sagepub.com.ezproxy.uwc.ac.za/content/11/2/64.full>
- Andersson, K. A., Petzold, M. G., Allebeck, P., Carlsten, A. (2008). Influence of mandatory generic substitution on pharmaceutical sales patterns: a national study over five years. *BMC Health Services Research*, 8(1), 1. Available from: <http://bmchealthservres.biomedcentral.com.ezproxy.uwc.ac.za/articles/10.1186/1472-6963-8-50>
- Andrea, I.D., Bertoldi, D., Aluisio, J.D., Barros, M.D., Camargo, A.L., Hallal, P.C., Vandoros, S., Wagner, A., Ross-Degnan, D. (2011). Household Expenditures of Medicines and the Role of Free Medicines in the Brazilian Health System. *Research and Practice Journal*.
- Ataguba, J.E., Goudge, J. (2012). The Impact of Health Insurance on Health-care Utilisation and Out-of-Pocket Payments in South Africa. The Geneva Papers, 2012, 37 (633–654) 2012 The International Association for the Study of Insurance Economics 1018-5895/12 [www.genevaassociation.org](http://www.genevaassociation.org) The Geneva Papers on Risk and Insurance - Issues and Practice 37, 633-654 (October 2012) | doi:10.1057/gpp.2012.35 Available from <http://www.palgrave-journals.com.ezproxy.uwc.ac.za/gpp/journal/v37/n4/abs/gpp201235a.html>
- Azores, K. F. (2013). Catastrophic Drug Coverage in Canada. *Healthy Dialogue*, 2(1), 1-9 Volume 2, Issue 1, 2013, Available from: <http://yujhs.journals.yorku.ca.ezproxy.uwc.ac.za/index.php/yujhs/article/view/37158>

Bangalee, V., Suleman, F. (2016). Has the increase in the availability of generic drugs lowered the price of cardiovascular drugs in South Africa? *Health SA Gesondheid* 21 (2016) 60-66. Available from: <http://ees.elsevier.com/hsag/default.asp>

Baum, F. (1995). Researching public health: behind the qualitative-quantitative methodological debate. *Social Science & Medicine*, 40(4), 459-468. Available from: <http://www.sciencedirect.com.ezproxy.uwc.ac.za/science/article/pii/0277953694E0103Y>

Blecher, M., Kollipara, A., DeJageri, P., Zulu, N. (2011). Health Financing in South Africa. Available from: <http://www.rmchsa.org/wp-content/uploads/2014/04/SA-Health-Review-Health-financing-2011.pdf>

Blomqvist, A., Xu, J. (2001). Pharmacare in Canada: Issues and options (Working Paper 01-01). Retrieved from Health Canada website. Available from: <http://publications.gc.ca/collections/Collection/H13-5-01-1E.pdf>

Bodenheimer, T. (2005). High and rising health care costs. Part 1: seeking an explanation. *Annals of Internal Medicine*, 142(10), 847-854. Available from: <http://annals.org.ezproxy.uwc.ac.za/article.aspx?articleid=718406>

Cameron, A., Ewen, M., Ross-Degnan, D., Ball, D., Laing, R. (2009). Medicine prices, availability, and affordability in 36 developing and middle-income countries: a secondary analysis. *The Lancet*, 373(9659), 240-249. Available from: <http://www.sciencedirect.com.ezproxy.uwc.ac.za/science/article/pii/S0140673608617626> or [http://ac.els-cdn.com/S0140673608617626/1-s2.0-S0140673608617626-main.pdf?\\_tid=70dabee0-df26-11e5-874c-00000aacb362&acdnat=1456779370\\_4fec4b967163c3016bc2e9c06c866151](http://ac.els-cdn.com/S0140673608617626/1-s2.0-S0140673608617626-main.pdf?_tid=70dabee0-df26-11e5-874c-00000aacb362&acdnat=1456779370_4fec4b967163c3016bc2e9c06c866151)

Cameron, A., Mantel-Teeuwisse, A.K., Leufkens, H.G.M., Laing, R.O. (2012). Switching from Originator Brand Medicines to Generic Equivalents in Selected Developing Countries: How Much Could Be Saved? *Value in Health*, Volume 15, Issue 5, July–August 2012, Pages 664–673. Available from: <http://www.sciencedirect.com.ezproxy.uwc.ac.za/science/article/pii/S1098301512015471>



za.ezproxy.uwc.ac.za/scholar?hl=en&q=Prescribing+behaviour+in+clinical++practice%3A+patients%27+expectations+and+doctors%27+perceptions+of++patients%27&btnG=&as\_sdt=1%2C5&as\_sdt p=. Cited in Shamim-ul-Haq et al., (2014).

Couturier, C., Zaleski, I., Jolly, D., Durieux, P. (2000). Effects of financial incentives on medical practice: results from a systematic review of the literature and methodological issues. *International Journal for Quality in Health Care .The Pharma Innovation Journal* 2000; 12:133-142. 11. Cited in Shamim-ul-Haq et al., (2014)

Cox, E.R., Jernigan, C., Coons, S.J., Draugalis, J.L. (2001). Medicare beneficiaries' management of capped prescription benefits. *Med Care* 2001;39:296-301

Cunningham, P. J. (2009). High medical cost burdens, patient trust, and perceived quality of care. *Journal of General Internal Medicine*, 24(3), 415-420.

Doody, O., Noonan, M. (2013). Preparing and conducting interviews to collect data. *Nurse Researcher*, 20(5), 28-32. Available from <http://journals.rcni.com/doi/abs/10.7748/nr2013.05.20.5.28.e327>

Doran, E., Robertson, J., Rolfe, I., & Henry, D. (2004). Patient co-payments and use of prescription medicines. *Australian and New Zealand Journal of Public Health*, 28(1), 62-67.  
<http://onlinelibrary.wiley.com.ezproxy.uwc.ac.za/doi/10.1111/j.1467-842X.2004.tb00634.x/pdf>

Dukes, M.N.G., Haaijer-Ruskamp, F.M., de Joncheere, K., Rietveld, A.H. (2003). Drugs and money. Prices, affordability and cost containment. Amsterdam: World Health Organization; 2003.  
(<http://apps.who.int/medicinedocs/fr/d/Js4912e/>).

El-Dahiyat, F., Kayyali, R. (2013). Evaluating patients' perceptions regarding generic medicines in Jordan. *Journal of Pharmaceutical Policy and Practice*, 6(1), 3.  
[http://download.springer.com/static/pdf/465/art%253A10.1186%252F2052-3211-6-3.pdf?originUrl=http%3A%2F%2Fjoppp.biomedcentral.com%2Farticle%2F10.1186%2F2052-3211-6-3&token2=exp=1457625428~acl=%2Fstatic%2Fpdf%2F465%2Fart%25253A10.1186%25252F2052-3211-6-3.pdf\\*~hmac=8a15ee12972f83ac66281e66ada46035eb4248dbcc1dcfc00501a9c7bd8cc3ad](http://download.springer.com/static/pdf/465/art%253A10.1186%252F2052-3211-6-3.pdf?originUrl=http%3A%2F%2Fjoppp.biomedcentral.com%2Farticle%2F10.1186%2F2052-3211-6-3&token2=exp=1457625428~acl=%2Fstatic%2Fpdf%2F465%2Fart%25253A10.1186%25252F2052-3211-6-3.pdf*~hmac=8a15ee12972f83ac66281e66ada46035eb4248dbcc1dcfc00501a9c7bd8cc3ad)

Everett, M. D., Anthony, M. S. (2005). Healthcare costs and benefits: a future direction for financial planning research. *Journal of Personal Finance*, 4(4), 69. Available from: <http://search.proquest.com.ezproxy.uwc.ac.za/openview/6a79d87255652562c346a9be231dbfd9/1?pq-origsite=gscholar>

Farber, S. C., Costanza, R., Wilson, M. A. (2002). Economic and ecological concepts for valuing ecosystem services. *Ecological economics*, 41(3), 375-392.  
[http://mcr.sagepub.com.ezproxy.uwc.ac.za/content/66/1\\_suppl/28S.full.pdf+html](http://mcr.sagepub.com.ezproxy.uwc.ac.za/content/66/1_suppl/28S.full.pdf+html)

Francis, K (2013). Medical schemes versus health insurance: What is the difference and why you should care. Helen. Suzman. Foundation: Promoting Liberal Constitutional Democracy. Available from <http://hsf.org.za/resource-centre/hsf-briefs/medical-schemes-versus-health-insurance-what-is-the-difference-and-why-you-should-care>

Fuchs, V.R. (1974). Who shall live? Health, Economics, and Social Choice. New York: Basic Books, 1974. Cited in Everett et al., 2005.

Gabel, J., Claxton, G., Gil, I., Pickreign, J., Whitmore, H., Holve, E. et al (2004). Health benefits in 2004: four years of double-digit premium increases take their toll on coverage: five million fewer jobs provided health insurance in 2004 than in 2001, this new analysis finds. *Health Aff (Millwood)*. 2004; 23:200-9. Available from: <http://content.healthaffairs.org.ezproxy.uwc.ac.za/content/23/5/200.short>

Gabel J, Claxton G, Holve E, Pickreign J, Whitmore H, Dhont K. et al (2003). Health benefits in 2003: premiums reach thirteen-year high as employers adopt new forms of cost sharing. *Health Affairs(Millwood)*. 2003; 22:117-26. Available from: <http://content.healthaffairs.org.ezproxy.uwc.ac.za/content/22/5/117.short>

Gabel J, Levitt L, Holve E, Pickreign J, Whitmore H, Dhont K. et al (2002). Job-based health benefits in 2002: some important trends. *Health Affairs (Millwood)*. 2002; 21:143-51. Available from: <http://content.healthaffairs.org.ezproxy.uwc.ac.za/content/21/5/143.short>

Gabel, J.R. (1999). Job-based health insurance, 1977-1998: the accidental system under scrutiny. *Health Affairs (Millwood)*. 1999; 18:62-74.



Gagnon, J. P. (1977). Factors affecting pharmacy patronage motives--a literature review. *Journal of the American Pharmaceutical Association*, 17(9), 556. 1977;NS17:556-66. Available from: <http://www.ncbi.nlm.nih.gov.ezproxy.uwc.ac.za/pubmed/330607>

Ganther-Urmie, J. M., Nair, K. V., Valuck, R., McCollum, M., Lewis, S. J., Turpin, R. S. (2004). Consumer attitudes and factors related to prescription switching decisions in multitier co-payment drug benefit plans. *American Journal of Managed Care*, 10(3), 201-208. Available from [https://www.researchgate.net/publication/8669619\\_Consumer\\_Attitudes\\_and\\_Factors\\_Related\\_to\\_Prescription\\_Switching\\_Decisions\\_in\\_Multitier\\_Co-payment\\_Drug\\_Benefit\\_Plans](https://www.researchgate.net/publication/8669619_Consumer_Attitudes_and_Factors_Related_to_Prescription_Switching_Decisions_in_Multitier_Co-payment_Drug_Benefit_Plans)

Gatwood, J., Gibson, T.B., Chernew, M.E., Farr, A.M., Vogtmann, E., Fendrick, A.M. (2014). Price Elasticity and Medication Use: Cost Sharing Across Multiple Clinical Conditions. Available from <http://www.amcp.org/WorkArea/DownloadAsset.aspx?id=18711>. Downloaded in November 2015. 1102 *Journal of Managed Care & Specialty Pharmacy JMCP* November 2014 Vol. 20, No. 11 [www.amcp.org](http://www.amcp.org). Accessed in November 2015.

Godlee, F. (2012). Clinical trial data for all drugs in current use. *British Medical Journal*, 345, e7304. <http://www.bmj.com.ezproxy.uwc.ac.za/content/345/bmj.e7304.short>

Godman, B., Bucsics, A., Burkhardt, T., Haycox, A., Seyfried, H., Wieninger, P. (2008). Insight into recent reforms and initiatives in Austria: implications for key stakeholders. *Expert Review of Pharmacoeconomics & Outcomes Research*, 8(4), 35 2008; 8: 357-71. Available from: <http://www.tandfonline.com.ezproxy.uwc.ac.za/doi/pdf/10.1586/14737167.8.4.357>

Godman, B., Wettermark, B., Hoffmann, M., Andersson, K., Haycox, A., Gustafsson, L. L. (2009). Multifaceted national and regional drug reforms and initiatives in ambulatory care in Sweden: global relevance. *Expert Review of Pharmacoeconomics & Outcomes Research*, 9(1), 65-83. 2009; 9: 65-83. Available from: <http://www.tandfonline.com.ezproxy.uwc.ac.za/doi/abs/10.1586/14737167.9.1.65>

Goldacre, B., (2012). *Bad Pharma, How Drug companies mislead doctors and harm patients*. 4<sup>th</sup> edition, *HarperCollins Publishers*, London (1 – 448). Cited in Godlee, 2012.

Goldman, D. P., Joyce, G. F., Zheng, Y. (2007). Prescription drug cost sharing: associations with medication and medical utilization and spending and health. *Journal of American Medical*



*Association*, 298(1), 61-69. Available from:

<http://jama.jamanetwork.com/article.aspx?articleid=207805>

Goldman, D. P., Joyce, G. F., Escarce, J. J., Pace, J. E., Solomon, M. D., Laouri, M., Landsman, P.B., Teutsch, S. M. (2004). Pharmacy benefits and the use of drugs by the chronically ill. *Journal of American Medical Association*, 291(19), 2344-2350. Available from:

<http://jama.jamanetwork.com/article.aspx?articleid=198761>

Grandfils, N., Sermet, C. (2006). Pharmaceutical policy in France: a mosaic of reforms. *EUROHEALTH-LONDON-*, 12(3), 15. 2006; 12: 15-7.

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.119.2197&rep=rep1&type=pdf#page=19>

Gruber, J. (2006). The role of consumer co-payments for health care: lessons from the RAND Health Insurance Experiment and beyond. Henry J. Kaiser Family Foundation. Available from:

[http://www.allhealth.org/chcrep/1010docs\\_ds/KFFGruberLessonsfromRAND.pdf](http://www.allhealth.org/chcrep/1010docs_ds/KFFGruberLessonsfromRAND.pdf)

Harris, B., Goudge, J., Ataguba, J. E., McIntyre, D., Nxumalo, N., Jikwana, S., & Chersich, M. (2011). Inequities in access to health care in South Africa. *Journal of Public Health Policy*, S102-S123. Available from: <http://www.palgrave-journals.com.ezproxy.uwc.ac.za/jphp/journal/v32/n1s/abs/jphp201135a.html>

Hassali, M. A., Shafie, A. A., Jamshed, S., Ibrahim, M. I., Awaisu, A. (2009). Consumers' views on generic medicines: a review of the literature. *International Journal of Pharmacy Practice*, 17(2), 79-88. Available from:

<http://onlinelibrary.wiley.com.ezproxy.uwc.ac.za/doi/10.1211/ijpp.17.02.0002/pdf>

Hassali, M. A., Shafie, A. A., Jamshed, S., Ibrahim, M. I., Awaisu, A. (2009). Consumers' views on generic medicines: a review of the literature. *International Journal of Pharmacy Practice*, 17(2), 79-88. Available from:

<http://onlinelibrary.wiley.com.ezproxy.uwc.ac.za/doi/10.1211/ijpp.17.02.0002/full>

Hassali, M. A., Alrasheedy, A. A., McLachlan, A., Nguyen, T. A., AL-Tamimi, S. K., Ibrahim, M. I. M., Aljadhey, H. (2014). The experiences of implementing generic medicine policy in eight countries: A review and recommendations for a successful promotion of generic medicine use. *Saudi*

*Pharmaceutical Journal*, 22(6), 491-503.

<http://www.sciencedirect.com.ezproxy.uwc.ac.za/science/article/pii/S131901641300128X?np=y>

Hassell, K., Rogers, A., Noyce, P. (2000). Community pharmacy as a primary health and self-care resource: a framework for understanding pharmacy utilization. *Health & Social Care in the Community*, 8(1), 40-49. Available from:

<http://onlinelibrary.wiley.com.ezproxy.uwc.ac.za/doi/10.1046/j.1365-2524.2000.00222.x/full>

Hawkins, D., Mothersbaugh, D. (2009). *Consumer Behavior Building Marketing Strategy*. McGraw-Hill. Available from: <https://books-google-co-za.ezproxy.uwc.ac.za/books?hl=en&lr=&id=Oi6BAwAAQBAJ&oi=fnd&pg=PP1&dq=U.S.+and+Food+Administration+pharmaceutical+marketing+strategies&ots=iwZFC4LSP6&sig=4eWL0CNWmTpihxE96eX0kl4eROk#v=onepage&q&f=false>.

Hsieh, H., Shannon, S.E. (2005). Three approaches to Content Analysis. *Qualitative Health Research* 15: 1277. cited in Quantitative Research Module Study Module, 2015:158.

Hsu, J., Price, M., Huang, J., Brand, R., Fung, V., Hui, R., Fireman, B., Newhouse, J.P., Selby, J. V. (2006). Unintended consequences of caps on Medicare drug benefits. *New England Journal of Medicine*, 354(22), 2349-2359. Available from:

<http://www.nejm.org.ezproxy.uwc.ac.za/doi/full/10.1056/NEJMsa054436>

Hurwitz, M. A., Caves, R. E. (1988). Persuasion or information? Promotion and the shares of brand name and generic pharmaceuticals. *The Journal of Law & Economics*, 31(2), 299-320.

Available from:

[http://www.jstor.org.ezproxy.uwc.ac.za/stable/725333?seq=1#page\\_scan\\_tab\\_contents](http://www.jstor.org.ezproxy.uwc.ac.za/stable/725333?seq=1#page_scan_tab_contents)

Huskamp, H. A., Deverka, P. A., Epstein, A. M., Epstein, R. S., McGuigan, K. A., & Frank, R. G. (2003). The effect of incentive-based formularies on prescription-drug utilization and spending. *New England Journal of Medicine*, 349(23), 2224-2232. Available from:

<http://www.nejm.org.ezproxy.uwc.ac.za/doi/full/10.1056/NEJMsa030954>

Hwang, W., Weller, W., Ireys, H., Anderson, G. (2001). Out-of-pocket medical spending for care of chronic conditions. *Health Affairs*, 20(6), 267-278. Available from

<http://content.healthaffairs.org.ezproxy.uwc.ac.za/content/20/6/267.full>

Kaiser Commission (2004). Kaiser Commission on Medicaid and the Uninsured. Medicaid Enrollment in 50 States. Menlo Park, CA: Kaiser Family Foundation; December 2002. Available from: <http://www.kff.org> 6 December 2004.

Kamat, V.R., Nichter, M. (1998). Pharmacies self-medication and pharmaceutical marketing in Bombay India. *Social Science & Medicine*, 47, 779–794. doi:10.1016/S0277-9536(98)00134-8. Available from:

<http://www.sciencedirect.com.ezproxy.uwc.ac.za/science/article/pii/S0277953698001348?np=y>

Kitzinger, J. (1995). Qualitative research. Introducing focus groups. *BMJ: British Medical Journal*, 311(7000), 299. Available from:

<http://www.ncbi.nlm.nih.gov.ezproxy.uwc.ac.za/pmc/articles/PMC2550365/?page=1>

Kohl, S.H., Shrank, W.H. (2007). Increasing generic drug use in medicare part d: the role of government. *Journal of American Geriatric Society*, 55 (2007), pp. 1106–1109

Kohli, E., Buller, A. (2013). Factors influencing consumer purchasing patterns of generic versus brand name over-the-counter drugs. *South Medical Journal*, 106(2), 155-160. Available from: [http://sma.org/wp-content/uploads/2013/02/Kholi\\_final.pdf](http://sma.org/wp-content/uploads/2013/02/Kholi_final.pdf)

Krass, I., Thomas. R., Walker, W.L. (1991). Professionalism in pharmacy - a review. *Australian Pharmacy Journal* 1991; 10: 1 1-6

Lacasse, J. R., Leo, J. (2010). Ghostwriting at elite academic medical centers in the United States. *PLoS Medicine*, 7(2), e1000230. Available from:

<http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1000230>

Leive, A., Xu, K. (2008). Coping with out-of-pocket health payments: empirical evidence from 15 African countries. *Applications of Engel Curves and Two-Part Models in Six African Countries*

Leive, A., Xu, K. (2008). Coping with out-of-pocket health payments: empirical evidence from 15 African countries. *Bull World Health Organ*. 2008 Nov; 86(11): 849–856. doi: 10.2471/BLT.07.049403. .Bull World Health Organ. 2008 Nov; 86(11): 849–856C. Available from:

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2649544/> or

[http://www.who.int/health\\_financing/documents/dp\\_e\\_07\\_7-coping\\_with\\_outofpocket.pdf](http://www.who.int/health_financing/documents/dp_e_07_7-coping_with_outofpocket.pdf)

Liberman, J. N., Wang, Y., Hutchins, D. S., Slezak, J., Shrank, W. H. (2011). Revealed preference for community and mail service pharmacy. *Journal of the American Pharmacists Association*, 51(1), 50-57. Available from:

<http://www.sciencedirect.com.ezproxy.uwc.ac.za/science/article/pii/S1544319115306105>

Lipowski, E. E. (1992). Predictors of community pharmacy preference: a logistic regression analysis of consumers' socioeconomic and shopping characteristics. *Journal of Pharmaceutical Marketing & Management*, 6(2), 43-61. Available from:

[http://www.tandfonline.com.ezproxy.uwc.ac.za/doi/abs/10.3109/J058v06n02\\_05](http://www.tandfonline.com.ezproxy.uwc.ac.za/doi/abs/10.3109/J058v06n02_05)

Lipowski, E. E. (1993). How consumers choose a pharmacy. *American Pharmacy*, (12 Supplementary), S14-7. Available from: <http://europepmc.org/abstract/med/8109540>

Management Sciences for Health (2012). Part 1: Policy and Economic Issues. Policy and Legal Framework. Chapter 6: Pharmaceutical legislation and regulation. Available from:

<https://www.msh.org/sites/msh.org/files/mds3-ch06-legislation-mar2012.pdf>

Manning, W.G., Newhouse, J.P., Duan, N., Keeler, E.B., Leibowitz, A., Marquis, M.S. (1987). Health insurance and the demand for medical care: evidence from a randomized experiment. *Am Econ Rev.* 1987; 77:251-77. Available from:

[http://www.jstor.org.ezproxy.uwc.ac.za/stable/1804094?seq=1#page\\_scan\\_tab\\_contents](http://www.jstor.org.ezproxy.uwc.ac.za/stable/1804094?seq=1#page_scan_tab_contents)

McElnay, J.C., Nicholl, A.J., Grainger-Rousseau, T.J. (1993). The role of the community pharmacist - a survey of public opinion in Northern Ireland. *International Journal of Pharmacy Practice* 1993;2:95-100.

McIntyre, D. (2010). Private sector involvement in funding and providing health services in South Africa: implications for equity and access to health care. Regional network for equity in health in east and southern Africa (EQUINET). Available from:

<http://www.equinetafrica.org/sites/default/files/uploads/documents/DIS84privfin%20mcintyre.pdf>

McLeod, H., Ramjee, S. (2007). Medical schemes - Health Systems Trust Available from:  
[http://www.hst.org.za/uploads/files/chap4\\_07.pdf](http://www.hst.org.za/uploads/files/chap4_07.pdf)

Mediscor PBM Report, (2013). Mediscor Pharmaceutical Benefit Management.  
<http://www.mediscor.net/Conferences/Workshop2013/1Workshop%202013-MMR2012-CBadenhorst.pdf>

Mela, C. F., Gupta, S., Lehmann, D. R. (1997). The long-term impact of promotion and advertising on consumer brand choice. *Journal of Marketing Research*, 248-261. Available from:  
[http://www.jstor.org.ezproxy.uwc.ac.za/stable/3151862?seq=1#page\\_scan\\_tab\\_contents](http://www.jstor.org.ezproxy.uwc.ac.za/stable/3151862?seq=1#page_scan_tab_contents)

Merks, P., Kaźmierczak, J., Olszewsk, A.E., Kołtowska-Häggström, M. (May 2014). Comparison of factors influencing patient choice of community pharmacy in Poland and in the UK, and identification of components of pharmaceutical care. *Patient Preference and Adherence*; Dove Press. Available from: <http://europepmc.org/articles/pmc4029754>

Mills, A., Ataguba, J. E., Akazili, J., Borghi, J., Garshong, B., Makawia, S., Mtei, G., Harris, B., Macha, J., Meheus, F., McIntyre, D. (2012). Equity in financing and use of health care in Ghana, South Africa, and Tanzania: implications for paths to universal coverage. *The Lancet*, 380(9837), 126-133. Available from:  
<http://www.sciencedirect.com.ezproxy.uwc.ac.za/science/article/pii/S0140673612603572>

Moffatt, B., Elliott, C. (2007). Ghost marketing: pharmaceutical companies and ghostwritten journal articles. *Perspectives in Biology and Medicine*, 50(1), 18-31. Volume 50, Number 1, Winter 2007 pp. 18-31 | 10.1353/pbm.2007.0009. Available from:  
[http://muse.jhu.edu.ezproxy.uwc.ac.za/login?auth=0&type=summary&url=/journals/perspectives\\_in\\_biology\\_and\\_medicine/v050/50.1moffatt.html](http://muse.jhu.edu.ezproxy.uwc.ac.za/login?auth=0&type=summary&url=/journals/perspectives_in_biology_and_medicine/v050/50.1moffatt.html)

Morrow, N., Hargie, O., Woodman, C. (1993). Consumer perceptions of and attitudes to the advice-giving role of community pharmacists. *Pharmaceutical Journal* 1993;251:25-7.

NDoH (2015). National Department of Health, National Health Insurance for South Africa, towards universal health coverage, Version 40, pp 1-89. Published Thursday 10 December 2015.

Newhouse, J. P., Manning, W. G., Morris, C. N., Orr, L. L., Duan, N., Keeler, E. B., Leibowitz, A., Brook, R. H. (1981). Some interim results from a controlled trial of cost sharing in health insurance. *New England Journal of Medicine*, 305(25), 1501-1507. Available from:  
<http://www.nejm.org.ezproxy.uwc.ac.za/doi/full/10.1056/nejm198112173052504>

Onah, N.M., Govender, V. (2014). Out –of –Pocket Payments, Health Care Access and Utilisation in South Eastern Nigeria; A Gender Perspective Nigeria. Available from:  
<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0093887>

Ortiz, M., Ledin, D., Thomas, R. (1987). The impact of professional services on pharmacy patronage: findings of a pharmacy practice foundation survey (part 6). *Australian Journal of Pharmacy*, 68, 207-14. Available from: [https://scholar-google-co-za.ezproxy.uwc.ac.za/scholar?hl=en&q=The+impact+of+professional+services+on+pharmacy+patronage+ortiz+&btnG=&as\\_sdt=1%2C5&as\\_sdtp=](https://scholar-google-co-za.ezproxy.uwc.ac.za/scholar?hl=en&q=The+impact+of+professional+services+on+pharmacy+patronage+ortiz+&btnG=&as_sdt=1%2C5&as_sdtp=)

Ortiz, M.S. (1990). A survey of pharmacists' perceptions of their professional role. *Australian Journal of Pharmacy* 1990;71:24 1-6.

Patel, A., Gauld, R., Norris, P., Rades, T. (2012). Quality of generic medicines in South Africa: Perceptions versus Reality—A qualitative study. *British Medical Journal Health Services Research*, 12(1), 297. Available from:  
<http://bmchealthservres.biomedcentral.com.ezproxy.uwc.ac.za/articles/10.1186/1472-6963-12-297>

Petty, N. J., Thomson, O. P., Stew, G. (2012). Ready for a paradigm shift? Part 1: Introducing the philosophy of qualitative research. *Manual Therapy*, 17(4), 267-274. Available from:  
<http://www.sciencedirect.com.ezproxy.uwc.ac.za/science/article/pii/S1356689X12000562>

Pharmacy Act (1974). Pharmaceutical Society of South Africa (PSSA) Law Compendium Volume 1; The Pharmacy Act 53 of 1974.

Phelps, C. E. (2000). Information diffusion and best practice adoption. *Handbook of Health Economics*, 1, 223-264.  
<http://www.sciencedirect.com.ezproxy.uwc.ac.za/science/article/pii/S157400640080164X?np=y>



Piette, J.D., Heisler M., Wagner, T.H. (2004). Problems paying out-of-pocket medication costs among older adults with diabetes. *Diabetes Care*. 2004 Feb;27(2):384-91. Available from <http://www.ncbi.nlm.nih.gov/pubmed/14747218>.

Prosser, H., Walley, T. (2005). A qualitative study of GPs' and PCO stakeholders' views on the importance and influence of cost on prescribing. *Social Science & Medicine*, 60(6), 1335-1346. <http://www.sciencedirect.com.ezproxy.uwc.ac.za/science/article/pii/S0277953604003582>

Quill, T. E. (1983). Partnerships in patient care: a contractual approach. *Annals of Internal Medicine*, 98(2), 228-234. Available from: <http://annals.org.ezproxy.uwc.ac.za/article.aspx?articleid=696266>

Radyowijati, A., Haak, H. (2003). Improving Antibiotic Use in Low-Income Countries: An Overview of Evidence on Determinants. *Social Science & Medicine* 57(4):733-44. *Social Science and Medicine*. 2003 Aug; 57(4):733-44.

Rasell, M. E. (1995). Cost sharing in health insurance—a re-examination. *New England Journal of Medicine*, 332(17), 1164-1168. <http://www.nejm.org.ezproxy.uwc.ac.za/doi/full/10.1056/NEJM199504273321711>

Rector, T.S., Venus, P.J. (2004). Do drug benefits help Medicare beneficiaries afford prescribed drugs? *Journal of Health Affairs* (Millwood) 2004;23:213-222. Available from: <http://content.healthaffairs.org.ezproxy.uwc.ac.za/content/23/4/213.full>

Ritchie, J., Spencer, L., O'Connor, W. (2003). Carrying out qualitative analysis. *Qualitative Research practice: A guide for social science students and researchers*, 219-262. Available from: [https://books-google-co-za.ezproxy.uwc.ac.za/books?hl=en&lr=&id=z5y0LCT8YNUC&oi=fnd&pg=PA219&dq=Richie+Spencer+1994+qualitative&ots=q3cYAdJ5G\\_&sig=80iYOWMFK8n87NO5aT6jeE0kDEA#v=onepage&q&f=false](https://books-google-co-za.ezproxy.uwc.ac.za/books?hl=en&lr=&id=z5y0LCT8YNUC&oi=fnd&pg=PA219&dq=Richie+Spencer+1994+qualitative&ots=q3cYAdJ5G_&sig=80iYOWMFK8n87NO5aT6jeE0kDEA#v=onepage&q&f=false)

Roberts, M.J., Reich, M.R. (2011). *Pharmaceutical Reform: A Guide to Improving Performance and Equity*. Washington DC: The International Bank for Reconstruction and Development/The World Bank, Washington, DC (2011) Available from: <https://books-google-co-za.ezproxy.uwc.ac.za/books?hl=en&lr=&id=mT7ImUC6A7kC&oi=fnd&pg=PR5&dq=Pharmaceutic>



al+Reform:+A+Guide+to+Improving+Performance+and+Equity+Reich&ots=utCxLojKDX&sig=WajmiQRgixa2E475shjaKcNW9NE#v=onepage&q=Pharmaceutical%20Reform%3A%20A%20Guide%20to%20Improving%20Performance%20and%20Equity%20Reich&f=false

Roeser, S., Hillerbrand, R., Sandin, P., Peterson, M. (2012). *Handbook of Risk Theory: Epistemology, Decision Theory, Ethics, and Social Implications of Risk; Social Influences on Risk Attitudes: Applications in Economics*. Springer Publishers. (1 – 600). Available from: [https://books-google-co-za.ezproxy.uwc.ac.za/books?hl=en&lr=&id=PyJ\\_4KYwxNwC&oi=fnd&pg=PR1&dq=Epistemology,+Decision+Theory,+Ethics,+and+Social+Implications+of+Risk%3B+Social+Influences+on+Risk+Attitudes:+Applications+&ots=Dj6U0KtuDM&sig=55h57N8OsRqwaw3cRZtNm7tt0dc#v=onepage&q=Epistemology%2C%20Decision%20Theory%2C%20Ethics%2C%20and%20Social%20Implications%20of%20Risk%3B%20Social%20Influences%20on%20Risk%20Attitudes%3A%20Applications&f=false](https://books-google-co-za.ezproxy.uwc.ac.za/books?hl=en&lr=&id=PyJ_4KYwxNwC&oi=fnd&pg=PR1&dq=Epistemology,+Decision+Theory,+Ethics,+and+Social+Implications+of+Risk%3B+Social+Influences+on+Risk+Attitudes:+Applications+&ots=Dj6U0KtuDM&sig=55h57N8OsRqwaw3cRZtNm7tt0dc#v=onepage&q=Epistemology%2C%20Decision%20Theory%2C%20Ethics%2C%20and%20Social%20Implications%20of%20Risk%3B%20Social%20Influences%20on%20Risk%20Attitudes%3A%20Applications&f=false)

Roeser, S. (2012). *Handbook of risk theory: Epistemology, Decision Theory, Ethics, and Social Implications of Risk*. Springer Science & Business Media. Available from: [https://books-google-co-za.ezproxy.uwc.ac.za/books?hl=en&lr=&id=PyJ\\_4KYwxNwC&oi=fnd&pg=PR1&dq=Epistemology,+Decision+Theory,+Ethics,+and+Social+Implications+of+Risk%3B+Social+Influences+on+Risk+Attitudes:+Applications+&ots=Dj6U0KtuDM&sig=55h57N8OsRqwaw3cRZtNm7tt0dc#v=onepage&q=Epistemology%2C%20Decision%20Theory%2C%20Ethics%2C%20and%20Social%20Implications%20of%20Risk%3B%20Social%20Influences%20on%20Risk%20Attitudes%3A%20Applications&f=false](https://books-google-co-za.ezproxy.uwc.ac.za/books?hl=en&lr=&id=PyJ_4KYwxNwC&oi=fnd&pg=PR1&dq=Epistemology,+Decision+Theory,+Ethics,+and+Social+Implications+of+Risk%3B+Social+Influences+on+Risk+Attitudes:+Applications+&ots=Dj6U0KtuDM&sig=55h57N8OsRqwaw3cRZtNm7tt0dc#v=onepage&q=Epistemology%2C%20Decision%20Theory%2C%20Ethics%2C%20and%20Social%20Implications%20of%20Risk%3B%20Social%20Influences%20on%20Risk%20Attitudes%3A%20Applications&f=false)

Rubin, R. J., Mendelson, D. N. (1995). Cost sharing in health insurance. *New England Journal of Medicine*, 333(11), 733-734. N Engl J Med 1995; 333:733-734 September 14, 1995 DOI: 10.1056/NEJM199509143331115. Available from: <http://www.nejm.org.ezproxy.uwc.ac.za/doi/full/10.1056/NEJM199509143331115>

Rudolph, N. V., Montgomery, M. A. (2010). Low-income Medicare beneficiaries and their experiences with the part D prescription drug benefit. *INQUIRY: The Journal of Health Care Organization, Provision, and Financing*, 47(2), 162-172. <http://inq.sagepub.com.ezproxy.uwc.ac.za/content/47/2/162.full.pdf+html>

SAPC, (2012). South African Pharmacy Council report, available from:  
<http://www.e2.co.za/emags/AnnualReport2013/index.html>.

SAPC, (2012). Pharmacy Act 53 of 1974. Government notice 1871 in government gazette 4442, dated 16 october 1974. Commencement date: 21 February 1975. [proc. r52, gazette no. 4594, dated 21 February 1975]. Rules Relating to the Services for which a Pharmacist may levy a fee and guidelines for levying such a fee or fees\_board notice 33 in government gazette 35095, dated 2 march 2012. Commencement date: 2 march 2012. Available from: [http://www.saflii.org/za/legis/consol\\_reg/pa53o1974rangnr33555/](http://www.saflii.org/za/legis/consol_reg/pa53o1974rangnr33555/)

Schafheutle, E. I., Hassell, K., Noyce, P. R. (2002). Access to medicines: cost as an influence on the views and behaviour of patients. *Health & Social Care in The Community*, 10(3), 187-195. Available from: <http://onlinelibrary.wiley.com.ezproxy.uwc.ac.za/doi/10.1046/j.1365-2524.2002.00356.x/full>

Seiter, A. (2010). A practical approach to pharmaceutical policy. World Bank Publications. Washington, DC (2010). Available from: [https://books-google-co-za.ezproxy.uwc.ac.za/books?hl=en&lr=&id=d\\_C3SOdfpHsC&oi=fnd&pg=PR5&dq=seiter+2010+pharmacies&ots=QGOhr6\\_hqv&sig=liOFUwfVcqQvEgKLgdFV74-1Tg0#v=onepage&q&f=false](https://books-google-co-za.ezproxy.uwc.ac.za/books?hl=en&lr=&id=d_C3SOdfpHsC&oi=fnd&pg=PR5&dq=seiter+2010+pharmacies&ots=QGOhr6_hqv&sig=liOFUwfVcqQvEgKLgdFV74-1Tg0#v=onepage&q&f=false)

Semark, B., Engström S., Brudin L., Tågerud S., Fredlund K., Borgquist L., Petersson G. (2013). Factors influencing the prescription of drugs of different price levels. *Pharmacoepidemiology Drug Saf.* 2013 Mar; 22(3):286-93. doi: 10.1002/pds.3402. Epub 2013 Jan 24. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/23349104> - factors that influence buying of prescription medicine

SEVENTH ANNUAL EDITION (2015). Generic drug Savings in the U.S. Available from [http://www.gphaonline.org/media/wysiwyg/PDF/GPhA\\_Savings\\_Report\\_2015.pdf](http://www.gphaonline.org/media/wysiwyg/PDF/GPhA_Savings_Report_2015.pdf)

Shah, A. N., Vail, T. P., Taylor, D., Pietrobon, R. (2004). Comorbid illness affects hospital costs related to hip arthroplasty: Quantification of health status and implications for fair reimbursement and surgeon comparisons1 1No benefits or funds were received in support of this study. *The Journal of Arthroplasty*, 19(6), 700-705. Available from: [http://ac.els-cdn.com/S0883540304002220/1-s2.0-S0883540304002220-main.pdf?\\_tid=0800729c-e9f4-11e5-9fe6-00000aabb0f6b&acdnat=1457967182\\_1997c8e3ef8da8c4cf51d41ec83f9329](http://ac.els-cdn.com/S0883540304002220/1-s2.0-S0883540304002220-main.pdf?_tid=0800729c-e9f4-11e5-9fe6-00000aabb0f6b&acdnat=1457967182_1997c8e3ef8da8c4cf51d41ec83f9329)

Shamim-ul-Haq, S., Ahmed, R. R., Nawaz Ahmad, N., Imamuddin Khoso, I., Vishnu Parmar, V. (2014). Factors Influencing Prescription Behavior of Physicians. *The Pharma Innovation Journal* 2014; 3(5): 30-35. Available from:

[http://www.academia.edu/7590222/30\\_Factors\\_Influencing\\_Prescription\\_Behavior\\_of\\_Physicians](http://www.academia.edu/7590222/30_Factors_Influencing_Prescription_Behavior_of_Physicians).

Shamimulhaq, S., Ahmed, R. R., Nawaz, A., Khoso, I., Vishnu, P. (2014). Factors Influencing Prescription Behavior of Physicians. *The Pharma Innovation Journal*, ISSN, 2277-7695. Available from: [http://papers.ssrn.com.ezproxy.uwc.ac.za/sol3/papers.cfm?abstract\\_id=2463088](http://papers.ssrn.com.ezproxy.uwc.ac.za/sol3/papers.cfm?abstract_id=2463088)

Shepherd, M. D. (1988). Consumer drug purchases are based on perceptions of quality, survey on generics finds. *American Journal of Hospital Pharmacy*, 45, 1245.

Shrank, W.H., Hoang, T., Ettner, S.L., Glassman, P.A., Nair, K., Delapp, D., Dirstine, J., Avorn, J., Asch, S.M. (2006). The implications of choice: Prescribing generic or preferred pharmaceuticals improves medication adherence for chronic conditions. *Archives of Internal Medicine. Intern. Med.*, 166 (2006), p. 332

Shrank, W.H., Stedman, M., Ettner, S.L., DeLapp, D., Dirstine, J., Brookhart, M.A. (2007). Patient, physician, pharmacy, and pharmacy benefit design factors related to generic medication use. *Journal for General Internal Medicine*. 2007;22(9):1298-1304.

Shrank, W.H., Stedman, M., Ettner, S.L., Delapp, D., Dirstine, J., Brookhart, M.A., Fischer, M.A., Avorn, J., Asch, S.M. (2007). Patient, physician, pharmacy, and pharmacy benefit design factors related to generic medication use *Journal for General Internal Medicine*, 22 (2007), pp. 1298–1304

Shrank, H. W., Cox, E.R., Fischer, M.A., Mehta, J., Choudhry, N.K. (2009). Patients' Perceptions of Generic Medications : Although most Americans appreciate the cost-saving value of generics, a few are eager to use generics themselves, *National Institute of Health* 28(2): 546 – 556. Available from: <http://web.b.ebscohost.com.ezproxy.uwc.ac.za/ehost/pdfviewer/pdfviewer?sid=b0bb3230-fe28-4b01-82f2-06c7b27849a1%40sessionmgr113&vid=1&hid=106>

Shrank, W. H., Cox, E. R., Fischer, M. A., Mehta, J., Choudhry, N. K. (2009). Patients' perceptions of generic medications. *Health Affairs*, 28(2), 546-556. Available from: <http://web.b.ebscohost.com.ezproxy.uwc.ac.za/ehost/pdfviewer/pdfviewer?sid=b0bb3230-fe28-4b01->

82f2-06c7b27849a1%40sessionmgr113&vid=1&hid=106

Simon, G. E., Grothaus, L., Durham, M.L., VonKorff, M., Pabiniak, C. (1996). The Impact of Visit Co-payments on Outpatient Mental Health Utilization by Members of a Health Maintenance Organization. *The American Journal of Psychiatry*, 153(3), 331. Available from: <http://search.proquest.com.ezproxy.uwc.ac.za/openview/3a8a577389ac8b52b749fee19d693b74/1?pq-origsite=gscholar>

Sinha, I., Batra, R. (1999). The effect of consumer price consciousness on private label purchase. *International Journal of Research in Marketing*, 16(3), 237-251. Available from: <http://www.sciencedirect.com.ezproxy.uwc.ac.za/science/article/pii/S0167811699000130>

Sinnott, S. J., Buckley, C., David, O., Bradley, C., Whelton, H. (2013). The effect of co-payments for prescriptions on adherence to prescription medicines in publicly insured populations; a systematic review and meta-analysis. *PLoS One*, 8(5), e64914. Available from: <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0064914>

Sismondo, S. (2007). Ghost Management: How Much of the Medical Literature Is Shaped Behind the Scenes by the Pharmaceutical Industry? *PLoS Med.* 2007 Sep; 4(9): e286. Published online 2007 Sep 25. doi: 10.1371/journal.pmed.0040286

Smith, H. A., Coons, S. J. (1990). Patronage factors and consumer satisfaction with sources of prescription purchases. *Journal of Pharmaceutical Marketing & Management*, 4(3), 61-81. Available from: [http://www.tandfonline.com.ezproxy.uwc.ac.za/doi/abs/10.3109/J058v04n03\\_06](http://www.tandfonline.com.ezproxy.uwc.ac.za/doi/abs/10.3109/J058v04n03_06)

Smith, M. C. (1991). *Pharmaceutical Marketing: Strategy and Cases*. CRC Press. Available from: <https://books-google-co-za.ezproxy.uwc.ac.za/books?hl=en&lr=&id=ZjBUbWbVSNYC&oi=fnd&pg=PP15&dq=U.S.+and+Food+Administration+pharmaceutical+marketing+strategies&ots=-m18AWbnI8&sig=nfh5r2uVXrJ147JG7vTNi2h5qLo#v=onepage&q&f=false>.

Socio - Economic Review and Outlook (2011).

<http://www.treasury.gpg.gov.za/Documents/Socio%20Economic%20Review%20and%20Outlook%202011.pdf>

Sofaer, S., Firminger, K. (2005). Patient perceptions of the quality of health services. *Annals Review. Public Health*, 26, 513-559. Available from:

<http://www.annualreviews.org.ezproxy.uwc.ac.za/doi/pdf/10.1146/annurev.publhealth.25.050503.153958>

Sorensen, A. T. (2000). Equilibrium price dispersion in retail markets for prescription drugs. *Journal of Political Economy*, 108(4), 833-850.

[http://www.jstor.org.ezproxy.uwc.ac.za/stable/10.1086/316103?seq=2#page\\_scan\\_tab\\_contents](http://www.jstor.org.ezproxy.uwc.ac.za/stable/10.1086/316103?seq=2#page_scan_tab_contents)

Soumerai, S. B., Avorn, J., Ross-Degnan, D., Gortmaker, S. (1987). Payment restrictions for prescription drugs under Medicaid. Effects on therapy, cost, and equity *New England Journal of Medicine*, 317(9), 550-556.

<http://www.nejm.org.ezproxy.uwc.ac.za/doi/full/10.1056/nejm198708273170906>

South African Healthcare Inquiry (2013). The market inquiry in the private healthcare sector is conducted by the competition commission in terms of Chapter 4A of the Competition Act, 89 of 1998 (as amended) (the Act) and in keeping with the purpose and functions of the Commission set out in section 2 and section 21 of the Act respectively. Available from <http://www.compcom.co.za/healthcare-inquiry/> and Government Gazette No. 37062: 29 November 2013.

Steinman, M.A., Sands, L.P., Covinsky, K.E. (2001). Self-restriction of medications due to cost in seniors without prescription coverage. *Journal of General Internal Medicine* 2001;16:793-799.

Available from: <http://onlinelibrary.wiley.com.ezproxy.uwc.ac.za/doi/10.1046/j.1525-1497.2001.10412.x/full>

Stuart, B., Grana, J. (1998). Ability to pay and the decision to medicate. *Medical Care*, 36(2), 202-211. Available from:

[http://journals.lww.com.ezproxy.uwc.ac.za/lww-medicalcare/Abstract/1998/02000/Ability\\_to\\_Pay\\_and\\_the\\_Decision\\_to\\_Medicate.9.aspx](http://journals.lww.com.ezproxy.uwc.ac.za/lww-medicalcare/Abstract/1998/02000/Ability_to_Pay_and_the_Decision_to_Medicate.9.aspx)

Tang, S., Meng, Q., Chen, L., Bekedam, H., Evans, T., Whitehead, M. (2008). Tackling the challenges to health equity in China. *The Lancet*, 372(9648), 1493-1501. Available from:

<http://www.sciencedirect.com.ezproxy.uwc.ac.za/science/article/pii/S0140673608613641>

Tootelian, D. H., Gaedeke, R. M., Schlacter, J. (1988). Branded versus generic prescription drugs: perceptions of risk, efficacy, safety, and value. *Journal of Health Care Marketing*, 8(3): 26 - 29.

Available from:

<http://web.a.ebscohost.com.ezproxy.uwc.ac.za/ehost/pdfviewer/pdfviewer?sid=0bc2e2e7-a9b6-4501-81ea-0d686ce6b616%40sessionmgr4002&vid=1&hid=4114>

Tseng, C.W., Brook, R.H., Keeler, E., Steers, W.N., Mangione, C.M. (2004). Cost-lowering strategies used by Medicare beneficiaries who exceed drug benefit caps and have a gap in drug coverage. *JAMA* 2004;292:952-960. Available from:

<http://jama.jamanetwork.com/article.aspx?articleid=199314&resultclick=1>

Van Doorslaer, E., O'Donnell, O., Rannan-Eliya, R. P., Somanathan, A., Adhikari, S. R., Garg, C. C., Harbianto, D., Herrin, A.N., Huq, M.N., Ibragimova, S., Karan, A. (2007). Catastrophic payments for health care in Asia. *Health Economics*, 16(11), 1159-1184. HEALTH ECONOMICS. Health Economics. 16: 1159–1184 (2007) Published online 21 February 2007 in Wiley InterScience (www.interscience.wiley.com). DOI: 10.1002/hec.1209

<http://onlinelibrary.wiley.com.ezproxy.uwc.ac.za/doi/10.1002/hec.1209/abstract;jsessionid=4F34B5C7669442EE9CCAFF2F677AE039.f03t03>

Vogler, S. (2012) How large are the differences between originator and generic prices? Analysis of five molecules in 16 European countries. *Farmeconomia. Health economics and therapeutic pathways* 2012; 13(Suppliment 3): 29-4 Available from

[http://whocc.goeg.at/Literaturliste/Dokumente/Articles/Farmaco\\_311-1574-1-PB\\_Vogler.pdf](http://whocc.goeg.at/Literaturliste/Dokumente/Articles/Farmaco_311-1574-1-PB_Vogler.pdf)

Weil, A. (2003). There's something about Medicaid. *Health Affairs*, 22(1), 13-30. Available from:

<http://content.healthaffairs.org.ezproxy.uwc.ac.za/content/22/1/13.full>

Wettermark, B., Godman, B., Jacobsson, B., Haaijer-Ruskamp, F. M. (2009). Soft regulations in pharmaceutical policy making. *Applied Health Economics and Health Policy*, 7(3), 137-147.

<http://link.springer.com.ezproxy.uwc.ac.za/article/10.1007/BF03256147#page-3> and <https://scholar->



google-co-

za.ezproxy.uwc.ac.za/scholar?q=soft+regulation+in+pharmaceutical+policy+making&btnG=&hl=en  
&as\_sdt=0%2C5

Whitehead, P., Atkin, P., Krass, I., Benrimoj, S. I. (1999). Patient drug information and consumer choice of pharmacy. *International Journal of Pharmacy Practice*, 7(2), 71-79.

Available from: <http://onlinelibrary.wiley.com.ezproxy.uwc.ac.za/doi/10.1111/j.2042-7174.1999.tb00952.x/pdf>

Wingfield, J. (2006). Professionalism for pharmacists. *The Pharmaceutical Journal*, 276, 169-170.

Available from:

<http://onlinelibrary.wiley.com.ezproxy.uwc.ac.za/doi/10.1111/j.2042-7174.1999.tb00952.x/pdf>

World Bank (2015). Available from: <http://www.tradingeconomics.com/south-africa/out-of-pocket-health-expenditure-percent-of-private-expenditure-on-health-wb-data.html>

Xie B, Wang M, Feldman R. (2011). Preferences for health information and decision-making: development of the Health Information Wants questionnaire. In: Proceedings of the 2011 iConference. New York, NY: ACM; 2011 Presented at: iConference; Feb. 8-11, 2011; Seattle, Washington p. 237-280. Available from <http://dl.acm.org.ezproxy.uwc.ac.za/citation.cfm?id=1940799>

Xu, K. T. (2002). Choice of and overall satisfaction with pharmacies among a community-dwelling elderly population. *Medical Care*, 40(12), 1283-1293. Available from

[http://journals.lww.com.ezproxy.uwc.ac.za/lww-medicalcare/Abstract/2002/12000/Choice\\_of\\_and\\_Overall\\_Satisfaction\\_With\\_Pharmacies.15.aspx](http://journals.lww.com.ezproxy.uwc.ac.za/lww-medicalcare/Abstract/2002/12000/Choice_of_and_Overall_Satisfaction_With_Pharmacies.15.aspx)

Yip, W., Hsiao, W. C. (2009). Non-evidence-based policy: how effective is China's new cooperative medical scheme in reducing medical impoverishment? *Social Science & Medicine*, 68(2), 201-209.

<http://www.sciencedirect.com.ezproxy.uwc.ac.za/science/article/pii/S0140673610600633?np=y>

Zweifel, P., Manning, W.G. (2000). Moral hazard and consumer incentives in health care. In: Culyer AJ, Newhouse JP, eds. *Handbook of health economics*. New York: Elsevier, 2000:409-59.

<http://www.sciencedirect.com.ezproxy.uwc.ac.za/science/article/pii/S1574006400801675>



## APPENDICES

### APPENDIX 1: PHARMACY TYPES AND LOCATIONS

#### TITLE: PHARMACY TYPES AND LOCATIONS INCLUSIVE OF MEDICAL SCHEME MEMBERS (12) AND PHARMACIST (6) INTERVIEWEES

<b>High Socioeconomic Area Pharmacy Locations, Pharmacy Types and Codes for Interviewees and Interviews conducted at these pharmacy</b>	<b>Low Socioeconomic Area Pharmacy Locations, Pharmacy Types and Codes for Interviewees and Interviews conducted at these pharmacies</b>
<b>Pretoria East Corporate Pharmacy 1:</b>  Pharmacy Code: VER Pharmacist Code: VER– P6 Medical Scheme Member Co-payer Code: KER- M12.	<b>City Centre Corporate Pharmacy (nearer to train station) 2:</b>  Pharmacy Code: KAL Pharmacist Code: KAL – P4 Medical Scheme Member Co-payer Code: EST-M10
<b>Pretoria East Corporate Pharmacy 3:</b>  Pharmacy Code: DIS Pharmacist Code: DIS – P2 Medical Scheme Member Co-payer Code: NEL- M4 Medical Scheme Member Non Co-payer Code: DUM-M8	<b>Pretoria City Centre Corporate Pharmacy (near taxi rank) 4:</b>  Pharmacy Code: SUN Pharmacist Code: SUN– P3 Medicine Scheme Member Co-payer Code: LES - M11 Medical Scheme Member Non Co-payer Code: MAL-M2
<b>Pretoria East Independent Pharmacy 1:</b>  Pharmacy Code: CRO Pharmacist Code: CRO – P5 Medical Scheme Member Co-payer Codes: FUT-M3 and BAB-M9 Medical Scheme Member Non Co-payer Code: MAN-M6	<b>Pretoria City Centre Independent Pharmacy (along the taxi route) 2:</b>  Pharmacy Code: KEM Pharmacist Code: KEM – P1 Medical Scheme member Co-payer Codes: DIR-M1 and MOR-M5 Medical Scheme Member Non Co-payer Code : FRI-M7

## **APPENDIX 2A: INTERVIEW GUIDE FOR MEDICAL SCHEME MEMBERS**

### **TITLE: POST PILOT INTERVIEW GUIDE: MEDICAL SCHEME MEMBERS**

1. How do you feel about co-payments for prescription medicines?
  - a. What makes you feel that way?
2. In your understanding, what causes co-payments?
  - a. How did you arrive at that conclusion?
3. What was the main reason that caused you to co-pay in this recent purchase?
  - a. Can you tell me about what you were told were reasons why you had to co-pay.
4. Let us focus on health professionals:
  - a. To what extent would you say the doctor influenced your purchasing decision?
  - b. How do you normally respond when the pharmacist recommends a change to your prescription?
  - c. . What makes you behave that way?
  - d. How different would your response be if the recommended medicine was cheaper than what the doctor wrote on the prescription?
5. What would you say is good quality medication to you?
  - a. What makes you think that way?
6. What are your views about originators and generics?
  - a. Let us begin with originators
  - b. How about generics?
7. Who do you rely on for advice on medicines?
  - a. What makes you choose that (those) person(s)?
  - b. How about advertising of medicines, to what extent does it affect your purchasing behaviour?
8. We have come to the end of our interview. Is there anything you would like to add?

**Thank you for your time.**

## **APPENDIX 2B: INTERVIEW GUIDE FOR PHARMACISTS**

### **TITLE: POST PILOT PHARMACISTS INTERVIEW GUIDE**

1. What is your personal view as a pharmacist about co-payments?
2. What happens if the consumer asks for a medicine that is not available at the pharmacies?
3. How does the pharmacy decide which medicines to keep as stock?
  - a. Is there any reason for that approach?
4. What influences which medicine gets recommended to the patient?
  - a. How do consumers respond to the proposed change?
5. Have you ever experienced a situation where a consumer asked for a specific medicine?
  - a. Can you tell me about what happened?
6. In your opinion what policies are required to ensure that co-payments do not exist?
  - a. What makes you feel that way?
7. What is your procedure when dispensing chronic prescriptions?
  - a. What do you do to original prescriptions for chronic medicines?
8. We have come to the end of our interview., is there anything else you feel we left out and you would like to share with me about co-payments?

**Thank you for your time.**

## **APPENDIX 2C: INTERVIEW GUIDE FOR REGULATORS**

### **TITLE: REGULATOR KEY INFORMANT INTERVIEW GUIDE**

1. Can you tell me about your views about co-payments?
2. In your opinion, who benefits from co-payments?
  - a. Please share with me your reasons for feeling that way?
3. What policies do we have for co-payments?
  - a. How would you say these policies benefit the consumer?
4. In what way do you see these policies addressing co-payments?
5. In your opinion what policies would be required to ensure that co-payments do not negatively affect medical scheme members?
6. Is there anything else you would like to share with me that you feel we didn't cover?

**Thank you for your time**



### **APPENDIX 3:**

#### **TITLE: ETHICAL CLEARANCE LETTER**

#### **DEPARTMENT OF RESEARCH DEVELOPMENT**



#### **UNIVERSITY of the WESTERN CAPE**

10 December 2015

#### **To Whom It May Concern**

I hereby certify that the Senate Research Committee of the University of the Western Cape approved the methodology and ethics of the following research project by:

Ms NM Mpanza (School of Public Health)

Research Project: Factors that influence medical scheme insured consumers to co-pay for prescription medicines at private community pharmacies in Pretoria, Gauteng Province, South Africa.

Registration no: 15/7/8

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

The Committee must be informed of any serious adverse event and/or termination of the study.

*Ms Patricia Josias*

*Research Ethics Committee Officer*

*University of the Western Cape*

Private Bag X17, Bellville 7535, South Africa  
T: +27 21 959 2988/2948 . F: +27 21 959 3170  
E: [pjiosias@uwc.ac.za](mailto:pjosias@uwc.ac.za)  
[www.uwc.ac.za](http://www.uwc.ac.za)

## APPENDIX 4A:

### TITLE: PARTICIPANT INFORMATION (PI) SHEET FOR MEDICAL SCHEME MEMBERS



## UNIVERSITY OF THE WESTERN CAPE

*Private Bag X 17, Bellville 7535, South Africa*

*Tel: +27 21-959 2809 Fax: 27 21-959 2872*

*E-mail: soph-comm@uwc.ac.za*

### APPENDIX 4A

#### PARTICIPANT INFORMATION SHEET: MEDICAL SCHEME MEMBERS

**Project Title:** Factors that influence medical scheme insured consumers to co-pay for prescription medicines at private community pharmacies in Pretoria, Gauteng Province, South Africa.

#### **What is this study about?**

This research project is being conducted by Ntobeko Mpanza, a student at the University of the Western Cape. We are inviting you to participate in this research project because you have purchased at least one prescription medicine at the retail pharmacy. The purpose of this research project is to explore factors that influence consumers of prescription medicines such as medical scheme members, to choose expensively priced prescription medicines that attract additional cash payment at pharmacies, this despite the availability of cheaper and economic alternatives that are fully covered by their respective medical scheme at no additional cost to the member. Instead of focusing on whether the medicine is a generic or originator, the study will concentrate on expensively priced versus cheaper priced prescription medicines that are therapeutically similar but treat the same condition. This is because the variety within therapeutic categories of generally cheaper generic medicines renders some more expensive than others.

#### **What will I be asked to do if I agree to participate?**

If you agree to participate you will be asked to sign a voluntary consent form before enrolment. Face to face exit interviews will be conducted with each interviewee after they have purchased a medicine from the pharmacy. The interview should take less than thirty minutes of your time. Every interview will be recorded and notes taken to ensure that your views are accurately captured.

#### **Would my participation in this study be kept confidential?**

Everything discussed during the interview will be kept confidential. Your real name will not be used anywhere in the report to ensure that your views are not linked back to you. To ensure anonymity, a two letter pseudonym will be used instead of your real name. As the sole researcher in this study, I will be the only person with access to your identity. To ensure your confidentiality, the recorded interview information will be deleted immediately after summarizing our main discussion points. If a report or article is published about this research project, your identity will continue to be protected.

### **What are the risks of this research?**

There may be some emotional risks associated with participating in this research. You may experience discomfort and anxiety during discussions about medicines that remind you of your disease state. Should this occur, contact details of professionals such as nearby psychologists, and social workers will be made available to you should you need them for referral purposes.

Information collected during the interview will assist the researcher to describe areas of focus to be used to communicate with consumers that utilize dispensed prescription medicines, about economically beneficial purchasing experiences at South African retail pharmacies in Pretoria, Gauteng province, South Africa.

### **What are the benefits of this research?**

The final report will be shared with you and all other study participants, upon request. The study report aims to benefit the recipients by offering improved understanding of the dynamics that surround co-payment experiences at pharmacies. Note that your participation in this research is completely voluntary. If you decide to participate in this research, you may withdraw at any time without being prejudiced.

If you have any questions about the research study itself, please contact Ntobeko at:

Address: 42 Vistaria, 309 lucky bean street, Moreleta Park, Pretoria, 0044.

Telephone number: 082 463 3656.

E-mail: [mpanzm@vodamail.co.za](mailto:mpanzm@vodamail.co.za)

Prof Helen Schneider

School of Public Health

Head of Department

University of the Western Cape

Private Bag X17



Bellville 7535

[soph-comm@uwc.ac.za](mailto:soph-comm@uwc.ac.za)

Prof José Frantz

Dean of the Faculty of Community and Health Sciences

University of the Western Cape

Private Bag X17

Bellville 7535

[chs-deansoffice@uwc.ac.za](mailto:chs-deansoffice@uwc.ac.za)



## APPENDIX 4B:

### **TITLE: PARTICIPANT INFORMATION (PI) SHEET FOR KEY INFORMANTS I.E. (REGULATORS, PHARMACISTS AND REPRESENTATIVES OF MEDICAL SCHEMES AND PHARMACIST PROFESSIONALS)**



## UNIVERSITY OF THE WESTERN CAPE

*Private Bag X 17, Bellville 7535, South Africa*

*Tel: +27 21-959 2809 Fax: 27 21-959 2872*

E-mail: [soph-comm@uwc.ac.za](mailto:soph-comm@uwc.ac.za)

## APPENDIX 4B

### **PARTICIPANT INFORMATION SHEET: KEY INFORMANTS INCLUDING PHARMACISTS**

**Project Title:** Factors that influence medical scheme insured consumers to co-pay for prescription medicines at private community pharmacies in Pretoria, Gauteng Province, South Africa.



#### **What is this study about?**

This is a research project being conducted by Ntobeko Mpanza, a student at the University of the Western Cape. We are inviting you to participate in this research project because you have experience on regulatory matters that relate to medicines. The purpose of this research project is to explore factors that influence consumers such as medical scheme members to choose expensive prescription medicines that attract additional cash payment at pharmacies, this despite the availability of cheaper and economic alternatives that are fully covered by their respective medical schemes at no additional cost to the member. Instead of focusing on price based on whether the medicine is a generic or originator, the study will concentrate of expensive versus cheaper medicines that are therapeutically similar but treat the same condition. This is because the variety within the category of generally cheaper generic medicines renders some generics more expensive than others.

#### **What will I be asked to do if I participate?**

If you agree to participate you will be asked to sign a voluntary consent form before enrolment as a participant. We will have a face to face recorded interview which should take no more than thirty minutes of your time. The purpose of the interview is to get your views on the topic of co-payments and your understanding of the reasons why you think they occur amongst medical scheme members.

### **Would my participation in this study be kept confidential?**

Everything discussed during the interview will be kept confidential. Your real name will not be used anywhere in the report to ensure that your views are not linked back to you. To ensure your anonymity, a two letter pseudonym will be used instead of your real name. As the sole researcher in this study, I will be the only person with access to your identity. To ensure your confidentiality, the recorded interview information will be deleted immediately after summarizing our main discussion points. If we write a report or article about this research project, your identity will continue to be protected.

### **What are the risks of this research?**

There may be some risks from participating in this research study. The nature of our relationship and my current work responsibilities as the official responsible for the implementation of medicines pricing policies in the private sector, may cause you to be doubtful of my intentions about information collected during the interview. To guarantee that the interview and its contents will be used only for the study purposes, my commitment to you will be declared in the informed consent form to be signed by both of us. Should the report be widely circulated, your identity will still remain protected.

### **What are the benefits of this research?**

The final report will be shared with all study participants, upon request. The study report will contain important consumer views about co-payments, with potential to influence future communication focus areas that target policy implementation within the context of purchasing of medicines. Access to consumer views about co-payments will assist your organization to strategically communicate with these stakeholders in a more meaningful way that targets consumer needs. Information collected during the interview will assist the researcher to describe areas of focus to be used to communicate with consumers that utilize dispensed prescription medicines, about economically beneficial purchasing experiences at South African retail pharmacies found in Pretoria, Gauteng Province, South Africa.

Your participation in this research is completely voluntary. If you decide to participate in this research, you may withdraw at any time. Our work relationship will not change should you decide to withdraw from the study. If you have any questions about the research study itself, please contact the researcher Ntobeko Mpanza at: **Address:** 42 Vistaria, 309 lucky bean street, Moreleta Park, Pretoria, 0044. **Telephone number:** 082 463 3656. **E-mail:** [mpanzm@vodamail.co.za](mailto:mpanzm@vodamail.co.za) or

[mpanzm@health.gov.za](mailto:mpanzm@health.gov.za) OR

Prof Helen Schneider

School of Public Health

Head of Department

University of the Western Cape  
Private Bag X17  
Bellville 7535  
[soph-comm@uwc.ac.za](mailto:soph-comm@uwc.ac.za)

Prof José Frantz  
Dean of the Faculty of Community and Health Sciences  
University of the Western Cape  
Private Bag X17  
Bellville 7535  
[chs-deansoffice@uwc.ac.za](mailto:chs-deansoffice@uwc.ac.za)



## APPENDIX 5:

### TITLE: INFORMED CONSENT

This research has been approved by the University of the Western Cape's Senate Research Committee. REFERENCE NUMBER: 15/7/8



## UNIVERSITY OF THE WESTERN CAPE

*Private Bag X 17, Bellville 7535, South Africa*

*Tel: +27 21-959 2809 Fax: 27 21-959 2872*

**Title of Research Project:** **Project Title:** Factors that influence medical scheme insured consumers to co-pay for prescription medicines at private community pharmacies in Pretoria, Gauteng Province, South Africa

### Informed Consent

This research project involves making audiotapes of you. The tape will ensure that your views are accurately reflected in the report. After summarizing our discussion points onto a diary, the interview will be deleted from the recorder. I am the only person to have access to the recorded and diarized information. The diary will be destroyed once the report has been finalized.

**Please tick** below where appropriate

☐ I agree to be audio taped during my participation in this study.

☐ I do not agree to be audio taped during my participation in this study.

The study has been described to me in language that I understand. My questions about the study have been answered. I understand what my participation will involve and I agree to participate of my own choice and free will. I understand that my identity will not be disclosed to anyone. I understand that I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits.

Participant's name.....

Participant's signature.....

**Date**.....