

# Reducing ARV Costs in Namibia: A Means to Increase Access



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## Introduction to Namibia

- Population: 2.3 million
- Adult HIV Prevalence: 13.1%
- Gini-Coefficient: 70.7%
- Upper middle-income status

## Private Sector Potential Not Fully Realized

- Willingness and ability to pay for private services not fully utilized
  - Approximately 150,000 Namibians enrolled in private medical insurance and 184,000 additional civil servants and dependents enrolled in Public Service Employee Medical Aid Scheme (PSEMAS)
  - Only around 51% of formally employed are insured
  - In total around 16 to 18% of population insured

Source: NAMAF 2010 (not published)

## Guiding Research Question

- What are the potential savings for PSEMAS/Ministry of Finance if anti-retroviral medicines (ARVs) were available at public sector prices, instead of the private prices currently being paid by PSEMAS?
- **Rationale of study** → Lowering the cost of PSEMAS rates will likely expand access to health insurance in Namibia

## Data provided by PSEMAS and MoHSS

- Data provided by PSEMAS:
  - List of all medicines classified as ARVs in the PSEMAS system, including the following information:
    - Total quantity purchased
    - Total amount paid
    - Price per medicine
    - Description of medicine, including strength, unit, quantity in packaging, manufacturer
    - Number of beneficiaries per medicine and number of scripts
  - Unduplicated count of PSEMAS patients receiving ARVs in 2010
  - Total PSEMAS medical claims expenditures in 2010
- Data provided by the Ministry of Health and Social Services (MoHSS):
  - MoHSS prices for the PSEMAS-listed ARVs, including quantities/size of each medicine

## Approach

- Step 1: Combine all data sets
  - PSEMAS data set on prices and data set on total value combined
  - PSEMAS data set combined with MoHSS data set on prices
- Step 2: Data cleaning and verification
  - All non-ARV medicines are excluded from the analysis
  - Comparison of PSEMAS and MoHSS data
- Step 3: Analysis
  - Calculations performed:
    - Price difference between MoHSS and PSEMAS
    - Potential savings: price difference x quantities purchased
    - Average price difference
    - Total amount spent on ARV
- Step 4: Review of analysis by independent actuaries (Deloitte South Africa)

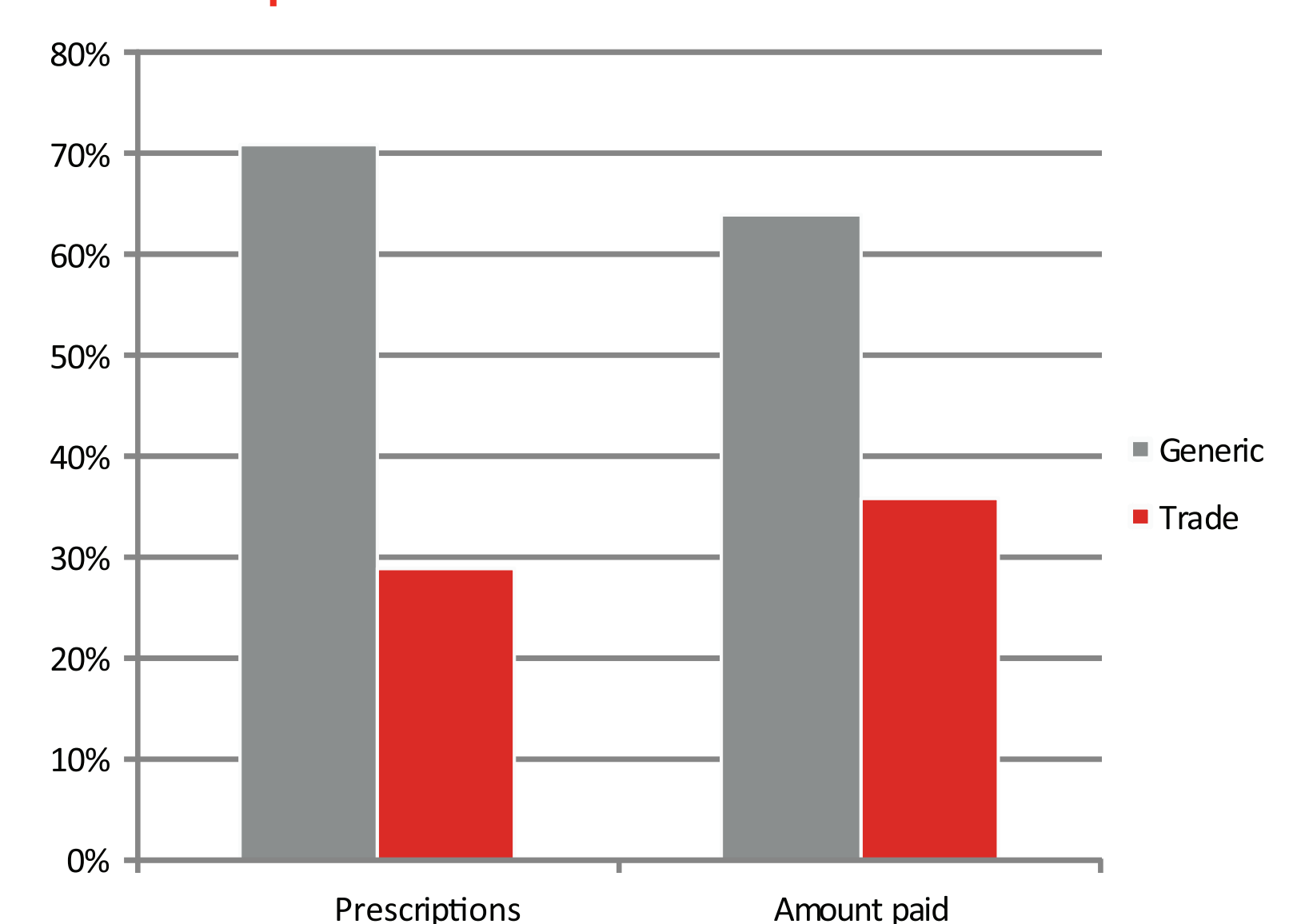
## Assumptions

- Quantity of medicines purchased by PSEMAS
  - Observed discrepancy in spend between some quantities recorded by PSEMAS and price
  - Therefore, the quantities of medicines purchased was deduced as follows:
    - Total spend per medicine/price (as reported by PSEMAS)
- Exclusion of ARV medicines
  - All medicines that were identified not to be ARV medicines were excluded, including 10 medicines, comprising 0.1% of all PSEMAS reported costs on ARV
- Prices
  - Prices as reported by PSEMAS as claim prices for 2010 without accounting for inflation
- Patients on ARV
  - Assumed that ARV patients were on ARV medicines for the whole of 2010 (for calculation of potential savings per patient)

## Results: Prescription and Cost Distribution of ARVs

- Of 123 products, 94 can be substituted
  - Total of 184,649 prescriptions
  - 71% generic and 29% trade

Prescription and Cost Distribution of ARVs



## Results: Costs and Potential Savings

- PSEMAS has spent N\$ 74,4 million on ARVs in 2010
  - This is **7.9%** of all PSEMAS claims in this period
  - **10,644** patients were receiving ARV medicines in 2010 (6.34% of all members)
- Potential savings per year if PSEMAS were to access ARVs at public sector prices is \$4,176,471 USD (2010)
  - Potential annual savings as a % of total ARV expenditure (2010) = **48%**
  - Potential annual savings as a % of total PSEMAS claims in (2010) = **3.8%**
  - Potential annual savings per patient (2010) = **\$392 USD**
- Price difference per medicine
  - Average price difference per medicine = **217.8%** (PSEMAS on average pays more than double the price that MoHSS pays)

## Conclusions

- Medicines are generally more expensive in the private sector
- Majority of public sector medicines are generic
- There are substantial potential savings if PSEMAS can access ARVs at MoHSS prices
- At least four other African countries are allowing private health insurance schemes to procure ARVs at public sector prices
- Existing disease management programs would facilitate implementation of program controls