

# **Access to subsidised medicines, cost of medicines and health outcomes : Exploring general practitioners' perceptions and experiences**

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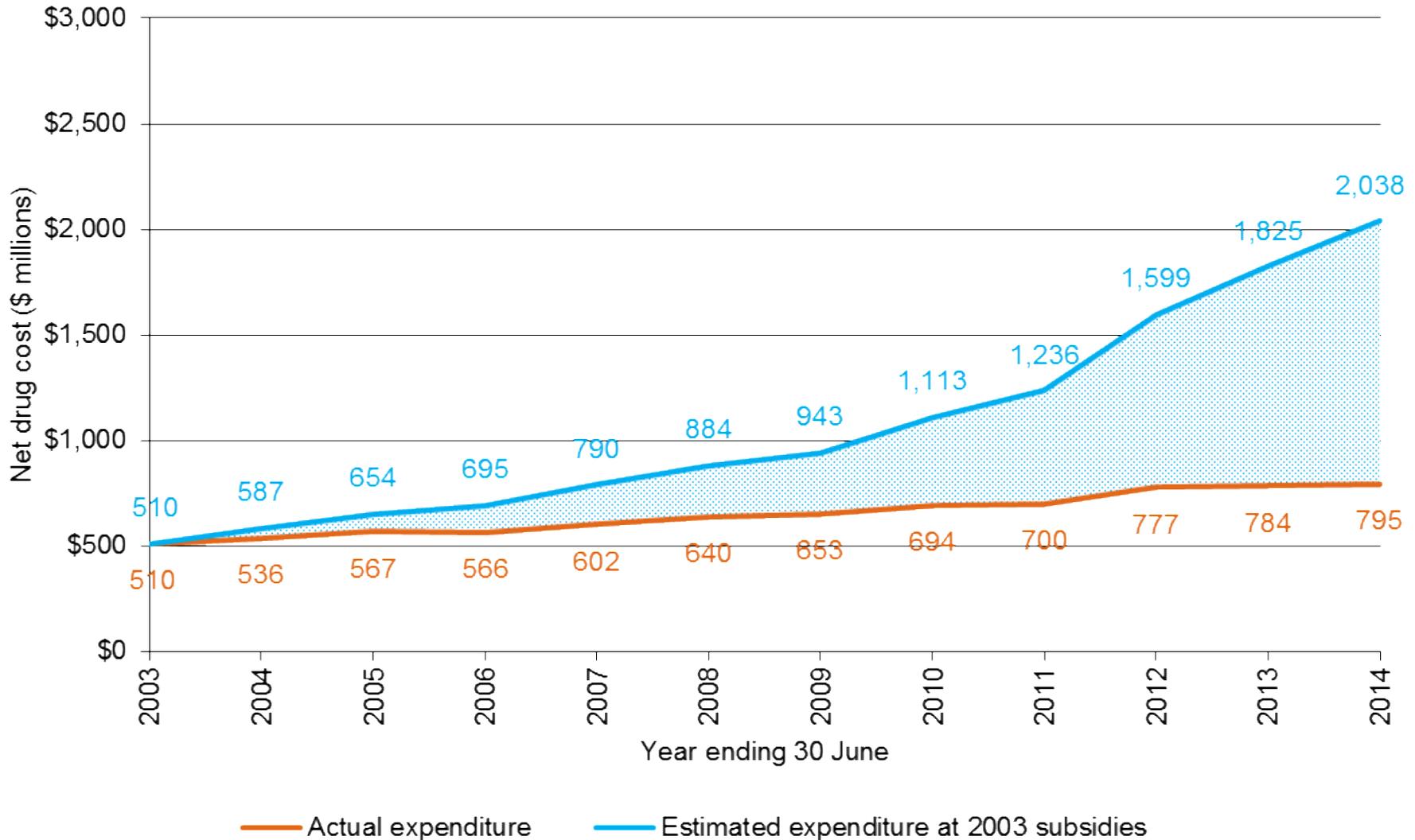
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# New Zealand's pharmacy system

- Universal coverage of subsidised medicines for NZ residents
- Co-payment of 5 NZ\$
- Pharmaceutical Management Agency of New Zealand (PHARMAC)
  - Single purchaser of pharmaceuticals
  - PHARMAC's key role is to decide whether a medicine will be subsidised or not

# Impact of PHARMAC on drug expenditure



# Rationale of the study

- There was general appreciation shown towards PHARMAC's strategy of creating competition in order to achieve a lower purchasing price.
- However, there are issues related to access to medicines
- GP's are important stakeholders in the medicines supply chain
- Studies have shown that GPs perceptions, knowledge and experiences of medicines' costs and pharmaceutical policy could impact medicines prescribing and health outcomes (Suggs et al, 2009; Frazier et al, 1991 and Denig et al, 1988).

# Rationale of the study

- Kasje et al reported that GPs do not generally take into consideration medicines costs to patient (Kasje et al, 2002).
- Prosser and Walley reported that majority of GPs lacked knowledge of actual drug prices and rarely monitored costs or viewed prices when prescribing (Prosser and Walley, 2003).
- Hence in this context, the present study was planned.

## AIMS OF THE STUDY

- The general aim of this study was to evaluate GPs' perceptions, knowledge and experiences regarding medicines' cost and subsidy in NZ.

The specific objectives were:

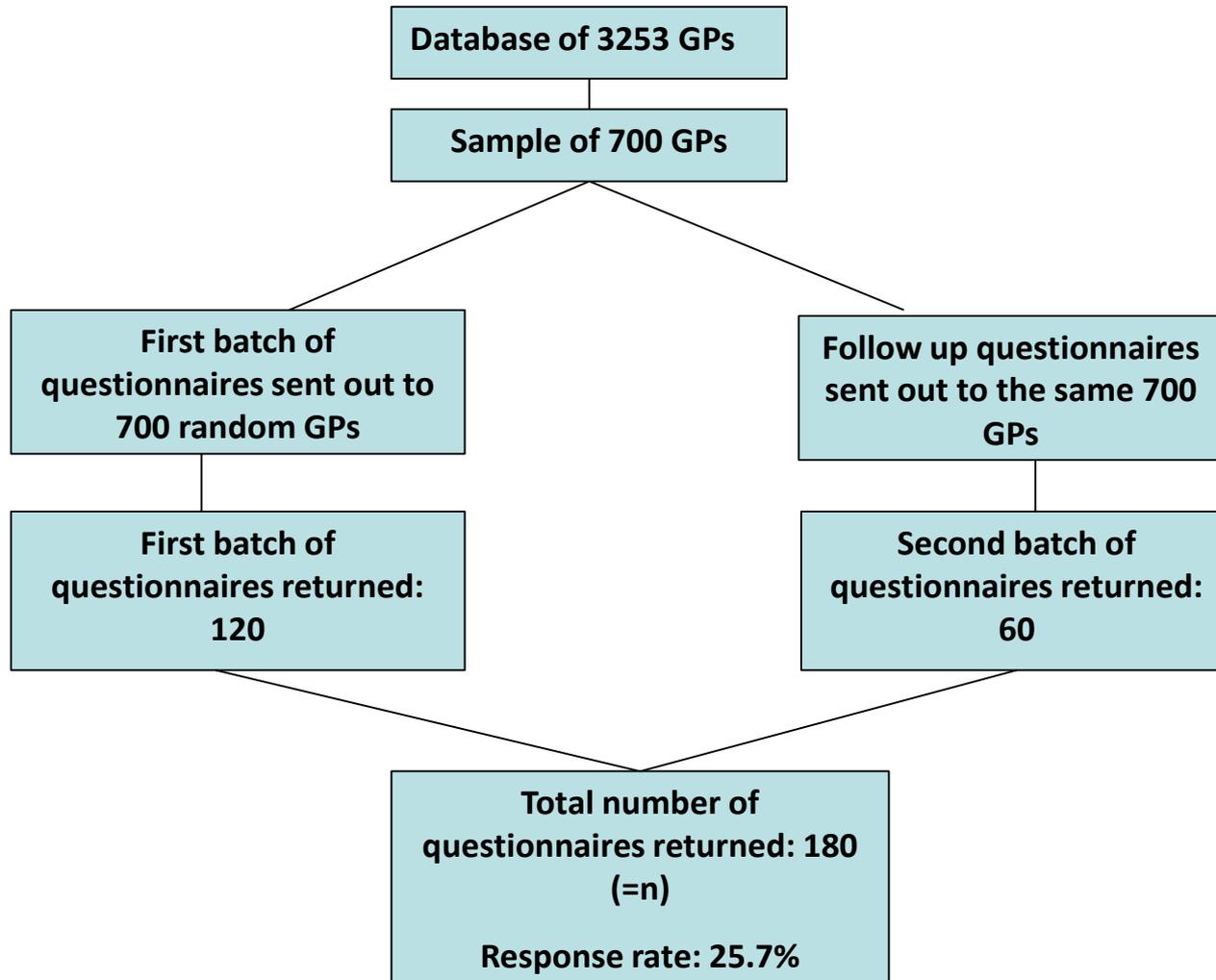
- To explore GPs' perceptions regarding access to subsidised medicines, medicines funding and reimbursement in NZ.
- To explore GPs' experiences, perceptions and knowledge regarding cost of medicines and health outcomes.

# METHODOLOGY

## Sampling Strategy

- A quantitative cross-sectional study was conducted throughout New Zealand.
- A sample of 700 GPs was extracted through simple random sampling.
- Two lots of questionnaires were sent.
- A total of 180 GPs responded which formed 25.7% of the random sample.

# SAMPLING METHODOLOGY

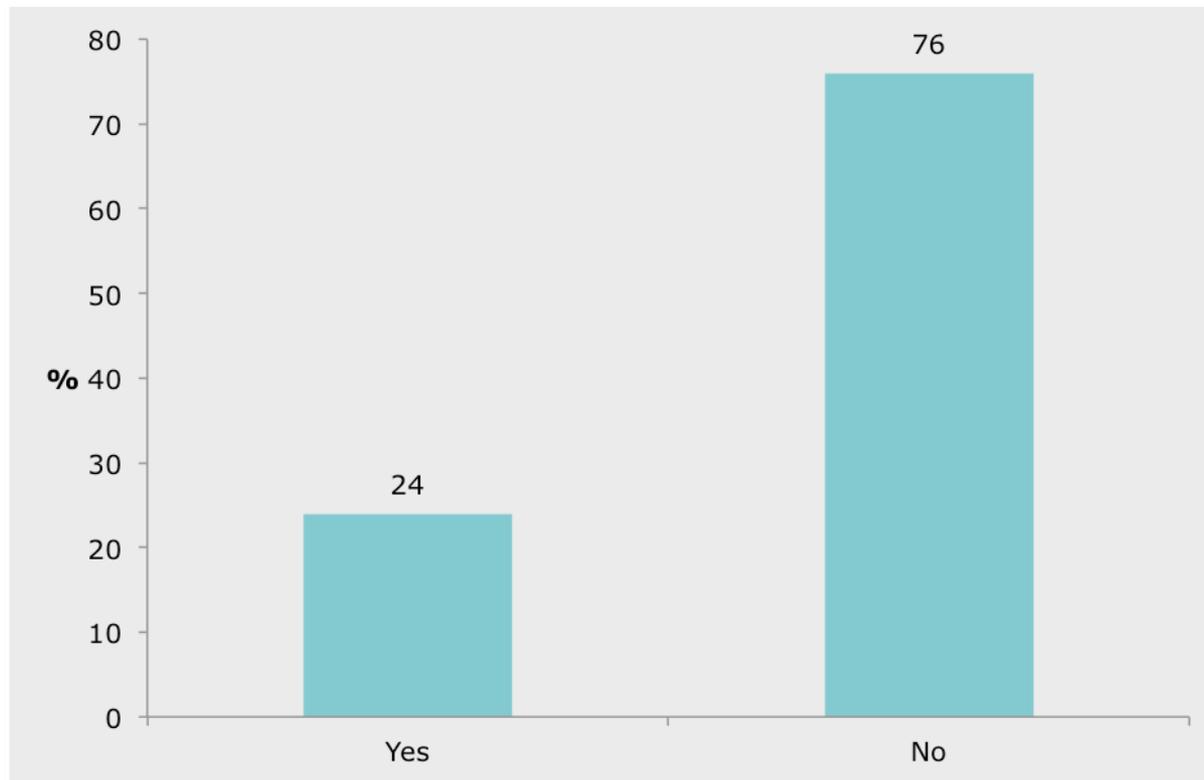


# RESULTS AND DISCUSSION

## Participants Demographics

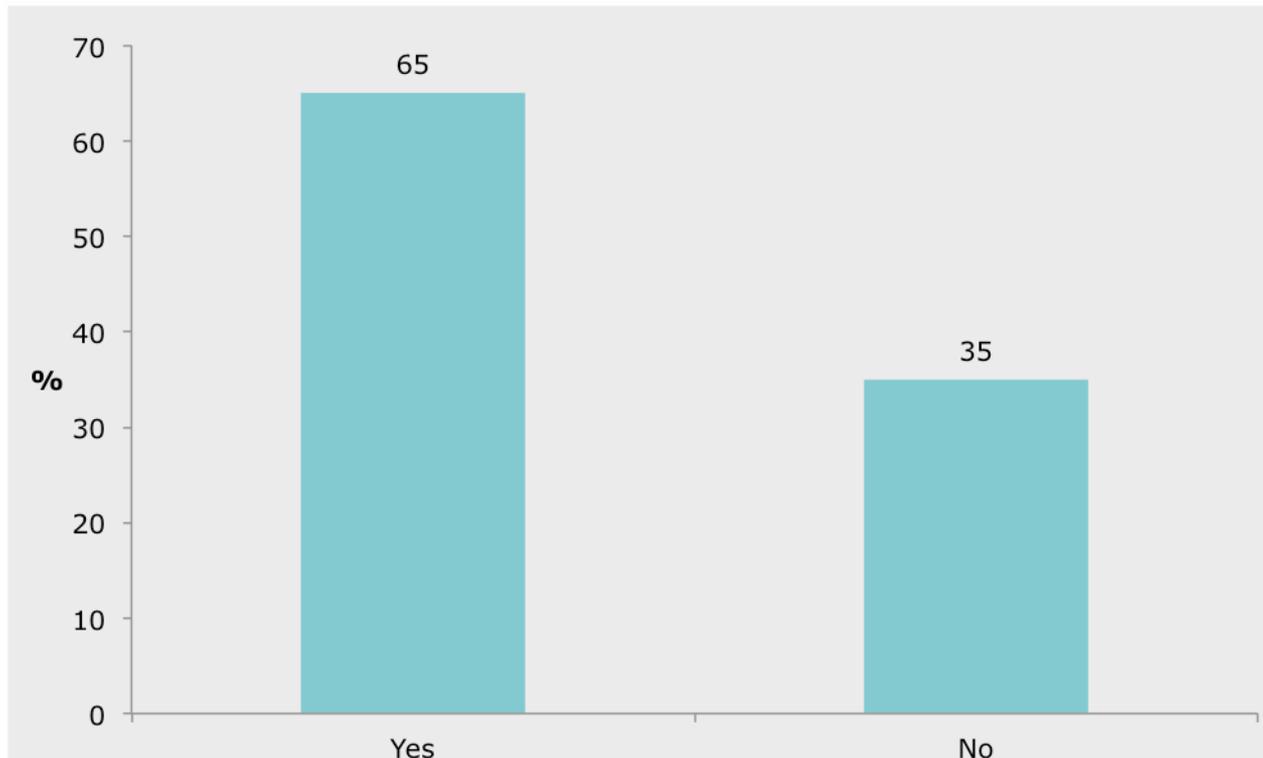
Most of the participants were male (55%) and older than 40 years.

## Participants' education on medicines cost and reimbursement



76% did not have formal education on pharmacoeconomics.

## Indication of whether participant had an interest in learning about medicines cost



65% participants were interested in learning about medicines cost.

# GPs' rating of the factors when selecting a medicine for prescribing

| No | Factors                | Percentage |
|----|------------------------|------------|
| 1  | medicine effectiveness | 90%        |
| 2  | subsidy status         | 29%        |
| 3  | side-effect profile    | 28%        |
| 4  | patient affordability  | 26%        |

## **GPs' attitudes regarding health outcomes and medicine funding and access**

- 53% view that a fully funded medicine improved compliance.
- 51% opined that the increase in medicine co-payment has reduced access.
- Most were neutral to the statement that health outcomes would improve if more new medicines were funded or more medicines in existing drug class were funded.

## **GPs' knowledge regarding strategies used by PHARMAC**

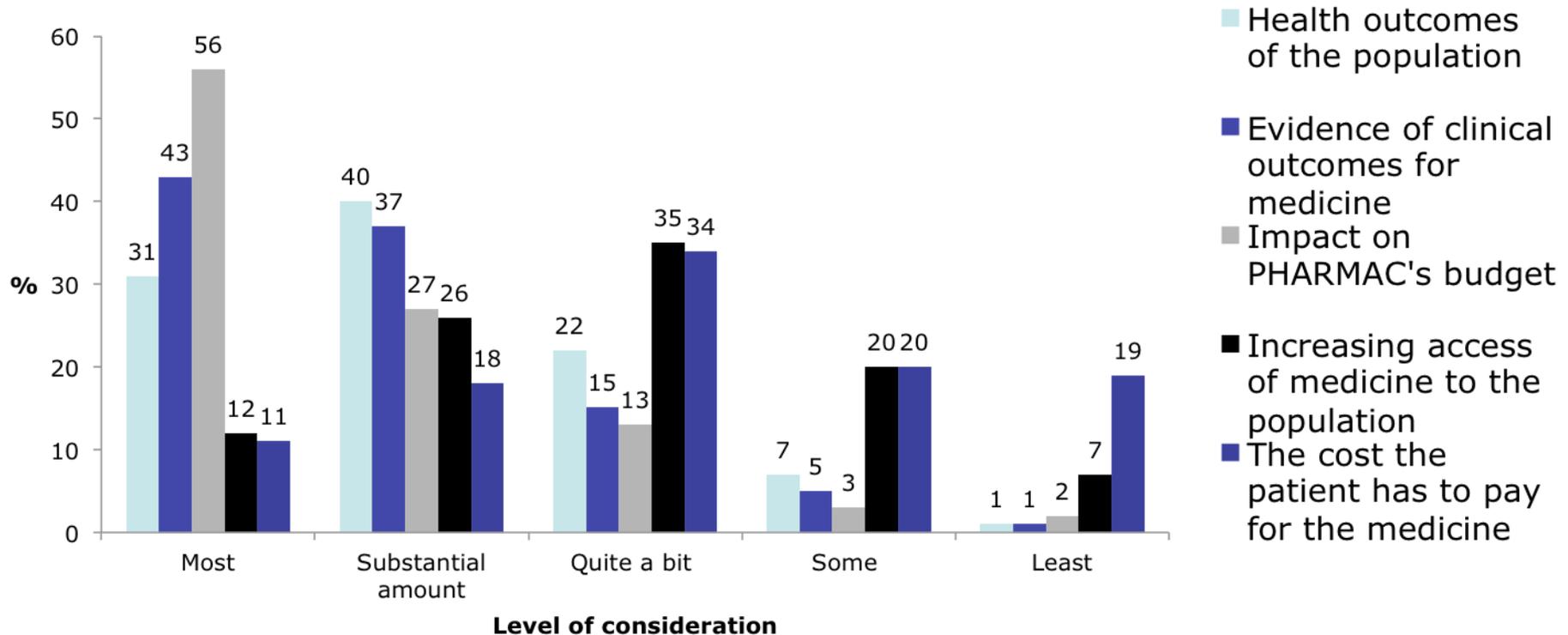
- Only 32% were able to correctly answer the question on PHARMAC operations.
- Chi Square test showed statistical significance ( $P < 0.05$ ), the GPs with a greater knowledge of PHARMAC's strategies were more likely to have been practicing for a longer period of time.

# Relationship between GPs' years in practice and their knowledge on PHARMAC strategies

| Years of practice | P values |
|-------------------|----------|
| 26-30             | 0.021    |
| >30               | 0.002    |

Ordinal regression showed that >25 years in GPs' practice is statistically significant (more years in practice, more knowledge they have regarding PHARMAC strategies).

# GP's perceptions on the level of consideration PHARMAC gives when funding medicines



## GPs' were asked to correctly identify the subsidy status of following medicines

| MEDICINE                            |                            |
|-------------------------------------|----------------------------|
| <b>Crestor® 20mg tablet</b>         | <b>(Rosuvastatin)</b>      |
| <b>Citalopram 20mg tablet</b>       |                            |
| <b>Doxy-50® 50mg tablet</b>         | <b>(Doxycycline)</b>       |
| <b>Ferrograd-C® BP 325mg tablet</b> | <b>(Ferrous Sulphate )</b> |
| <b>Telfast® 60mg tablet</b>         | <b>(Fexofenadine)</b>      |
| <b>Melatonin 1mg tablet</b>         |                            |

## **GPs' knowledge and the subsidy status of medicines**

- Only 12% were able to correctly identify the subsidy status of all six medicines.
- This is similar to another study conducted by Suggs et al (2009).
- No significant relationship was identified between participants years of experience and knowledge on subsidy status of medicines ( $P = 0.203$ ).

## COMMENTS BY GPS

- In questionnaire, a section was provided to GPs to write their comments regarding any topics that they are concerned about.

| Topics                                       | Nature of comments  |                                |   |   |                             |  |                               |
|--|---|--------------------------------|---|---|-----------------------------|--|-------------------------------|
| Special Authority                            | Complexity of system  | Time consuming system          | Irrational requirements                 | Efficacy of electronic application                        | Prevents clinical judgement | Direct to consumer advertising of SA medicines | -                             |
| PHARMAC                                      | General positive comments   | Negative relationship with GPs | Poor quality of sole supplied medicines | Dominated by price  | More options funded         | Access to PHARMAC schedule                     | Concern for future of PHARMAC |
| Price of medicine                            | Patients cannot afford the \$5 co-payment in lower socio-economic areas |                                | -                                       | -   | -                           | -  | -                             |
| General comments about the healthcare System |   | System too Bureaucratic        | Need for acute disability allowance     | System vulnerability                                      | -                           | -  | -                             |
| Funding of medicine                          | Consider more expensive medicines                                       | Concern for limited access     | Desire for more flexibility             | Desire for more consideration for diseases with low QALYs | -                           | -  | -                             |

## COMMENTS BY GPS

- Comments about the health system and PHARMAC were generally positive.

### Some comments

- *'some of the criteria requirements for certain medicines were irrational for example the need to re-apply for medicines which are indicated for long term conditions e.g Spiriva. It prevents clinicians from using their clinical judgement to select the best medicine for a particular patient'.*
- *'patients are cutting out aspirin and statins to save money. This is a very sad situation'.*

## CONCLUSION

- Overall, GPs lacked knowledge about what strategies PHARMAC used when deciding to fund medicines.
- They were also deficient in their knowledge about cost of medicines they prescribe.
- GPs were satisfied with the current range and access to medicines. This concurs with the findings from qualitative survey that most GPs are satisfied with the broader access to medicines issues
- Most GPs agreed that the increase in medicine co-payment has reduced access which could lead to poor health outcomes.