



UNIVERSITY OF <sup>TM</sup>  
KWAZULU-NATAL  
INYUVESI  
YAKWAZULU-NATALI

College of Health Sciences - Discipline of Pharmaceutical Sciences

# An Exploratory Study Into the Use and Pricing of Schedule Zero Medicines Post Exemption From the Single Exit Price Policy in South Africa

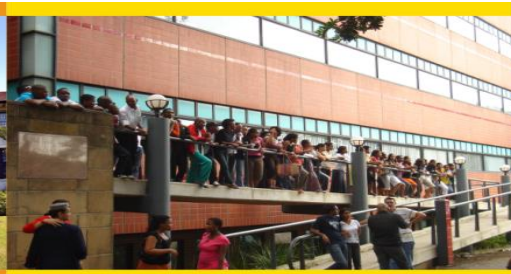
F. Suleman, V. A. Perumal-Pillay



EDGEWOOD CAMPUS



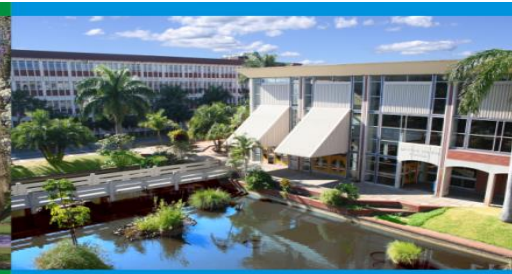
HOWARD COLLEGE CAMPUS



NELSON R MANDELA SCHOOL OF MEDICINE



PIETERMARITZBURG CAMPUS



WESTVILLE CAMPUS

UKZN INSPIRING GREATNESS

# Declaration

---

- F Suleman is:
  - the Chair of the South African National Medicines Pricing Committee
  - the Director of the World Health Organization Collaborating Centre for Pharmaceutical Policy and Evidence Based Practice

# Background

- South Africa introduced the Single Exit Price(SEP) in 2004 - affects all medicines
  - Exception: schedule zero medicines
- Schedule zero medicines - sold at outlets other than pharmacies and by non-pharmacists.
- No evidence indicating that this exemption from the SEP policy is good practice, nor whether they should be included within the policy.
  - It is therefore necessary to know whether a permanent exemption should be provided at all.

# Aim and objectives

---

- The aim of this study was to explore the impact of schedule zero medicine exemption from the Single Exit Price policy in the private healthcare sector in South Africa.
- The objectives of this study were to:
  - whether any price differential for a basket of schedule zero analgesics existed across three economic areas; the number of brands available; and prices of over the counter and prescription medicines;
  - determine prescription pricing trends;

# Methods

---

- The private sector study – used a quantitative methodology with:
  - random (outlets): supermarkets, independent community pharmacies and corporate pharmacies; and
  - purposive sampling (economic areas): low-income (Umlazi), middle-income (Berea) and high-income (Umhlanga) areas.
  - along with a database review.
- A basket of schedule zero analgesic:
  - consisted of Aspirin-only, Paracetamol-only and a combination of Aspirin and Paracetamol containing products.

# Methods (2)

- Data was obtained from two sources:
  - the type and pricing of Schedule zero medicines was obtained from the 35 randomly selected outlets in the three economic areas (12th March -11th April 2015),
  - data on patients' claims (January - June 2014) was obtained from a private medical scheme database for.
- Ethical approval - UKZN HSSREC (HSS/0154/013).
- Permission to use information from the medical scheme database
  - granted
    - all data was coded and presented as aggregate information to ensure confidentiality was maintained.

# Results

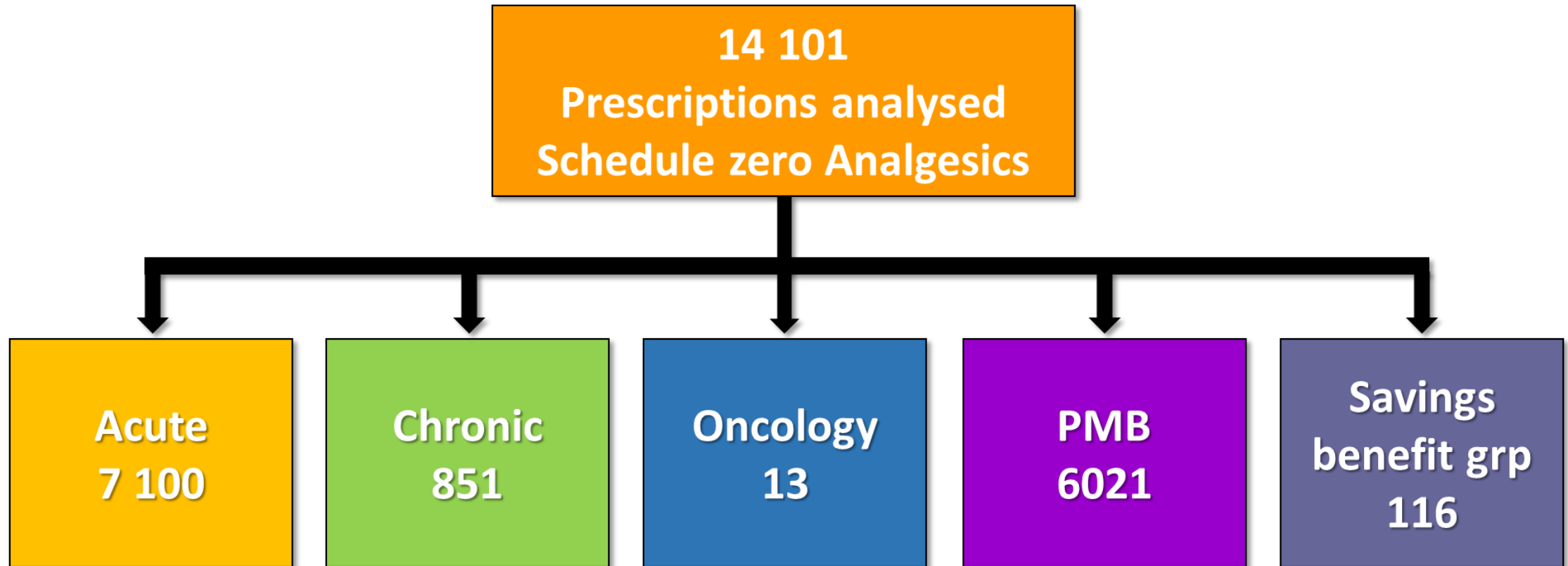


Figure 1. Distribution of Medical scheme database prescriptions

# Results (2)

Table 1. ATC categories with which schedule zero analgesics are prescribed

<b>ATC Category</b>	<b>Number of Prescriptions</b>	<b>Percentage</b>
Blood and Blood forming Organs	9446	72.91%
Cardiovascular System	9444	72.89%
Central Nervous System	6270	48.39%
Alimentary Tract and Metabolism	5558	42.90%
Musculoskeletal System	2895	22.34%
Respiratory System	2489	19.21%
General Anti-Infectives for Systemic use	2387	18.42%
Systemic Hormonal preparations, excluding sex hormones and insulins	1731	13.36%
Genitourinary System and Sex Hormones	1023	7.90%
Dermatological	368	2.84%
Sensory Organs	352	2.72%
Antineoplastic and Immunomodulating agents	128	0.99%
Various	108	0.83%
Antiparasitic Products	62	0.48%

*Note.* Prescriptions may contain one or more ATC category and that is why the percentages do not add to 100%.



# Results (3)

Table 2. Prescription trends

14 101 Medical scheme prescription claims	Co-payments		Dispensing Fees		Dispenser	
	No 51%	Yes 49% ZAR 0.01-64.93	No 31%	Yes 69% ZAR0.10-47.67	Pharmacist (PD) 77%	Doctor (DD) 23% No dispensing fee (98%)

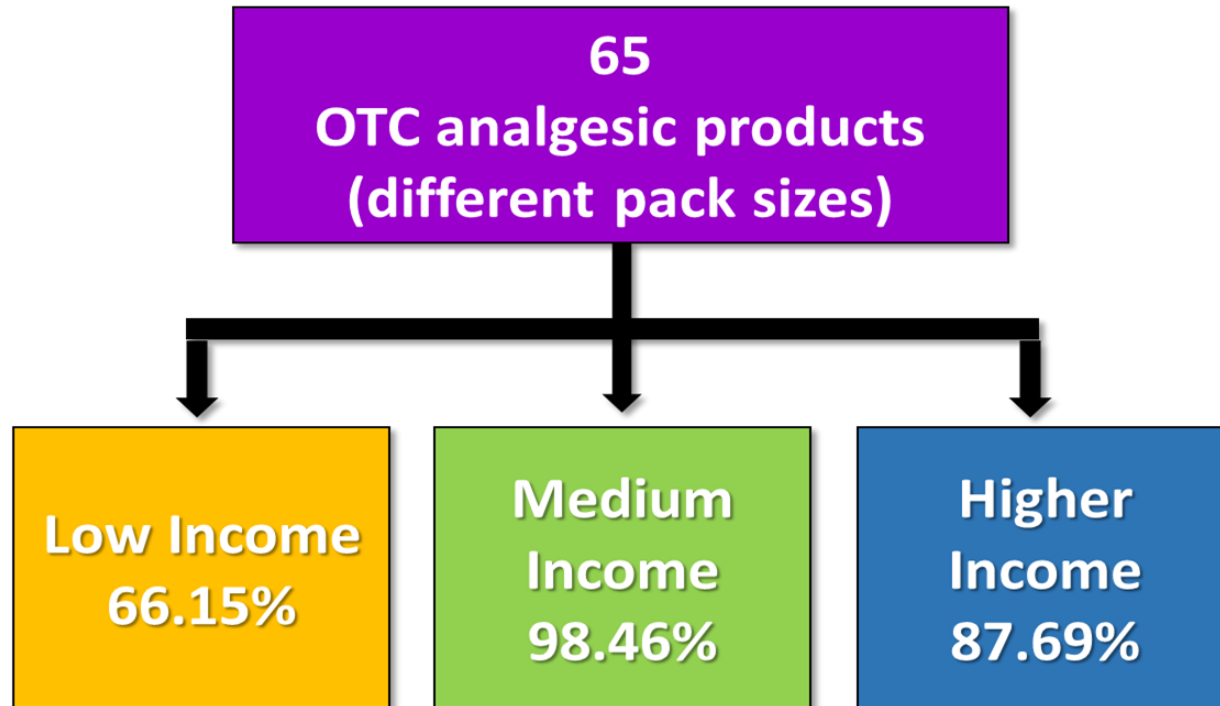
# Results (4)

## Medical Scheme Database Prescription analysis

- An analysis of 14 106 prescriptions from the medical scheme database showed significant differences ( $p < 0.05$ ; CI 95%) when the submitted prices were compared to the cash prices.
  - submitted fees claimed by pharmacies were higher than those claimed by dispensing doctors, these being higher by 2% - 4%
- Dispensing fees were also significantly different ( $p < 0.05$ ; CI 95%).
  - PD > DD

# Results (5)

## Comparison between 3 economic areas (ANOVA Test)



The most frequently found schedule zero analgesic among the three income areas was Panado® 500mg tablets (pack size of 24's) - found in 27 of the 35 (77%) outlets in all three income areas.

\*Most frequently found was Panado® 500 mg tablet (24's)

**Figure 2. Availability of Schedule Zero Analgesics amongst 35 outlets in 3 economic areas**

# Results (6)

## Comparison of prices of OTCs between 3 economic areas (ANOVA Test)

- An ANOVA testing for differences between the economic areas indicated significant differences for 4 products:

Product	Price differences
<b>Grandpa® tablets</b> (Paracetamol and Aspirin - pack size of 38's)	prices were highest in the high-income area and lowest in the middle-income area;
<b>Clicks Paracetamol® tablets</b> (Paracetamol - pack size of 24's)	prices were highest in the middle-income, lowest in the high-income area and not found in the low-income area;
<b>Bayer Aspirin Cardio® tablets</b> (Aspirin - pack size of 30's)	prices were cheapest in the low-income area and highest in the high-income area;
<b>Anadin® Extra tablets</b> (Aspirin - pack size of 30's)	prices were highest in the low-income area and the same price in the middle- and high-income area.

# Results (7)

## **Comparison of prices (prescription vs OTCs) between 3 economic areas**

Prices submitted to the medical scheme when compared to those purchased OTC, was:

- 23.91% higher than average prices in Low-income area
  - 0.66% lower for average prices in Middle-income area
  - 7.3% higher for average prices in High-income area
- The average medical aid submitted prices showed a tendency to be 1.5% higher than that bought over the counter for all economic areas combined

# Conclusions & Lessons learned

---

- This study indicated pricing variations exist for schedule zero analgesic medications which have implications for patients who use them.
- As this study was limited to three geographic areas in one urban municipality and one medical aid, a more expansive study should be conducted that includes both rural and urban areas in the country, a greater number of outlets, and other medical scheme databases for a longer time period.

# Conclusions & Lessons learned

---

- Additional research is recommended on a number of issues, such as:
  - establishing the effects of depleting medical scheme Savings or other benefits due to irregular pricing on adherence to chronic medications.
  - Whether pharmacists allow these medicines to be paid for separately at a lower price or process them on a prescription and charge accordingly.
  - if the consumers are given options to buy them as an OTC product.
- This legislation regarding medicine pricing was put in place to ensure that people not only have access to the medication that they need, but that it is affordable throughout the country