



# ART ADHERENCE CLUBS AND COMMUNITY MODELS OF CARE

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# ART roll-out: successes

- 7 million on ART; 2/3 in SSA
- Outcomes equivalent to rich settings
- Normalisation of life expectancy
- ART reduces transmission

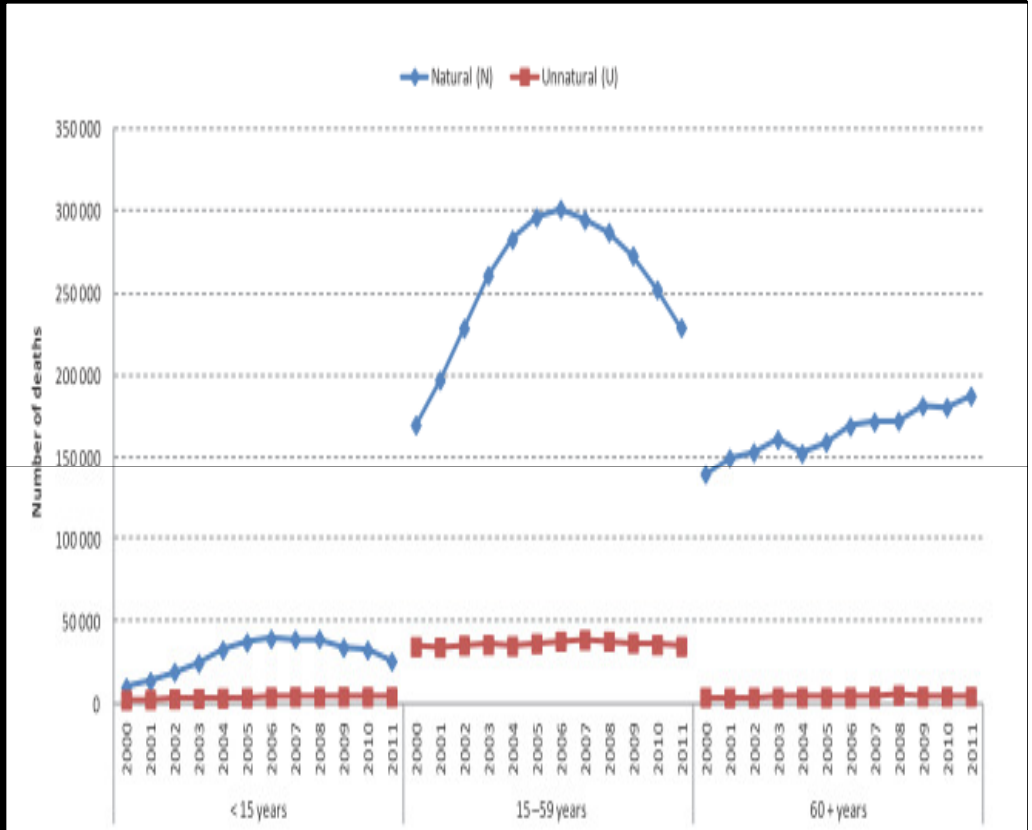

Figure 2: Trend in the number of natural (N) and unnatural (U) deaths by broad age group, RMS 2000–2011


Braitstein P et al. Lancet 2006.
Keiser O et al. PLoS Med 2008.
Mills EJ et al. Annals of Internal Medicine 2011.
Cohen MS et al. New England Journal of Medicine 2011.


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# ART roll-out: constraints

- Access: 8 million in need of ART
- *"Scaling up without messing up"*:
  - Retention in care: pre-ART and on ART
  - Adherence and treatment failure
- Human resources for health crisis
- <50% living with HIV know their status
- Stigma

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# ART eligibility: 5 policy scenarios

**Estimated millions of people eligible for ART in LMIC in 2011**

11 | 15 | 23 | 25 | 32

| CD4 ≤ 200 | CD4 ≤ 350 | CD4 ≤ 350 + TasP | CD4 ≤ 500 | All HIV+ |
|---|---|---|---|---|
| Recommended Since 2003 | Recommended since 2010 | Incremental approach 2012 | Ongoing systematic review of evidence (GRADE review) | "Test and treat" |

**ART regardless of CD4 count for:**
- Serodiscordant couples
- Pregnant women
- Key populations (SW, IDU, MSM)

WHO, 2012

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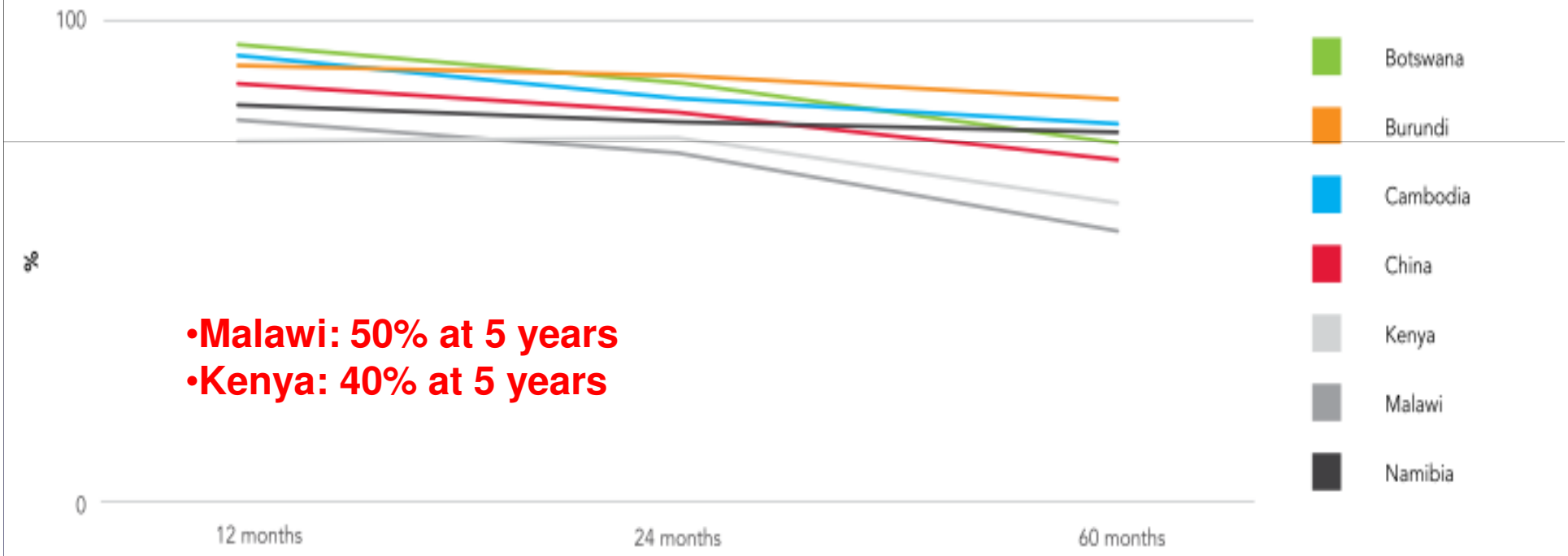
# Retention in care

Retention rate for antiretroviral therapy at 12, 24 and 60 months in selected countries, 2012 country reports




- **Malawi: 50% at 5 years**
- **Kenya: 40% at 5 years**

UNAIDS 2012.

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# Challenges to Retention in Care in Resource Limited Settings

- Transportation costs (Yu BWHO 2007; Amuron BMCID)
- Opportunity costs (i.e. work and child care responsibilities)
  - (Geng JAIDS 2011, Krebs AIDS Care 2008)
- Stigma and disclosure
  - (Rosen & McGuire 2008; Dalal JAIDS 2009)
- Stock-outs
  - (Pasquet PLoS One 2010)
- Side effects
  - (McGuire TMIH 2008)
- Alternative medical beliefs / religion
  - (Yu BWHO 2007; Deribe TMIH 2008)
- Quality of services; feeling well; imprisoned; hunger

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# Community models of care: underlying principles

- Access & retention are improved by:
  - Decentralisation to the lowest level of care
  - Beyond NiMART: Task-shifting to PLWHA / peer educators / CHW
- Adherence is improved by:
  - Decreasing burden on patient (time, cost, pills)
  - Increasing user-friendliness of care
  - Peer support (Ware NC. PLoS Med 2009; Rueda. Cochrane 2006)
- Separation of drug-delivery and clinical care

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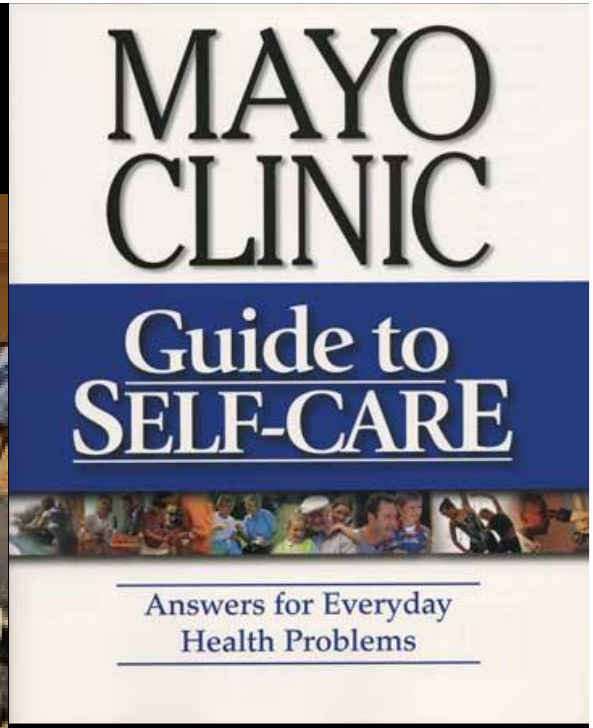
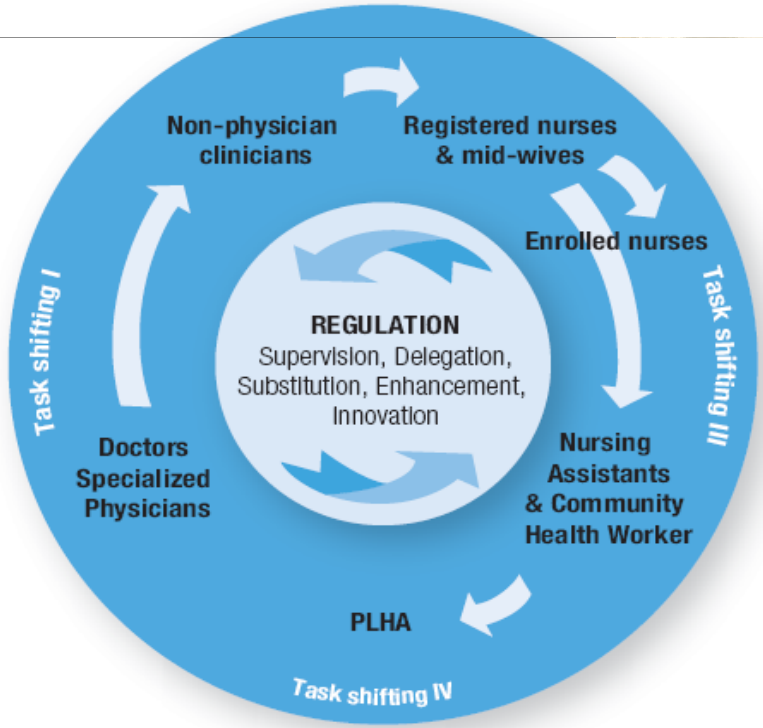
# Community-based self care: a new concept?




Task shifting: expanding the pool of human resources for health




## Africans advocate antiretroviral strategy similar to DOTS

AIDS experts suggest community health workers should help in the delivery of antiretroviral drugs

*Charles Wendo reporting*

**"The community-based approach is the answer . . . We will never have enough professionals to look after our people"**

Wendo. Lancet 2003.

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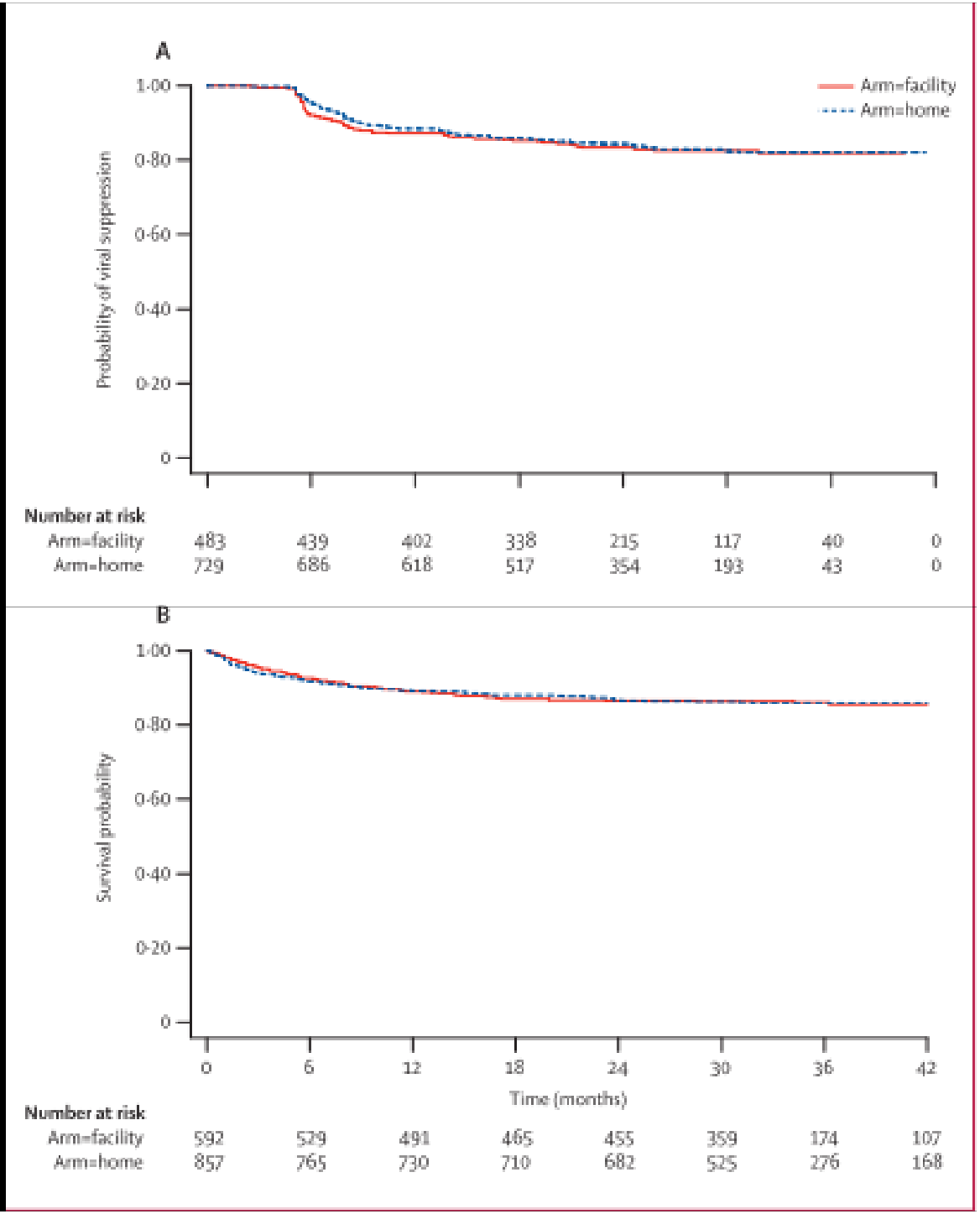
# Home-based ART

- HBC as effective as facility-based care
- Improved access to remote areas with poor infrastructure




Jaffar et al. Lancet 2009.

# MSF Community Models of Care pilots in Southern Africa

# Key functions of community models

1. Drug supply
2. Clinical screening
3. Adherence support and defaulter tracing
4. Monitoring
5. Building social fabric: autonomy and social support

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# Preliminary steps at clinic level

- Decentralise ART initiation to every available health facility and avoid down referral model.
- Task shifting -> Nimart
- TDF FDC available and minimal lab monitoring schedule
- Space clinical appointments for stable patients (2, 3 monthly)
- Separate from pill refills needs from clinical care

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# Spacing clinical visits every 6 months for stable patients, Chiradzulu, Malawi

- Chiradzulu district: 26,330 patients on ART
- Stable adults (> 95% adherence, CD4 >300, >12 m. on ART
- Clinical visit 6-monthly; ART refill 3-monthly
- Retention in care at 12 months: 97%

| | |
|---|---|
| Recruited patients | 2486 |
| Female (%) | 1715 (69) |
| Median time on ART prior to enrollment in months (IQR) | 27.2 (17.2-44.2) |
| Median CD4 at SMA enrollment (IQR) | 534 (420-692) |
| Median follow up (months) in SMA (IQR) | 14.7 (8.3-18.7) |

*McGuire et al MOPE 436 , IAS Rome 2011*

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DIRECÇÃO PROVINCIAL DE SAÚDE TETE

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## Community ART groups:
### Distribution of antiretroviral therapy through self-forming groups, in Tete Province, Mozambique

Tom Decroo1, Barbara Telfer1, Jacob Maïkéré1, Sergio Dezembro1, Carla das Dores Pereira Mosse2, Nathan Ford3 and Marc Biot1

1 Médecins sans Frontières, Mozambique.
2 Provincial Health Department, Tete, Mozambique
3 South African Medical Unit, Médecins Sans Frontières, Johannesburg, South Africa

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# Tete, Mozambique
# Community ART Groups (CAGs)

**Groups of 6**

- *>15 years,*
- *6 months on 1st line*
- *CD4 >200*
- *no stage 3 or 4*

**Separation of refill & care**

- *Monthly drug refill*
- *6 monthly clinical review and CD4*

***3530 patients in 788 CAGS (= 50% of cohort)***

***97.6% retained at 12 months***

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# Meeting point: clinic, health post or community pick up points?

- Thyolo, Malawi, Health Posts:
  - Tasks: HTC, staging, ARV refill, support
  - Staff: outreach nurse + local CHW (2 HSA's ) + expert patients (2PSA's)
- Roma, Lesotho, Health Posts:
  - Similar task + PMTCT
  - Monthly outreach from clinic
- Eshowe, KZN, South Africa
  - No Health posts -> mobile meeting points

**Primary care health centre**

**Health post or community pick-up point**

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# Eligibility criteria

| Criteria | Malawi Thyolo | Malawi Chiradzulu | Mozambique | South Africa | DRC |
|---|---|---|---|---|---|
| Voluntary participation | Yes | Yes | Yes | Yes | Yes |
| Adults only | Yes | Yes | No | No | Yes |
| Duration on ART: 6 months | 6 m | 12 m | 6 m | 18 m | 12m |
| Eligibility CD4 | Y (>300) | Y ( >300) | Yes | Yes | No |
| Eligibility clinical criteria | -- | No active OI | WHO Stage I/II | -- | -- |
| Eligibility Adherence check | Yes | -- | -- | Yes | -- |
| Not pregnant | -- | Yes | Can be pregnant | -- | Yes |

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# Management criteria and outcomes community ART groups

| Location | Model of community ART care | Start date | Nbr patients | ART provider | Frequency of ART dispensing | Frequency of clinic visits | Cumulative Retention* |
|---|---|---|---|---|---|---|---|
| Mozambique, Tete | Community ART groups | 2008 | 4410 900 CAGS | Expert patient | 1 monthly | 6 monthly | 97% after average FU time of 16 months |
| Malawi, Thyolo | Community health posts | 2009 | 925 | CHW ( HSA) | 3 monthly | 3 monthly | 98% at15 months |
| Malawi, Chiradzulu | Community ART refills | 2008 | 3343 | CHW | 3 monthly | 6 monthly | 97% at 1 yr 93% at 2 years* |
| Malawi, Chiradzulu | Community ART refills | 2008 | 4,000 | CHW ( HSA) | 3 monthly | 6 monthly | 97% at 2 years |
| South Africa, Khayelitsha | Adherence clubs | 2007 | 3000 110 clubs | CHW | 2 monthly | 6 monthly | 97.5 % at 1y 97.5 % at2 y |
| Kinshasa, DRC | Community ART points | 2010 | -- | Expert patient | -- | -- | -- |

# Adherence Clubs, Khayelitsha, South Africa
# Towards patient/group self management

- Lay-counsellor managed
- Group self-management: treatment literacy, defaulter tracing
- From facility to community to home
- **Club participants were:**
  - **57% more likely to remain in care (HR: 0.43, 95% CI 0.21-0.91)**
  - **67% less likely to experience virologic rebound (HR: 0.33, 95% CI 0.16-0.67)**

*Luque-Fernandez M. CROI 2012.*

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# Adherence Club roll out in Khayelitsha


| Clinics with ART clubs | RIC | Club Target | No. of clubs | Club Enrolment End Aug 2012 | Club RIC End Aug 2012 | % of RIC |
|---|---|---|---|---|---|---|
| 9 | 23220 | 5430 | 180 | 5195 | 4505 | 19% |

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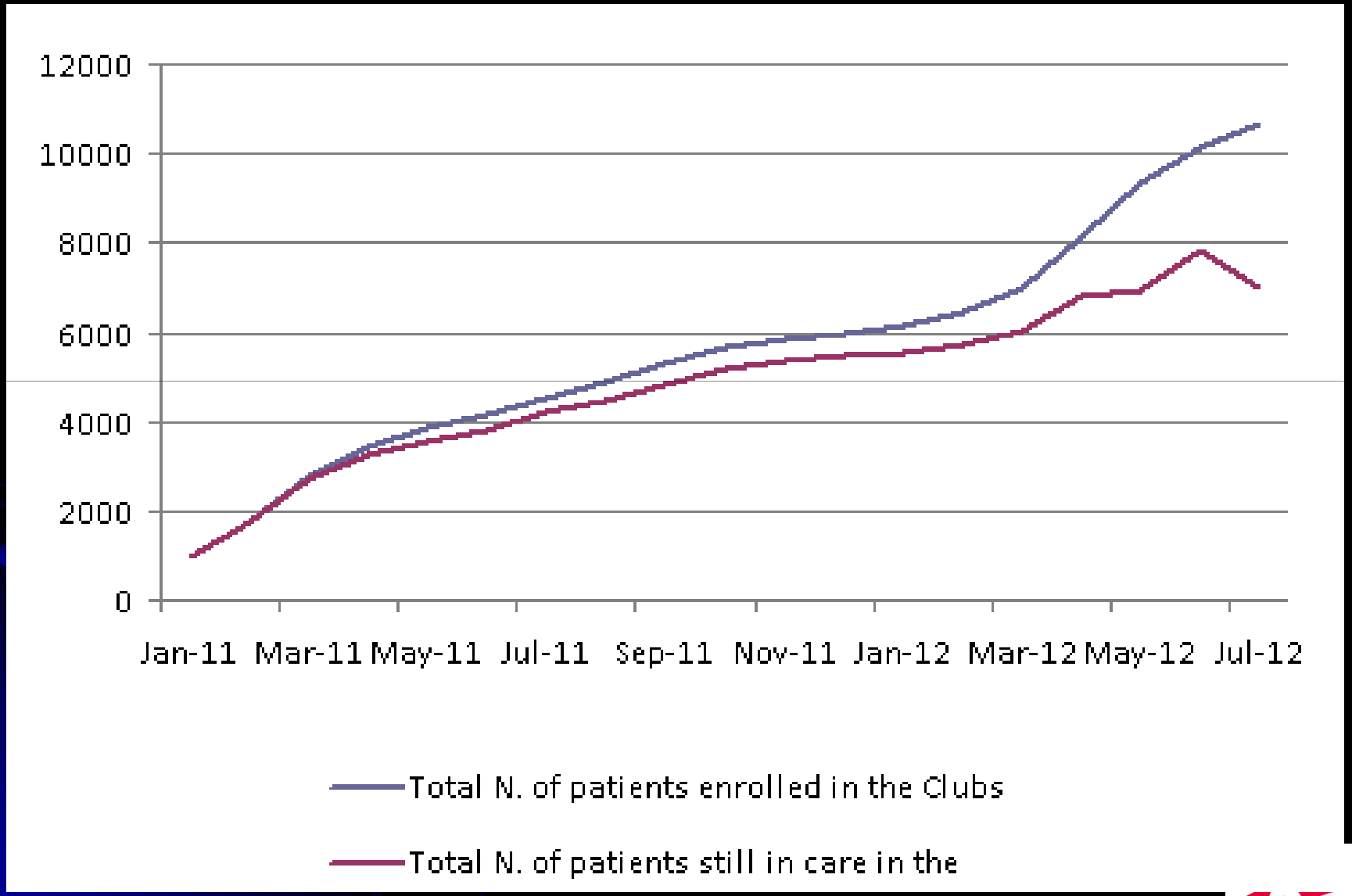
# From Pilot to implementation
# Club roll out in Cape Metro

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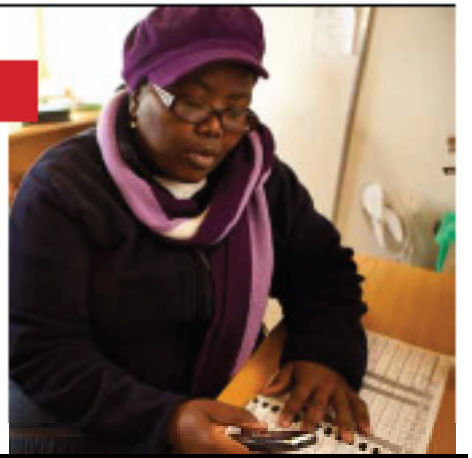
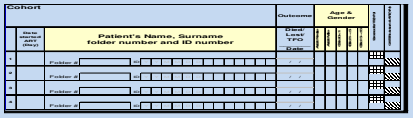
# Simplified M&E and accountability

**MOBILE M&E STRATEGY**

MSF is piloting use of a mobile application to capture basic club data previously completed in paper registers. Provided feasible and accurate, this may provide the solution for monitoring community ART clubs.



| Tier-1 | Tier-2 | Tier-3 |
|---|---|---|
| Paper registers | Electronic register | Networked EMR |

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# Which model is most adapted to main problems of adherence am facing in my specific environment ?

- Clinic overload
- Distances and natural barriers (urban<> rural)
- Stigma and disclosure
- Social fabric
- HR constraints
- Regulatory issues (feasibility of task-shifting ?)
- Legal barriers

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# High level of pre-ART LTFU amongst adolescent in Zimbabwe and Khayelitsha

| | eligible | initiated | % |
|---|---|---|---|
| Q2 2010 | 64 | 34 | 53.1 |
| Q3 2010 | 67 | 34 | 50.7 |
| Q4 2010 | 55 | 29 | 52.7 |
| Q1 2011 | 65 | 38 | 58.5 |

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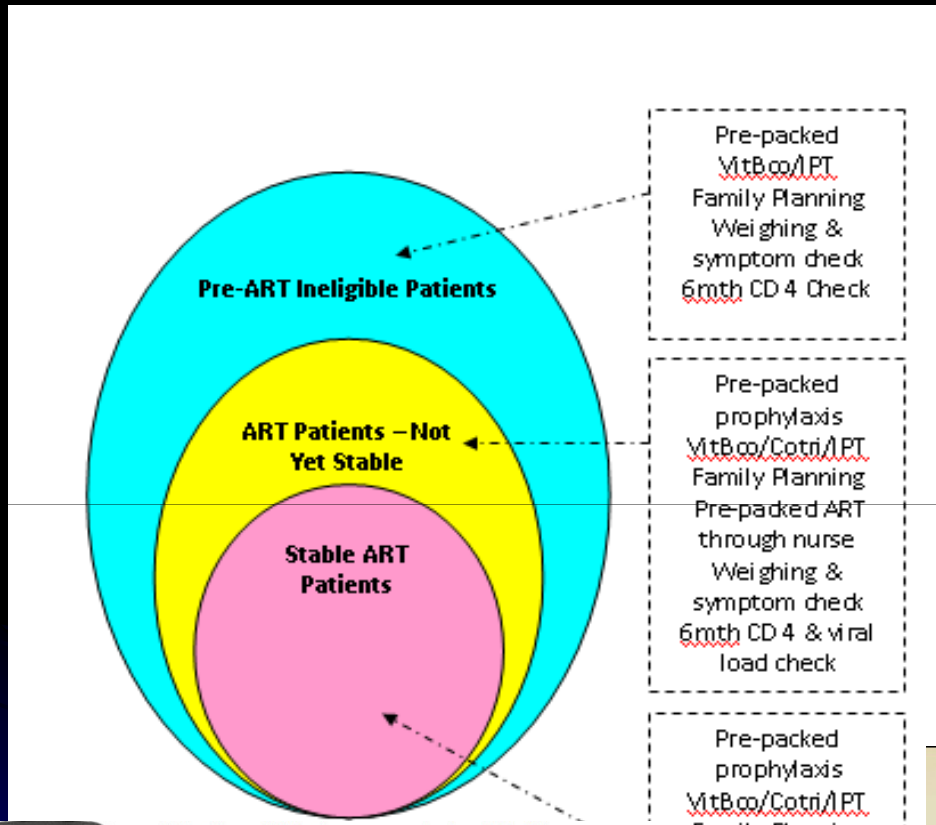
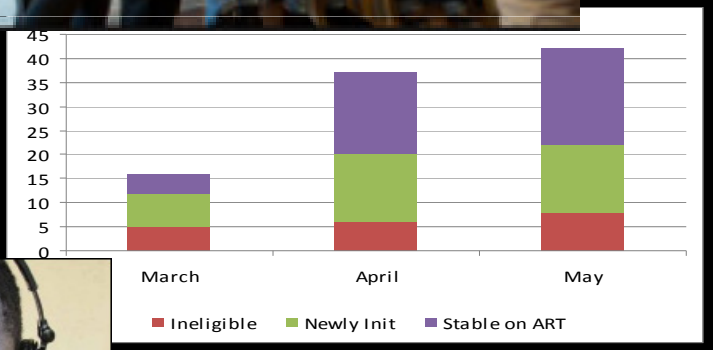
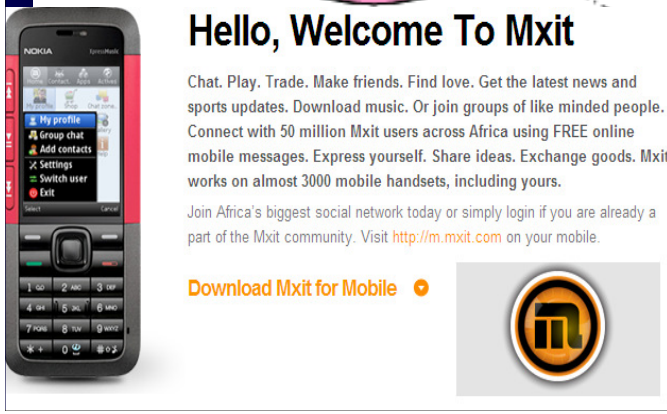
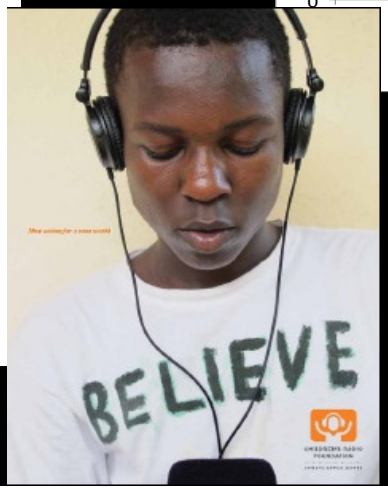
# Youths clubs, Khayelitsha, South Africa




CHILDREN'S RADIO FOUNDATION

# Pre-ART community groups improve pre-ART retention in care.


Boyles. 2011 PLoS ONE

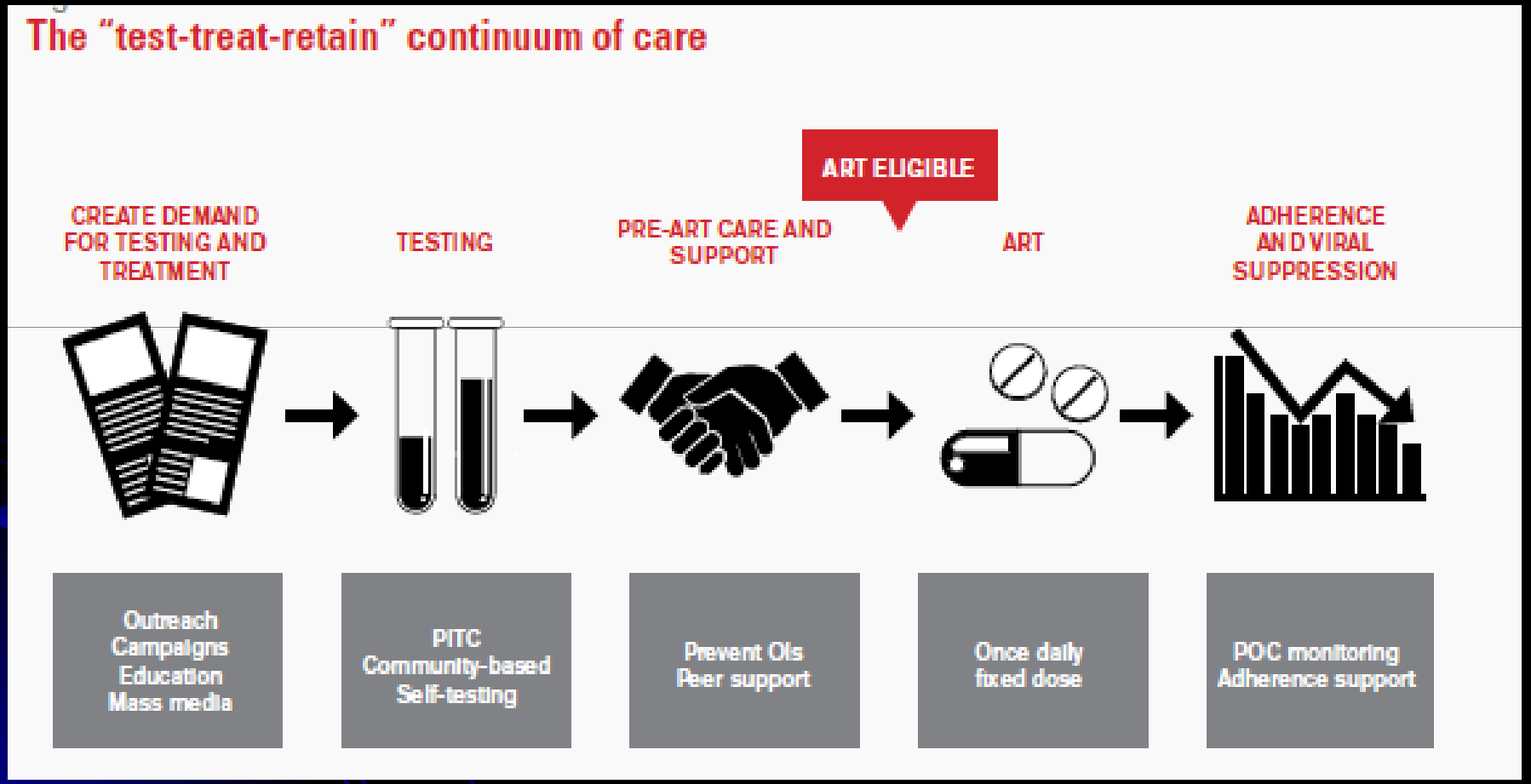


Baseline retention on pre-ART in SA (CD4 monitoring within 12 months) :

31-45% 2011 (Lessells et al, 2011)

| ART ineligible enrolled | 1828 |
|---|---|
| Recorded CD4/visit within 8m prior to end of study/starting ART | **8m** |
| Active in care % | 61.9 |
| Requested transfer out % | 4 |
| Deceased % | 10.28 |
| LTFU % | 23.85 |

# Community models of care and the cascade

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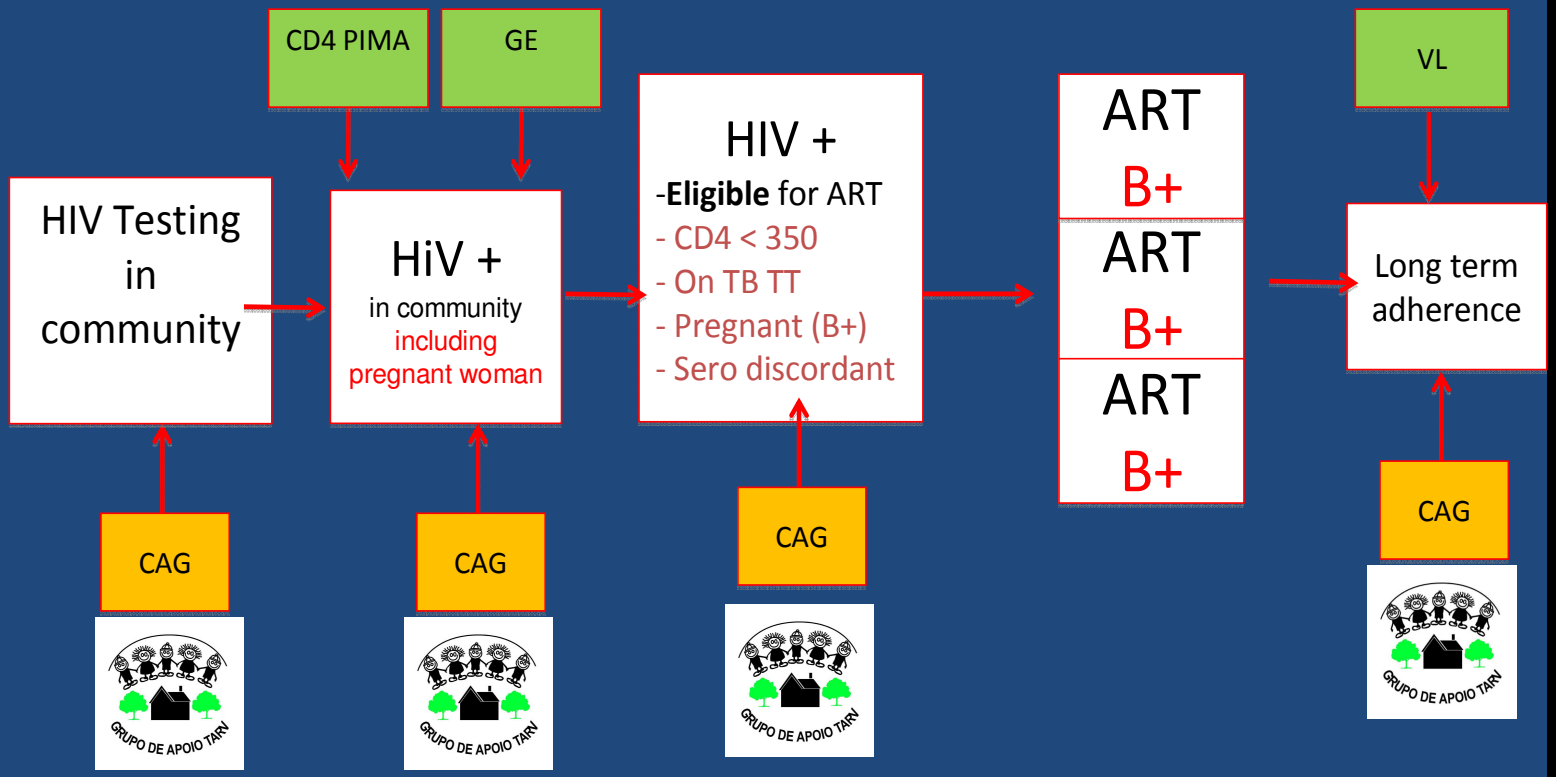
# The Future?

## Impact of community dynamic on 'test, treat, retain' cascade




**Social dynamic from the testing**
**-> Pre-ART groups**
**-> Group dynamic from eligibility**
**-> Specific groups for B+ women**

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# Discussion

## Advantages

- Patient perspective :
  - Reduced burden on stable/adherent patients who only need refills
  - Promotes self- management, empowerment
  - development of community networks -> social fabric and potential political activism
- Health services perspective
  - Reduced burden on health facilities
  - Likely more cost effective
  - Further share of responsibility via task shifting

## Challenges

- Patient perspective :
  - Unfair balance of responsibility
  - Quality of medical monitoring
  - HIV trivialization
  - Disclosure <> stigma
- Health services perspective
  - Accountability
  - Excludes patients most at risk of LTFU
  - Stretches further the drug supply chain
  - Requires well functioning and simplified monitoring and supervision

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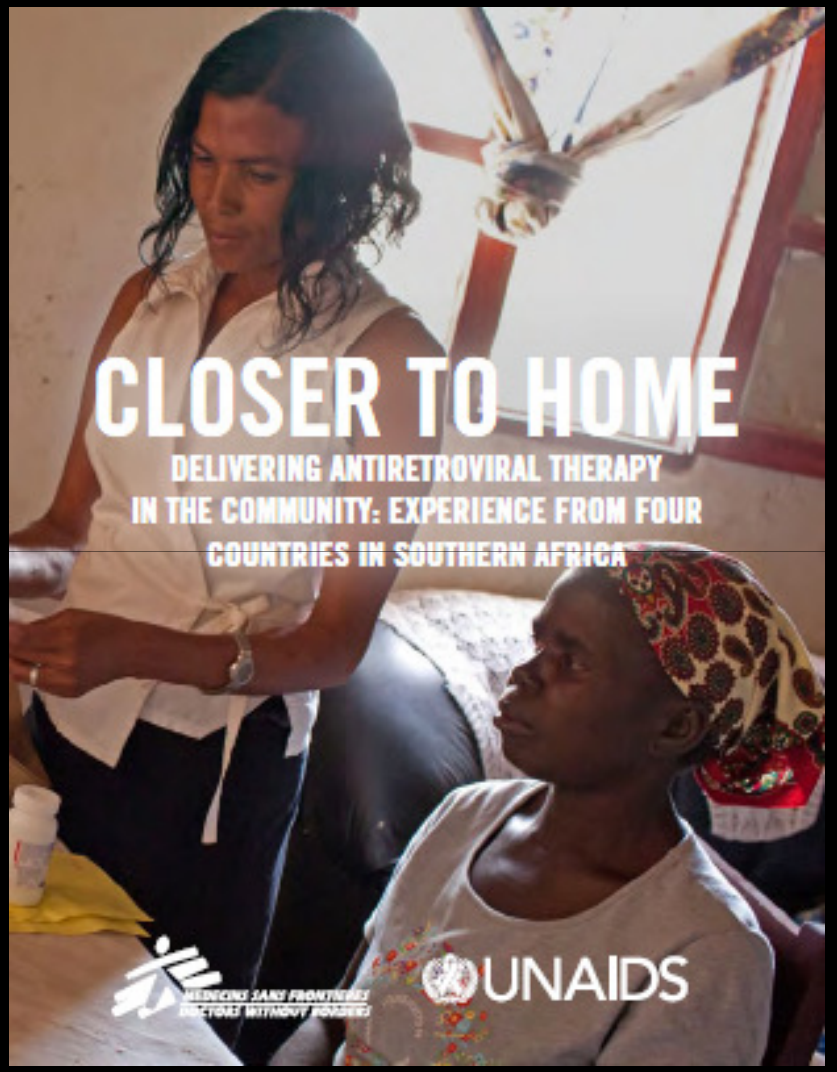
# Acknowledgements


- All PLHAs for their energy in setting up such ART groups/clubs
- DOH and MSF teams in DRC, Malawi, Mozambique & South Africa
- Eric Goemaere, Nathan Ford, Tom Decroo, Lynne Wilkinson, Helen Bygrave, Tom Ellman, Marc Biot


http://www.msfaccess.org/sites/default/files/MSF_assets/HIV_AIDS/Docs/AIDS_report_ClosertoHome_ENG_2012.pdf

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# ART ADHERENCE CLUB TOOLKIT
# **LAUNCH**

Tuesday, 27 November | 12:30 to 13:00 | Room 2.40