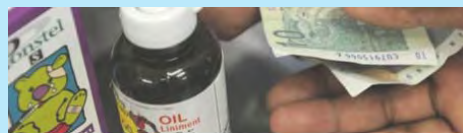




# Access barriers to ART in South Africa

A/Prof Sue Cleary  
Health Economics Unit



# Goal of presentation

- To present preliminary findings from an ongoing project about equitable access to public health care services in South Africa



# Background

## Equity and efficiency in scaling up access to HIV-related interventions in resource-limited settings

Susan Cleary

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Tel: +27 21 406 6755;  
e-mail: Susan.Cleary@uct.ac.za

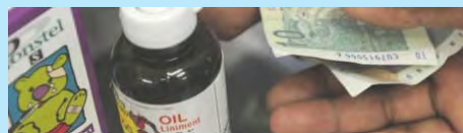
Current Opinion in HIV and AIDS 2010, 5:210–214

### Purpose of review

The present review focuses on empirical studies examining equity and efficiency in scaling up access to HIV treatment in resource-limited settings. Key themes from reviewed papers are extracted and future research priorities are identified.

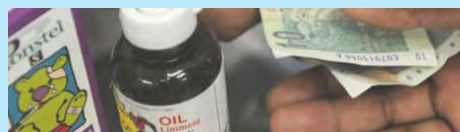
### Recent findings

Papers were found relating to three key themes. These were equity/efficiency trade-offs in the choice of treatment intervention(s); the implications of the model of care for equitable access; and socioeconomic inequalities in use, adherence and outcomes. Key findings include the need to implement or develop more cost-effective models of care as well as the importance of improving access for the poor.



# Background

- Inverse equity hypothesis:
  - Scaling up may be associated with widening socioeconomic or gender inequalities in access/utilization/outcomes
- Trade-off between efficiency and equity includes a trade-off between:
  - Achieving maximum coverage fast (picking the low hanging fruit)
  - Specifically targeting the harder to reach groups (the poor, rural dwellers, men, other vulnerable populations)



# Background: affordability

Cleary and McIntyre *BMC Health Services Research* 2010, **10**(Suppl 1):S2  
<http://www.biomedcentral.com/1472-6963/10/S1/S2>

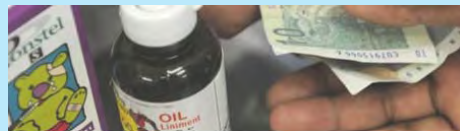


**RESEARCH**

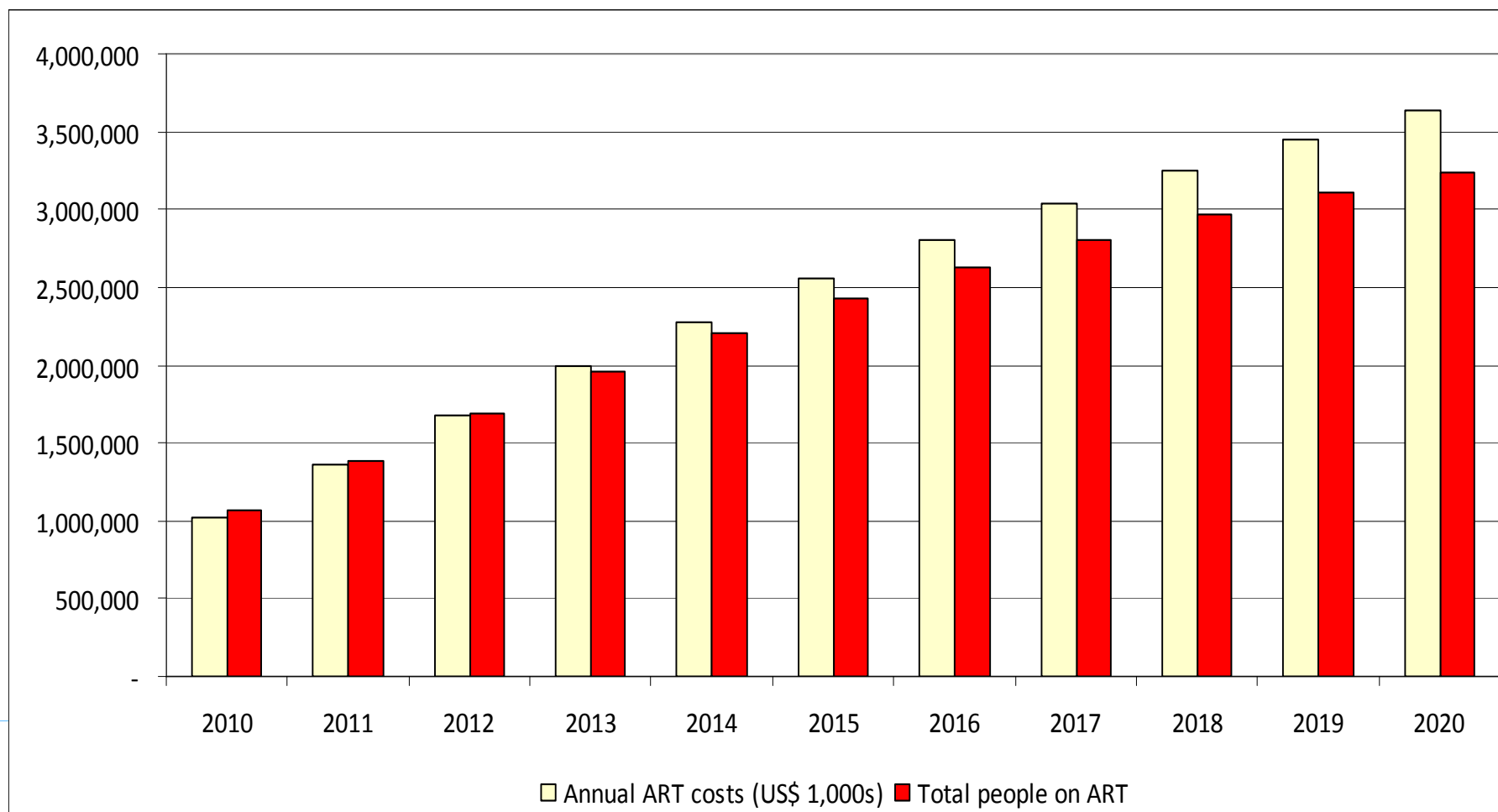
**Open Access**

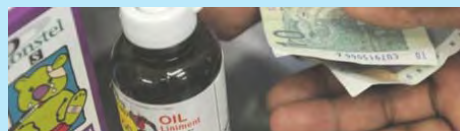
## Financing equitable access to antiretroviral treatment in South Africa

Susan Cleary\*, Di McIntyre



# Background: affordability





# Background: SE inequalities in use

Health Policy 99 (2011) 261–266



Contents lists available at ScienceDirect

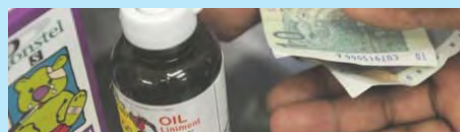
Health Policy

journal homepage: [www.elsevier.com/locate/healthpol](http://www.elsevier.com/locate/healthpol)



Equity in the use of antiretroviral treatment in the public health care system in urban South Africa

Susan Cleary<sup>a,\*</sup>, Sheetal Silal<sup>a</sup>, Stephen Birch<sup>a,b,f</sup>, Henri Carrara<sup>c</sup>, Victoria Pillay-van Wyk<sup>d</sup>, Thomas Rehle<sup>c,e</sup>, Helen Schneider<sup>e</sup>



# Background: SE inequalities in use

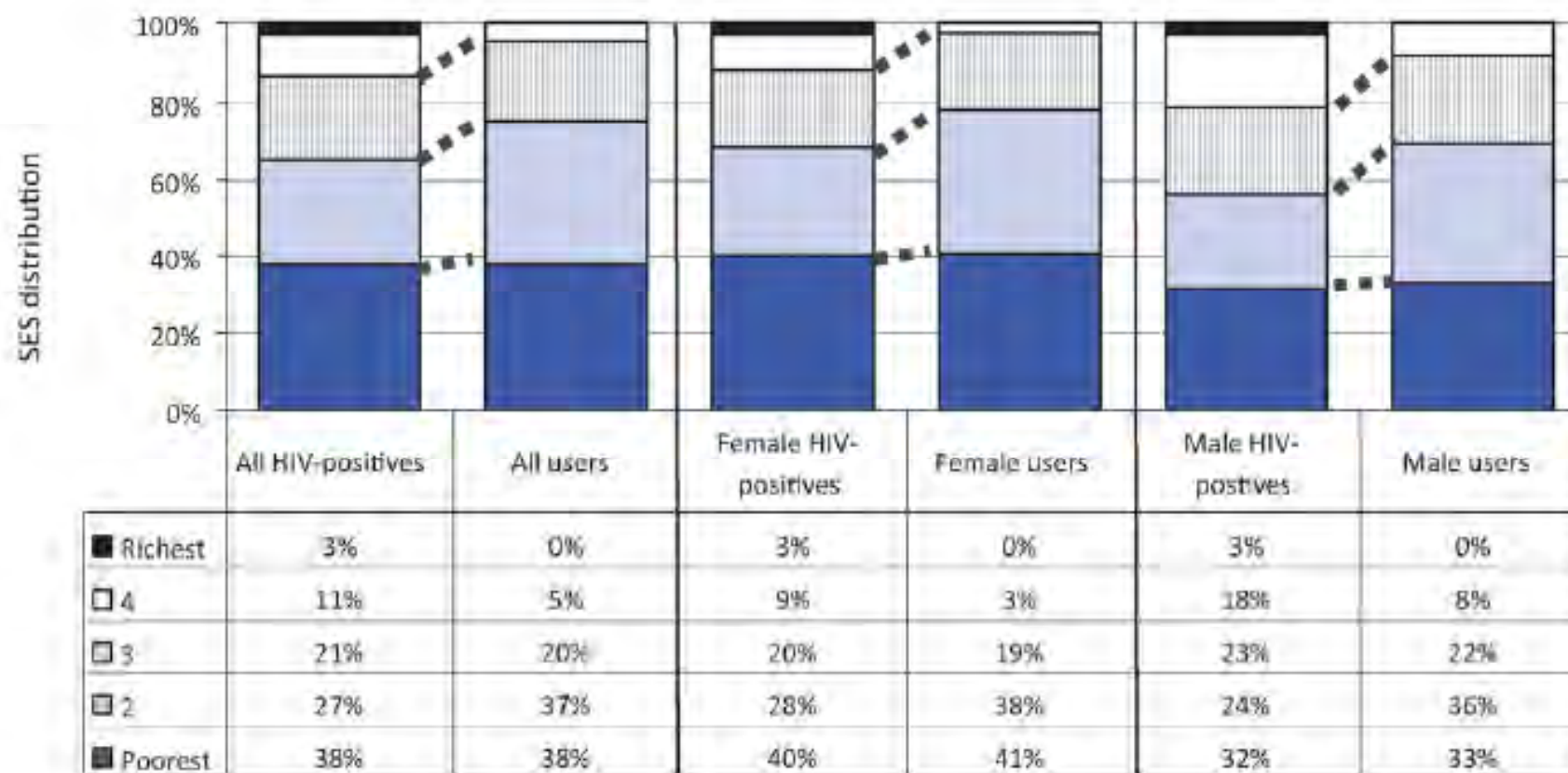
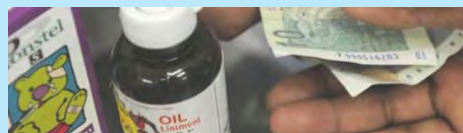
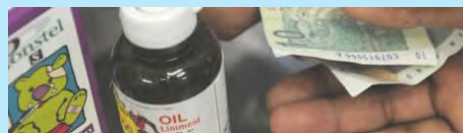


Fig. 2. Quintiles of the SES of HIV-positive adults and the users of ART services in Mitchells Plain and Soweto in total and by sex.



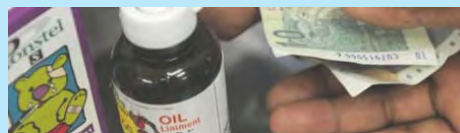
# Introducing the REACH study

- Five-year project aiming to document inequities in access to health services (ART, TB and maternal health) in the South African public health care system
- Study team includes:
  - Health Economics Unit (Univ of Cape Town)
  - Centre for Health Policy, Rural AIDS and Development Action Research Programme (Univ of Witwatersrand)
  - Africa Centre (Univ of KwaZulu-Natal)
  - McMaster Institute of Environment and Health; Centre for Health Economics and Policy Analysis (McMaster Univ)
- Funding:
  - Canadian Teasdale-Corti Global Health Research Initiative



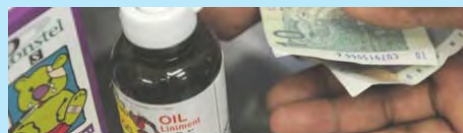
# ART focus within the REACH study

- Detailed case studies of service use and access barriers within 4 districts:
  - Mitchells Plain (Cape Town)
  - Soweto Region D (Johannesburg)
  - Hlabisa (northern KwaZulu-Natal)
  - Bushbuckridge (Mpumalanga)



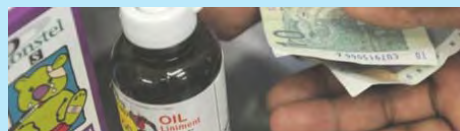
# ART focus within the REACH study





# ART focus within the REACH study

- Quantitative:
  - Representative sample of 1,266 ART service users interviewed within 12 facilities and 4 districts
  - Quality of care evaluated in all facilities
  - Choice of facility, and sample size of users in facility, determined by proportional and probability proportional to size methods
- Qualitative:
  - Facility observations, in-depth interviews with providers, service users, and partial or non-users (e.g. dropouts)



# Concepts

*Health Economics, Policy and Law* (2009), 4: 179–193

© Cambridge University Press 2009 doi:10.1017/S1744133109004836

## Access as a policy-relevant concept in low- and middle-income countries

DI MCINTYRE\*

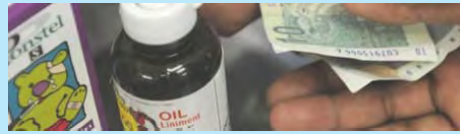
*Health Economics Unit, Department of Public Health and Family Medicine, University of Cape Town, South Africa*

MICHAEL THIEDE

*Health Economics Unit, Department of Public Health and Family Medicine, University of Cape Town, South Africa*

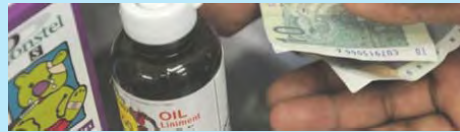
STEPHEN BIRCH

*Health Economics Unit, Department of Public Health and Family Medicine, University of Cape Town, McMaster University and University of Manchester, UK*



# Concepts

- Access:
  - Opportunity to use health services (not equated with use)
  - Degree of fit between service users and the health system along three dimensions:
    - Availability: fit between patient needs and the type, place and time of services provided
    - Affordability: fit between costs and opportunity costs of service use and HH ability to pay
    - Acceptability: fit between provider and patient attitudes towards and expectations of each other



# Concepts

## Availability

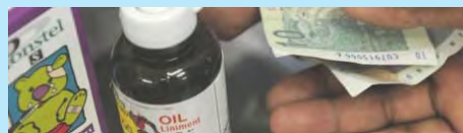
- Mode and cost of transport
- Travel time to facility
- Waiting time at facility
- Availability of government “disability” grants

## Affordability

- Direct and indirect health care costs
- Health care costs as a proportion of household expenditure
- Ability to borrow or sell assets to pay for health care
  - Perceived ease/difficulty of incurring expenses

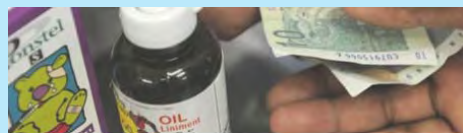
## Acceptability

- Perceptions of staff attitudes, confidentiality, and privacy



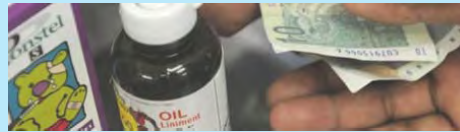
# Concepts

- Equitable access:
  - Does the distribution of access barriers differ by:
    - Sex?
    - Socioeconomic status?
    - Citizenship?
    - Geographic location (rural/urban)?
    - Other?



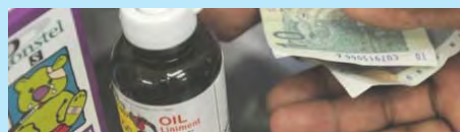
# Rural/urban inequalities in access

- Rationale:
  - Increasing coverage and ensuring retention in ART care requires a context specific understanding of barriers to access
    - Very little research has been conducted to date, particularly in rural areas
  - Research aims to document these access barriers as experienced by users within different geographic locale



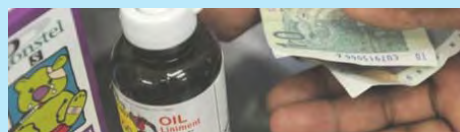
# Methods - quantitative

- Face-to-face semi-structured interviews with service users conducted in language of respondent's choice
- Double entry to purpose designed data entry platform in Epidata
- Stata/I.C 11 for analysis
- MCA used for SES index
  - type of house, walls, toilet facility, roof, water supply, electricity for cooking etc), assets (including fridge, stove, DVD player, television, cellphone, bicycle etc) and other factors associated with deprivation at the household level (including the sex, employment status and residency status of the household head)
- Bivariate logistic regressions, chi-squared and Wilcoxon ranksum tests used (for purposes of today's presentation)



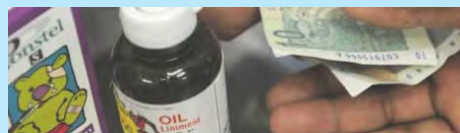
# Results

Variable	Urban	Rural	Odds Ratio	p-value
Sample size	654	612		
<b>Sociodemographics</b>				
Asset index (% in richest half)	75.84	22.39	10.8	<0.001
Mean household expenditure (ZAR)	1183	927	1.0	<0.001
Respondent employed (%)	29.49	14.71	2.4	<0.001
Mean (median) years of schooling	9.3 (10)	6.9 (8)	1.2	<0.001
Marital status (% single)	62.08	48.04	1.8	<0.001
Sex (% male)	21.87	31.05	0.6	<0.001
Mean (median) age (years)	36.34 (35)	39.5 (39)	1.0	<0.001

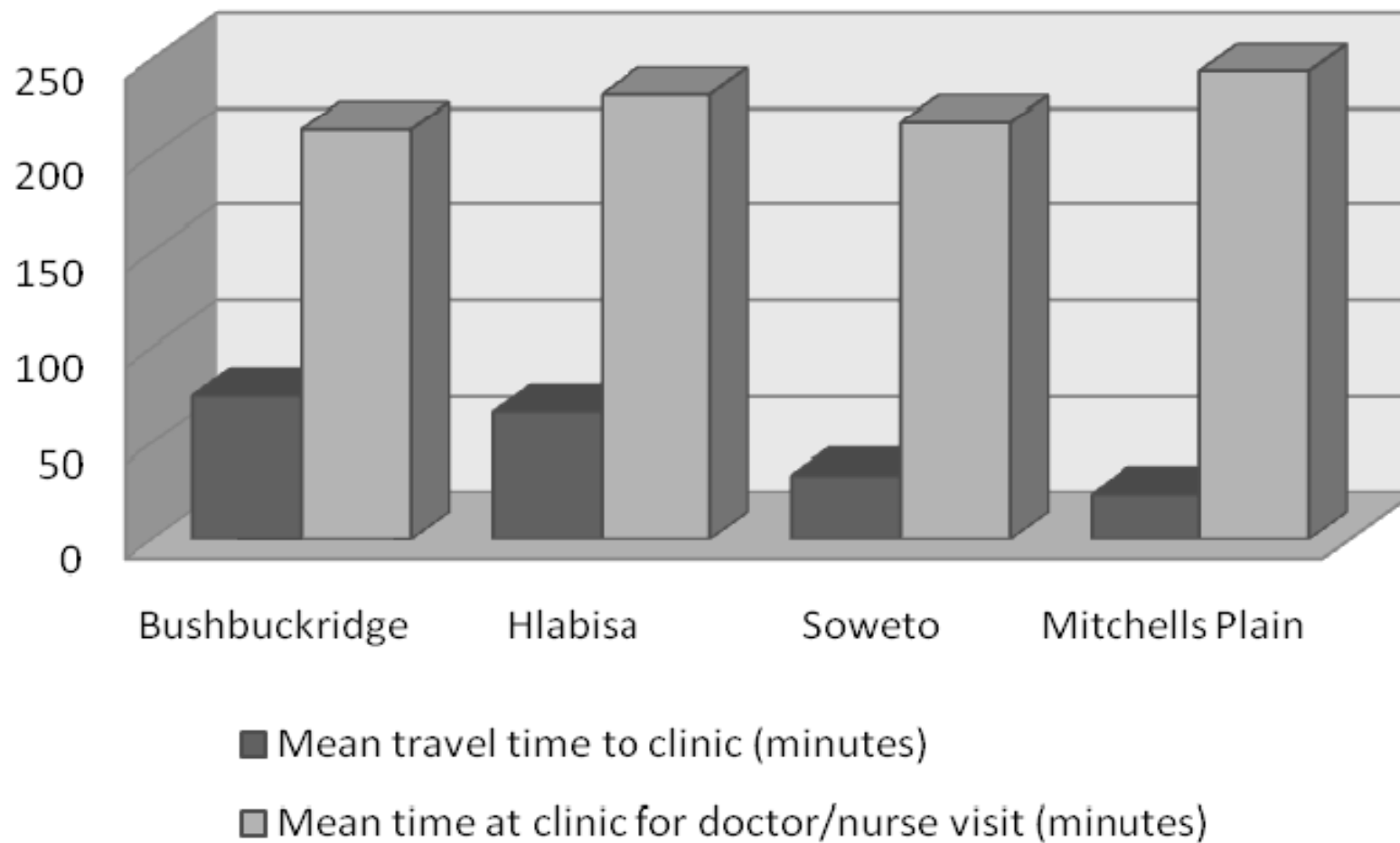


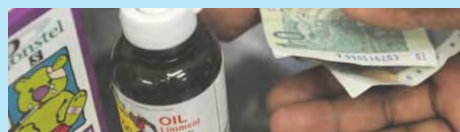
# Results

Variable	Urban	Rural	Odds Ratio	p-value
<b>Availability</b>				
Mean travel time to clinic (minutes)	28.49	71.35	0.95	<0.001
Transport by foot (%)	25.77	18.66	1.51	0.003
Mean time at clinic for doctor/nurse visit (minutes)	130.77	205.43	0.99	<0.001



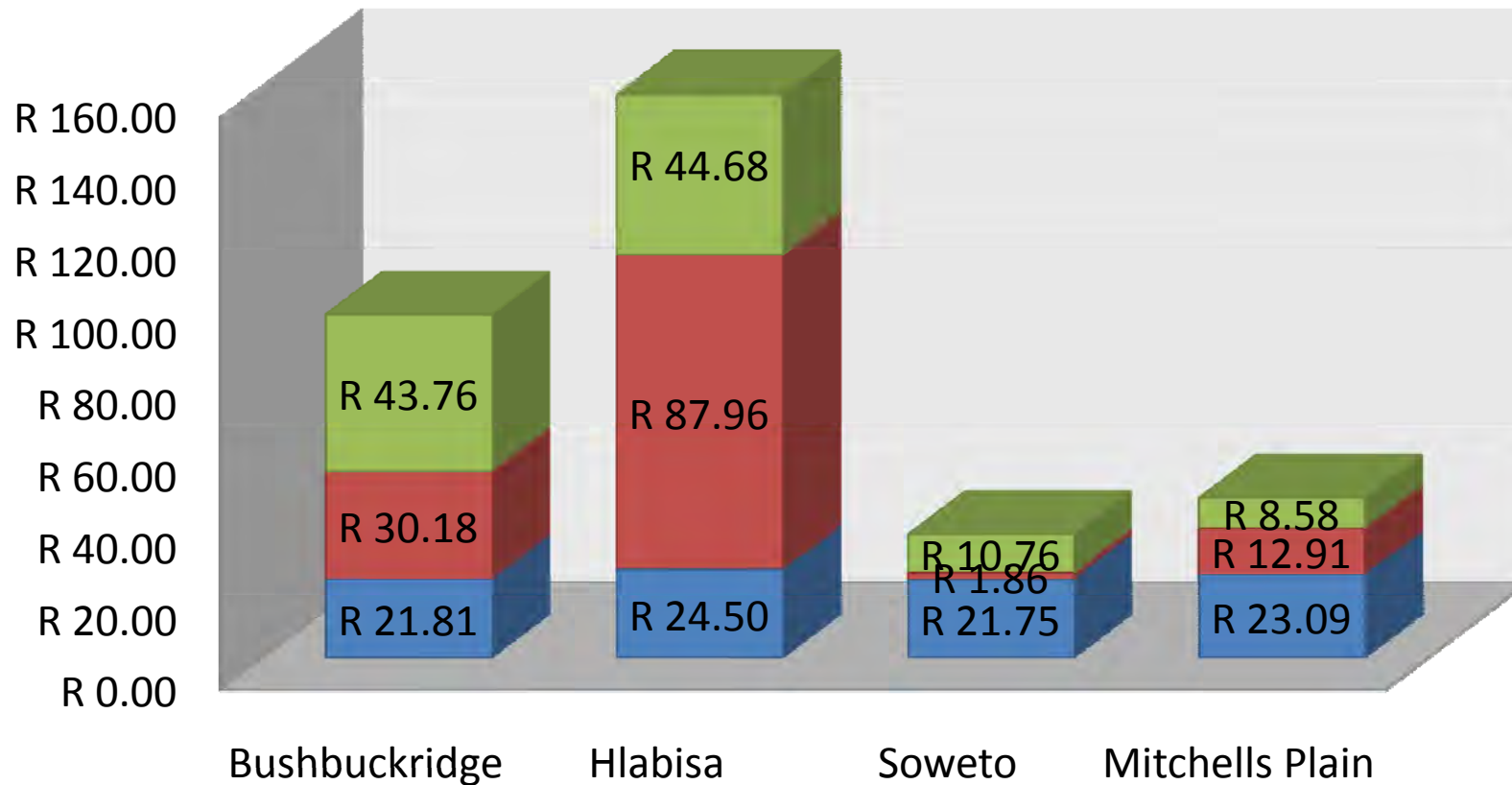
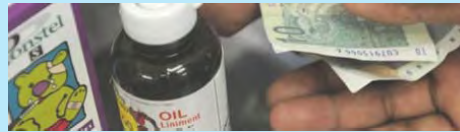
# Results



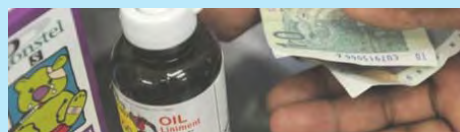


# Results

<b>Affordability</b>	Urban	Rural	Odds Ratio	p-value
Costs of attending ART service per visit	R12.27	R45.56	0.94	<0.001
Costs of other providers and self care	R29.74	R81.64	0.99	<0.001
Total cost of health services as a proportion of household expenditure (%)	5%	15%	0.003	<0.001
Households incurring health care costs greater than 15% of household expenditure (%)	6%	29%	0.16	<0.001
Respondent borrowed money to pay for health care in the past month (%)	6%	32%	0.15	<0.001
Respondent found it difficult to incur health care expenses (%)	73%	84%	0.51	<0.001

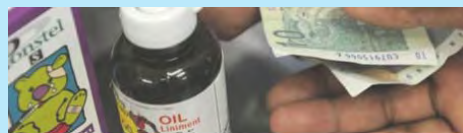


- Other providers (private sector general practitioners, traditional healers etc)
- Self care (over the counter medicines, traditional medicines etc)
- ART facility visits (transport costs, food costs etc)



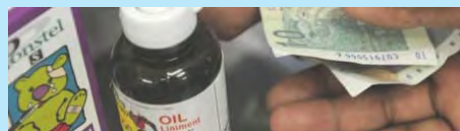
# Results

<b>Acceptability</b>	Urban	Rural	Odds Ratio	p-value
Respondent agrees that patient information is kept confidential (%)	95.26	86.44	3.15	<0.001
Respondent agrees that he/she is treated with respect by the health workers (%)	77.83	43.14	4.63	<0.001
Respondent agrees that he/she is always able to consult the health workers in private (%)	49.54	84.64	0.18	<0.001
<b>Baseline health status and adherence</b>				
CD4 count >50 cells/ $\mu$ l at start of ART	76.32	77.61	0.93	0.600
Respondent has previously missed taking one or more ARV dose (%)	19.14	8.17	2.66	<0.001
Respondent has missed one or more ART clinic visit in past 6 months (%)	6.74	3.92	1.77	0.028



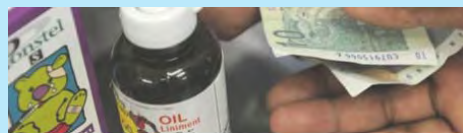
# Conclusions

- Access barriers differ between urban and rural users
  - Rural users:
    - Spend more time travelling and pay more in travel costs
    - Far more likely to incur catastrophic health care costs (>15% HH expenditure); this expenditure is more likely to be on self-care (e.g. traditional medicines, over the counter medicines) than on the use of providers (private general practitioners etc)
    - Far more likely to report difficulty in incurring these costs
    - Less likely to feel treated with respect by health workers



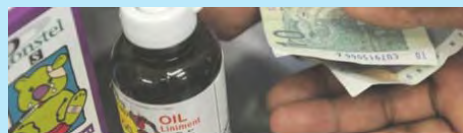
# Conclusions

- Inequitable access:
  - The “fit” between access barriers and the ability to overcome these barriers is worse for rural than urban users
  - Suggests that access is inequitable by geographic location



# Policy recommendations

- Decentralization
- Outreach services
- Less frequent visits for stable patients
- Other innovations such as patient clubs (Mozambique) could save patient as well as provider costs!



# Acknowledgements

- Work on rural/urban inequalities:
  - Stephen Birch, Mosa Moshabela, Helen Schneider
- REACH team:
  - Diane McIntyre, John Eyles, Till Barnighausen, Natsayi Chimbindi, Pascalia Munyewende, Jana Fried, Vanessa Daries, Duane Blaauw, Veloshnee Govender, Sheetal Silal, Bronwyn Harris, Loveday Penn-Kekana