

# Expanding ART South Africa -Challenges and a SWOT analysis

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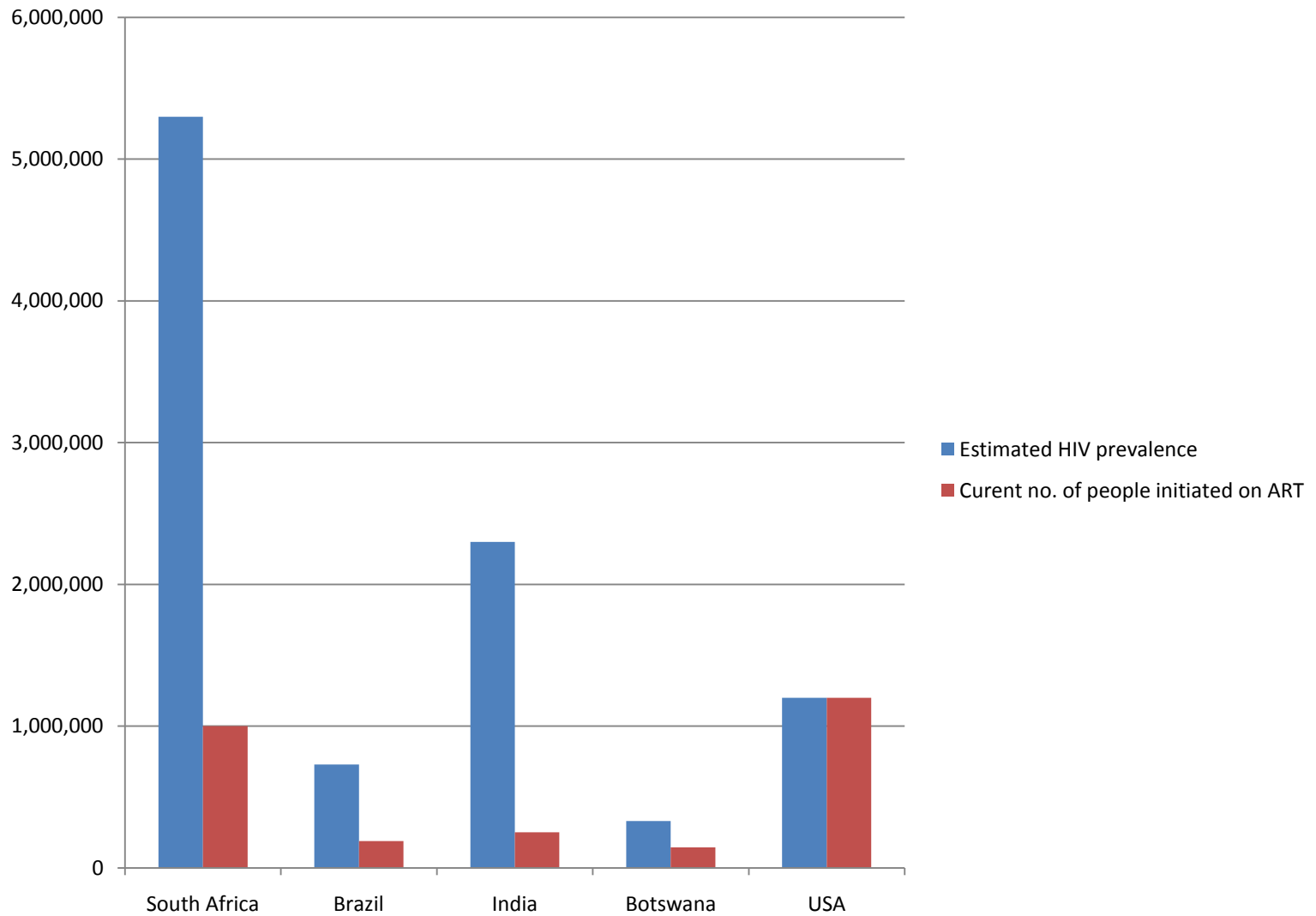
College of Health Sciences





# STANDARD CARE SERVICES FOR HIV/AIDS\*

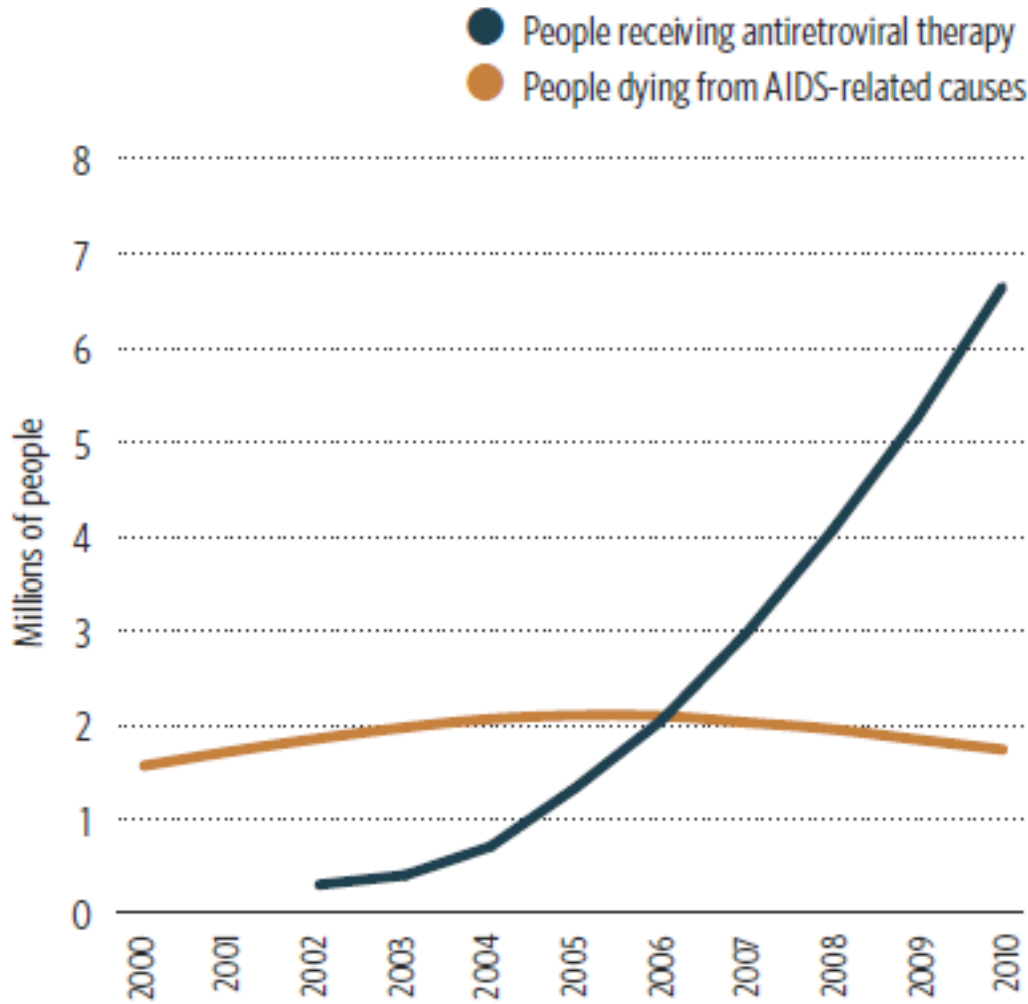
				<b>Palliative Care</b>
				<b>Home-based Care</b>
	<b>Prevention of Mother to Child Transmission</b>			<b>Antiretroviral Therapy</b>
	<b>Post Exposure Prophylaxis</b>	<b>Opportunistic Infections and Related Illnesses</b> Diagnosis, Treatments, Preventive Therapies,		
	Individual & Family . . .	<b>Pyscho-Social, &amp; Spiritual Support:</b> Care providers . . .		Bereavement . . . Orphans
	<b>VCT</b>			
	<b>Prevention</b> STI Services, Behavior Change: Communication, Education, universal precautions . . .			
<b>Uninfected People</b>	<b>Exposed People</b>	<b>People Living with HIV</b>	<b>People Living with AIDS</b>	<b>Terminally Ill and beyond</b>



## PLWA and Proportion on ART

South Africa's HIV epidemic remains the largest in the world, with an estimated 5.6 million [5 400 000–5 800 000] people living with HIV in 2009 (9).<sup>1</sup> This figure equals the total number of people living with HIV in all of Asia. The annual HIV incidence in South Africa was still a high 1.5% [1.3–1.8%] in 2009, down from 2.4% [2.1–2.6%] in 2001, although it varied considerably – from 0.5% in Western Cape province to 2.3% in KwaZulu-Natal, the most severely affected province in the country (9). These trends have occurred alongside apparent shifts to safer sex among young people (mainly increased condom use) (10).

**Fig. 1.1** Number of people with access to antiretroviral therapy and the number of people dying from AIDS-related causes, low- and middle-income countries, 2000-2010



**Male  
circumcision**  
Auvert B, PloS Med 2005  
Gray R, Lancet 2007  
Bailey R, Lancet 2007



**Treatment of  
STIs**  
Grosskurth H, Lancet 2000



**Female Condoms**



**Male Condoms**



**HIV Counselling  
and Testing**  
Coates T, Lancet 2000



**Behavioural  
Intervention**  
- **Abstinence**  
- **Be Faithful**



**Vaccines**  
Rerks-Ngarm S, NEJM 2009



**Post Exposure  
prophylaxis (PEP)**  
Scheckter M, 2002



**Oral pre-exposure  
prophylaxis**  
Grant R, NEJM 2010 (MSM)  
Baeten J, 2011 (Couples)  
Paxton L, 2011 (Heterosexuals)



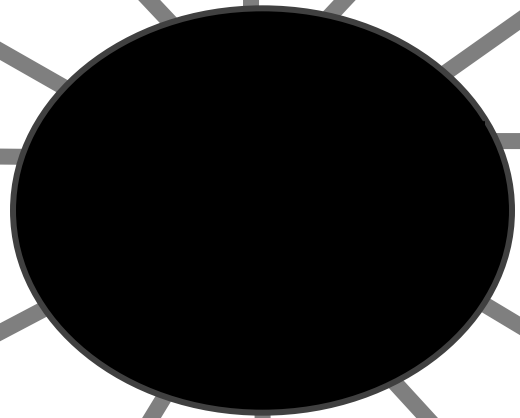
**Behavioural positive  
prevention**  
Fisher J, JAIDS 2004



**Treatment for  
prevention**  
Donnell D, Lancet 2010  
Cohen M, NEJM 2011



**Microbicides  
for women**  
Abdool Karim Q, Science 2010



Note: PMTCT, Screening transfusions, Harm reduction, Universal precautions, etc. have not been included – this is focused on reducing sexual transmission  
Slide: Courtesy - Salim Abdool Karim  
CAPRISA

# Revised SA Guidelines

- Phase out D4T and replace with tenofovir
- WHO stage 4
- TB – CD4 <350; MDR TB – all patients
- Pregnancy >350
- Infants



# The imperatives to expand ART access

- Treatment is prevention
- High cost of treating complications
- Protect the workforce
- Reduce orphans
- Can we afford not to!

# UN General Assembly Special Session – Ban Ki-moon (2011)

- Bold decisions must be taken to dramatically reshape the AIDS response to reach:
  - Zero new infections
  - Zero discrimination
  - Zero deaths

# Targets set by UNGASS on HIV/AIDS -2011

- Target 4
  - Have 15 million people living with HIV on ART by 2015
- Target 5
  - Reduce TB deaths by 50% by 2015
- Target 6
  - Annual global expenditure between US\$22-24 billion in low and middle income countries

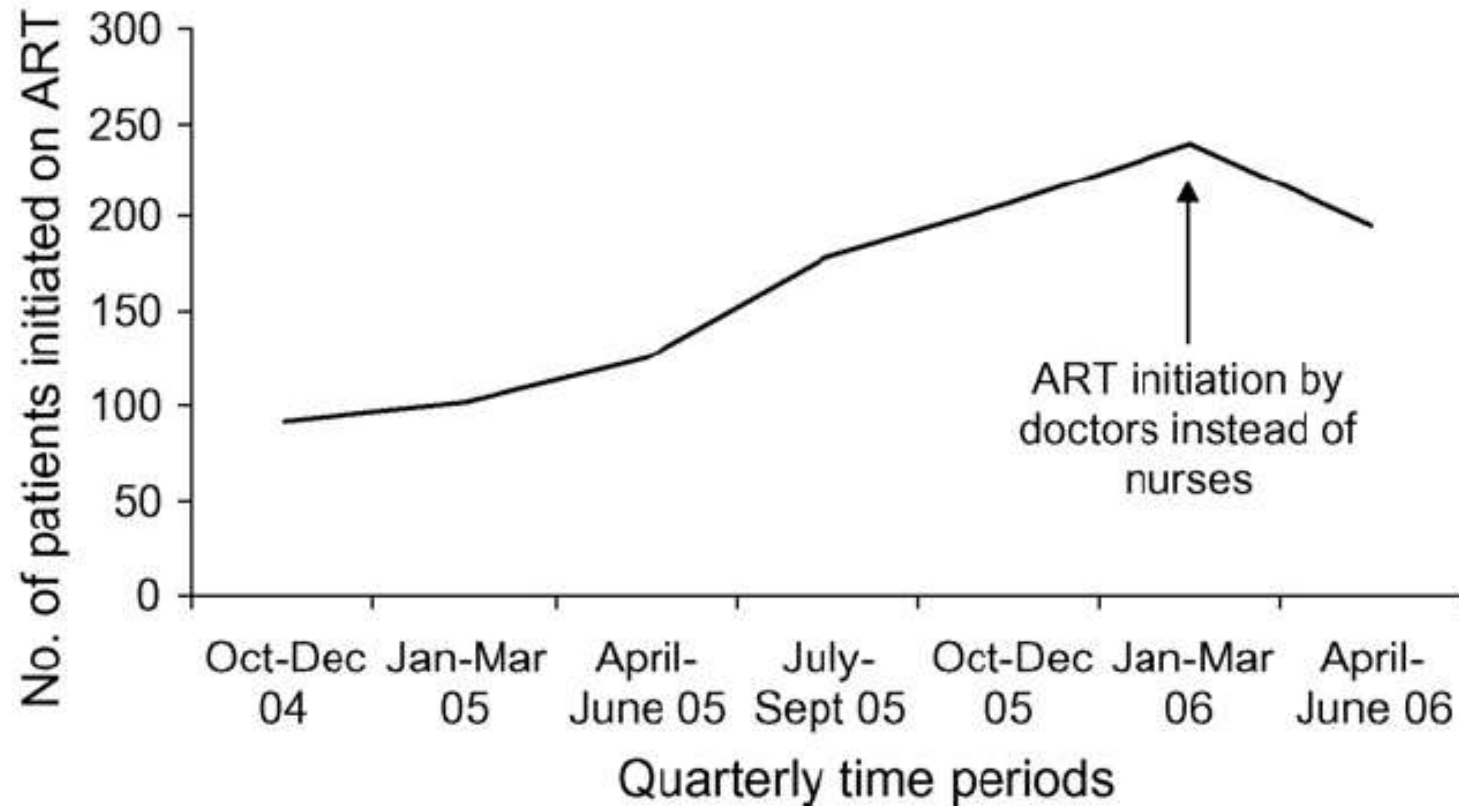
# Task shifting (sharing)

**Table 1** Types of task shifting commonly seen in Africa<sup>13</sup>.

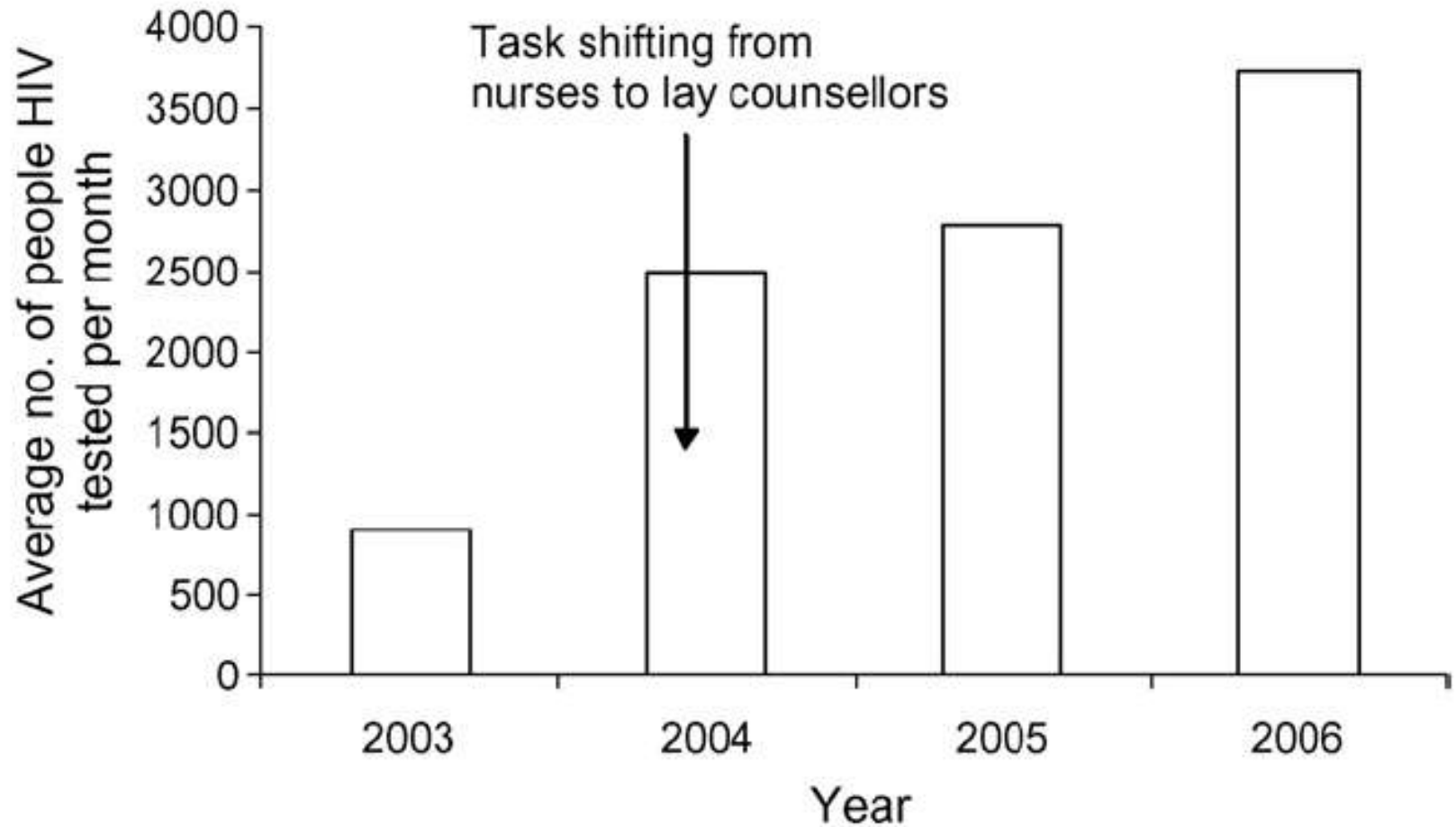
Type of task shifting	Definition	Example
Type I	The extension of the scope of practice of <i>non-physician clinicians</i> in order to enable them to assume some tasks previously undertaken by more senior cadres, e.g. doctors	Clinical officers deciding eligibility and prescribing ART (Malawi)
Type II	The extension of the scope of practice of <i>nurses</i> and <i>midwives</i> in order to enable them to assume some tasks previously undertaken by senior cadres	Nurses treating opportunistic infections and prescribing ART (Botswana, Ethiopia, Uganda, Malawi)
Type III	The extension of the scope of practice of <i>community health workers</i> or <i>lay providers</i> in order to enable them to assume some tasks previously undertaken by more senior cadres, e.g. nurses and midwives, non-physician clinicians or doctors	Community health workers providing ART counseling and HIV testing (Uganda, Rwanda, Malawi)
Type IV	<i>People living with HIV/AIDS</i> , trained in self-management to assume some tasks related to their own care that would previously have been undertaken by health workers	Provision of basic HIV support, treatment adherence and psychosocial support (Botswana, Kenya, Nigeria, South Africa)
Type V	The extension of the scope of practice of other cadres that do not traditionally have a clinical function, e.g. <i>pharmacists</i> , <i>laboratory technicians</i> , <i>administrators</i> , <i>record clerks</i>	Record clerks filling in basic patient information and measuring body weight at HIV clinics (Malawi)

ART: antiretroviral treatment.

# Task-shifting



**Figure 1** Quarterly initiation of antiretroviral treatment (ART) at clinics in Lusikisiki, South Africa, October 2004–June 2006.



**Figure 2** Impact of task shifting from nurses to lay counsellors on the coverage of HIV testing services, Thyolo District, Malawi, 2003–2006.

# ART – a treatment whose time has come?

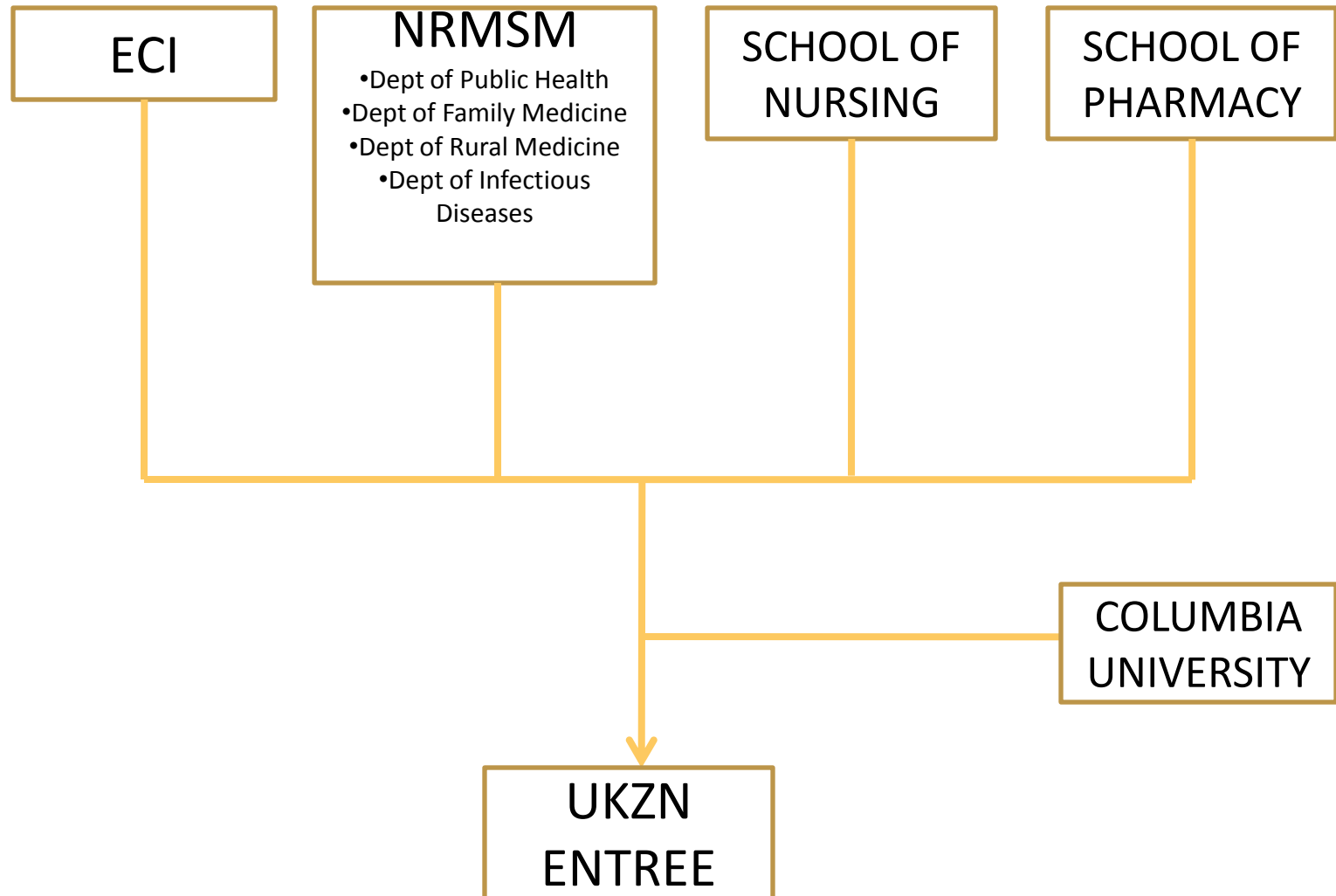
- Accredited ART sites in SA public sector
- Doctors should be automatically competent in ART upon graduation
- Avoid making HIV an elitist disease
- Promotes task-shifting

# Healthcare workforce

- Estimated shortage of 140 000 health care workers by 2020
- Lack of specific expertise in HIV care
- Failure to retain workforce in public sector
- Failure to attract and retain workforce in rural areas
- Lack of trainers



# UKZN ENTREE PROGRAM



# UKZN ENTREE MISSION STATEMENT

- The UKZN ENTREE program aims to increase the quantity, quality and retention of graduates with specific skills addressing the health needs of the South African population.
- ENTRÉE is based on the idea of Transformative Medical Education which is premised on the understanding that a nation's HCWs, their education, the health system, and the health of the population are interrelated.
- ENTRÉE supports the MEPI objectives of:
  - Increasing the numbers of HCWs trained
  - Retaining HCWs over time and in areas where they are most needed
  - Supporting regionally relevant research.

# MEPI MISSION STATEMENT

- ENTRÉE promotes strong links
  - Departments within the University
  - Research organisations within UKZN
  - South African Departments of Health and Education
- To promote
  - collaborative planning
  - retention of graduates |
  - innovations in education and research.
- The success of ENTREE will be

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- The success of ENTREE will be judged on outcomes achieved with an emphasis on its impact on population health

# ENTREE STRATEGY

Enhance quality of clinical and research capacity

Undergraduate students:

Medical  
Pharmacy  
Nursing

Enrichment of  
curriculum in clinical  
HIV and public health

Dual qualification

Support of interns  
and CSO

Faculty

Providing enabling  
research environment

Faculty enrichment

Wellness program

# Drug stock-outs

- A threat to expanded ART rollout
- Risks
  - Resistance
  - ARV failure
  - Death
- Will require an efficient and more effective drug supply system
- Co-operation with
  - International agencies, including bet countries
  - Pharma

	Agency contacted	Risk-of-stock-out episodes*	Stock-out episodes*	Laboratory supply stock-out episodes*	Drugs affected
El Salvador	ISSS and NAP (Ministry of Health)	1	2	2	Didanosine (100 mg), ritonavir (100 mg)
Honduras	NAP (Ministry of Health)	2	2	1	Didanosine (100 mg), didanosine (200 mg)
Nicaragua	NAP (Ministry of Health)	3	2	5	Efavirenz (200 mg), indinavir sulfate (400 mg), tenofovir disoproxil fumarate (300 mg), nevirapine (200 mg), abacavir (300 mg)
Panama	Pharmaceutical services (Ministry of Health)	1	6	3	Zidovudine intravenous (10 mg/mL)
Paraguay	PRONASIDA	1	0	0	Stavudine (30 mg)
Bolivia	NAP (Ministry of Health)	1	1	0	Efavirenz (200 mg), lamivudine (150 mg)+zidovudine (300 mg)+nevirapine (200 mg)
Chile	NAP (Ministry of Health)	5	0	0	Efavirenz (600 mg), abacavir (60 mg)+lamivudine (30 mg), nevirapine (200 mg), nevirapine (50 mg/5 mL), raltegravir (400 mg)

# South African Medical Journal, Vol 99, No 6 (2009)

(ARV-) Free State? The moratorium's threat to patients' adherence and the development of drug-resistant HIV

*Ziad El-Khatib, Marlise Richter*

## Provinces face drug stock outs due to overspending

09.04.2010 Anso Thom and Lungi Langa



**Massive provincial overspends have seen health facilities across South Africa running out of lifesaving drugs for anything from hypertension pills and paediatric vaccinations to tuberculosis and HIV treatment.**

New budgets were expected to kick in on April 1, but the situation is dire at many hospitals and clinics, especially those in rural areas. Health-e has received stock-out reports from doctors, nurses and pharmacists in all provinces except the [Northern Cape](#) and NorthWest (although this does not mean there are no shortages).

There was only one report of a looming stock out in the Western Cape when details surfaced of a pending shortage of dialysis tubes and filters at Groote Schuur Hospital's kidney dialysis unit.

Inadequate pre-antiretroviral care, stock-out of antiretroviral drugs and stigma: Policy challenges/bottlenecks to the new WHO recommendations for earlier initiation of antiretroviral therapy (CD < 350 cells/ $\mu$ L) in eastern Uganda

- [Lubega Muhamadi](#)
- [Xavier Nsabagasani](#)
- [Mbona Nazarius Tumwesigye](#)
- [Fred Wabwire-Mangen](#)
- [Anna-Mia Ekström](#)
- [Stefan Peterson](#)
- [George Pariyo](#)

[published online 08 July 2010.](#)



# Common causes for non-adherence

- Side-effects
- Lack of food
- Long distances to clinics
- Long wait in clinics
- Forgetting
- Stigma

# Improving adherence

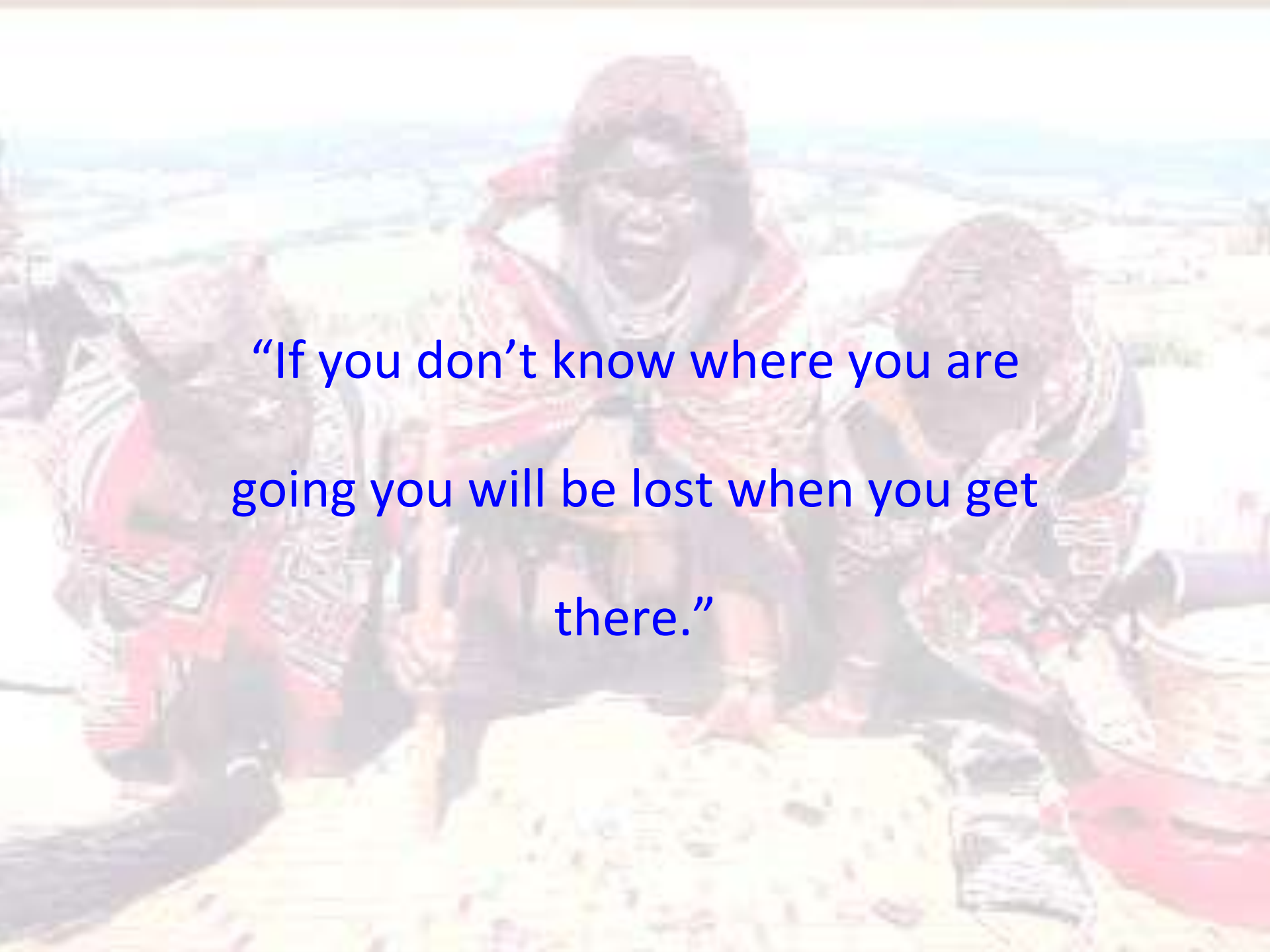
- Continuous counselling
- Task-shifting
- Community support
- Technology
- Social assistance

# Economic costs

- Increased cost of expanding ART access
  - Cost of drugs, esp 2<sup>nd</sup> and 3<sup>rd</sup> line Rx
  - Increased lab facilities
  - Increased clinic facilities

# Patients on ART

- Massive burden of subjects on ART
- Re-tool health care system to gear up to deal with drug side effects
- Increased burden of non-communicable diseases



“If you don’t know where you are  
going you will be lost when you get  
there.”