

# Universal access and upholding adherence in rural Malawi:

the contribution of task shifting to more effective ART delivery at Health Centres

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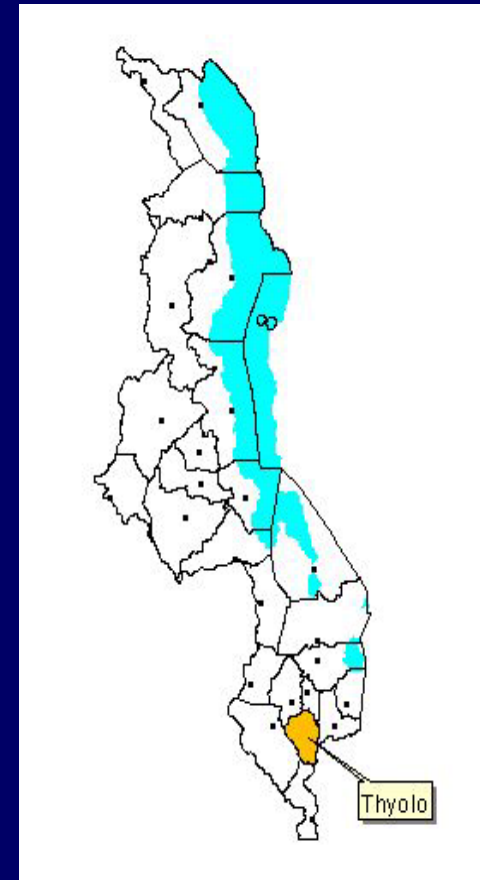
# Background

## Malawi

Population	± 12 m
HIV infected	± 900,000
Needing ART	290,000
Started ART	141,449 <i>Dec 2007</i>

## Thyolo District

Population	± 600,000
HIV infected	± 60,000 (10% )
Needing ART	± 9-12,000
ART	13,702 <i>June 2008</i> “Universal Access”



# HR Shortages in Malawi

- **Vacancies:** Nurses: 55%,  
Doctors: 45% (*MoH, 2007*)
- Main cause of attrition (44%): HIV/AIDS related illness/death  
(*MoH, 2005*)
- Uneven distribution of staff (20% of doctors in rural areas)
- High workload (150-200 consultations/day for MA in Thyolo)

	<b>Malawi</b>	<b>Thyolo District</b>	<b>WHO <i>recommendation</i></b>
Doctors	1.2	1.3 (1.6)	20
Nurses	28	17 (25)	100

*Doctors/nurses p/100,000 population (in brackets, MSF staff added)*

# Thyolo HIV/AIDS project

- National Universal Access goals in Thyolo, but  $\pm 7000$  new patients/yr
- If MD based model used in Thyolo from start of scale-up  $\rightarrow$  need for **9.7 FTE MD**
  - 50 MD graduates per year in Malawi (2007): 20% of these
  - Calculation scale up to 10,000 pts  $\rightarrow$  need 27 nurses (25% graduates 06)

*$\rightarrow$  Less HRH-intensive approach was needed*

- **Problems for programs and patients:**
  - Overcrowded ART clinics
  - Decentralisation to Health Centres: less staff & less qualified
  - High staff turnover

*Task shifting **as part of** overall strategy to continue pace of ART scale up and maintain UA with good outcomes.*

# Approach in Health Centres

Task shifting	Other measures
<p><b><u>VCT</u></b> by lay counsellors (# tests increased from 15,000 in 2003 to nearly 78,338 in 2007)</p>	<p>Increase # of testing sites Opt-out testing strategy</p>
<p><b><u>ART</u></b></p> <ul style="list-style-type: none"><li>•Initiation by Medical Assistant</li><li>•FU by lay counsellors (adherence support + ARV refill)</li><li>•Dispensing to be shifted to pt attendant</li></ul>	<ul style="list-style-type: none"><li>•Decentralisation of ART initiation &amp; FU to health centres</li><li>•Simplify &amp; standardize protocols</li><li>•Reduce # visits for stable pts</li><li>•Reduce steps pre-ART initiation</li><li>•“Track system”</li></ul>

# “Track System”-

*more efficient patient flow by categorizing patients*

**Screening & track allocation  
by HSA**

Opp.infections,  
side effects,  
ART initiation  
& early ART FU

Stable patients:  
counselling  
& drug refills

*Slow track*

*Medical assistant  
(nurse?)*

*Fast track*

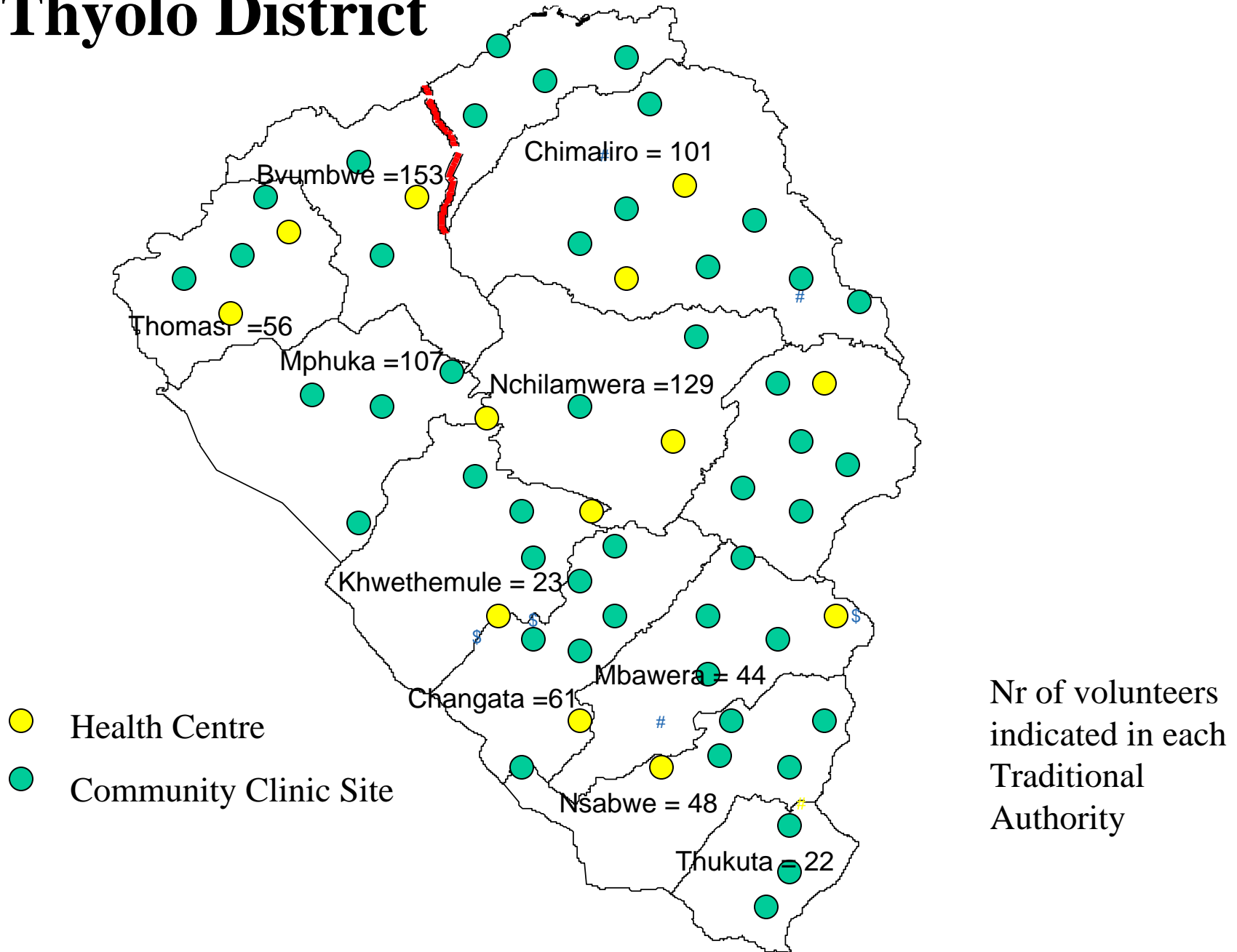
*Lay counsellor  
PLWHA  
HSA*

*Supervision and support  
by Doctor/Clinical officer*

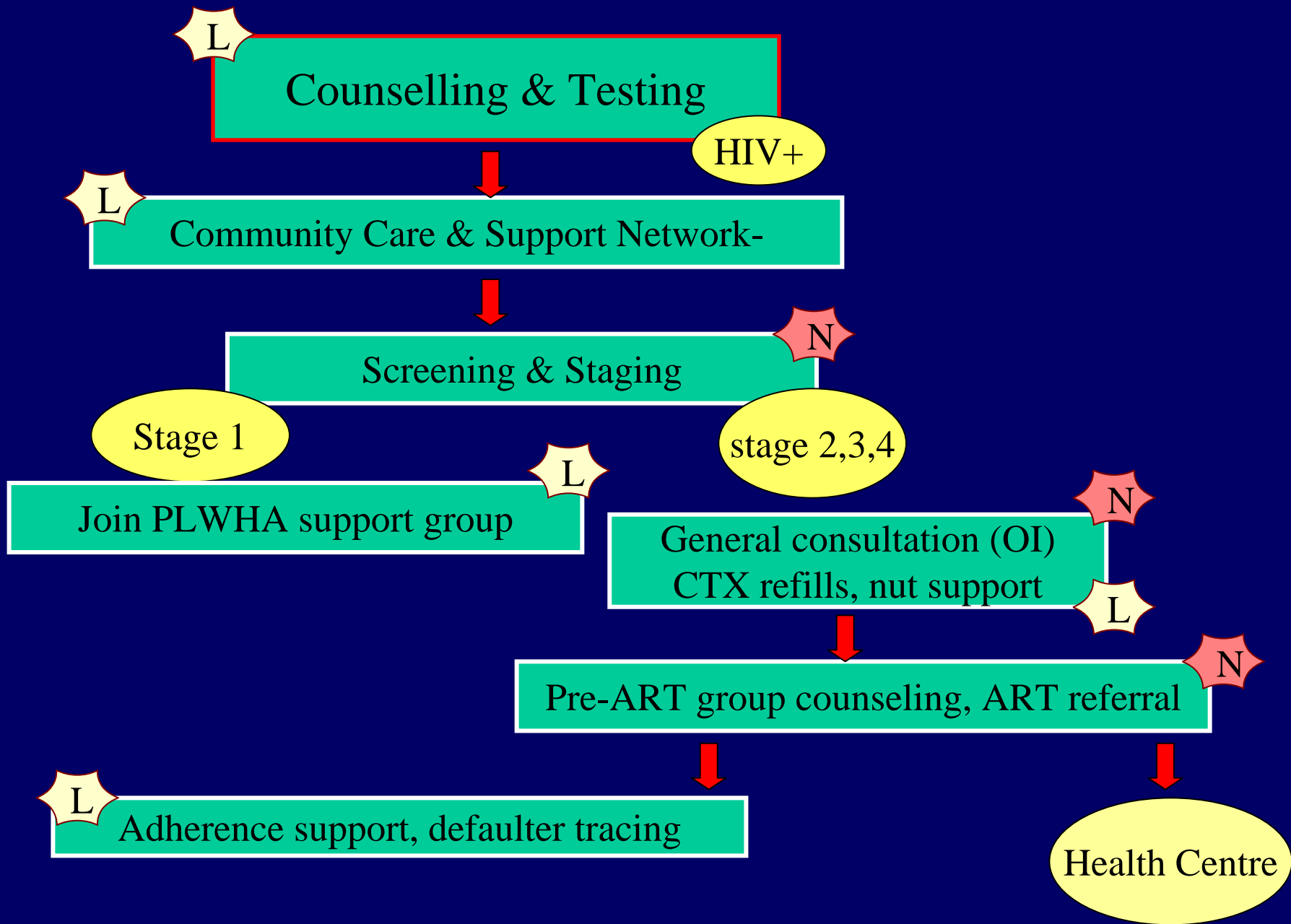
# Approach in Community

Task shifting	Other measures
<b><u>Community nurses:</u></b> Screening/clinical staging, pre-ART group counseling, OI's, CTX, nut care	Reduce # of visits to HCs
<b><u>Volunteers/PLWHA:</u></b> Pre-packing of drugs, registration, pt mobilization, pt referrals	Community empowerment in ART
<b><u>Volunteers/PLWHA/Support Groups</u></b> Defaulter tracing, adherence support	Support long term adherence

# Thyolo District



# Patient Flow in Community Care Programme



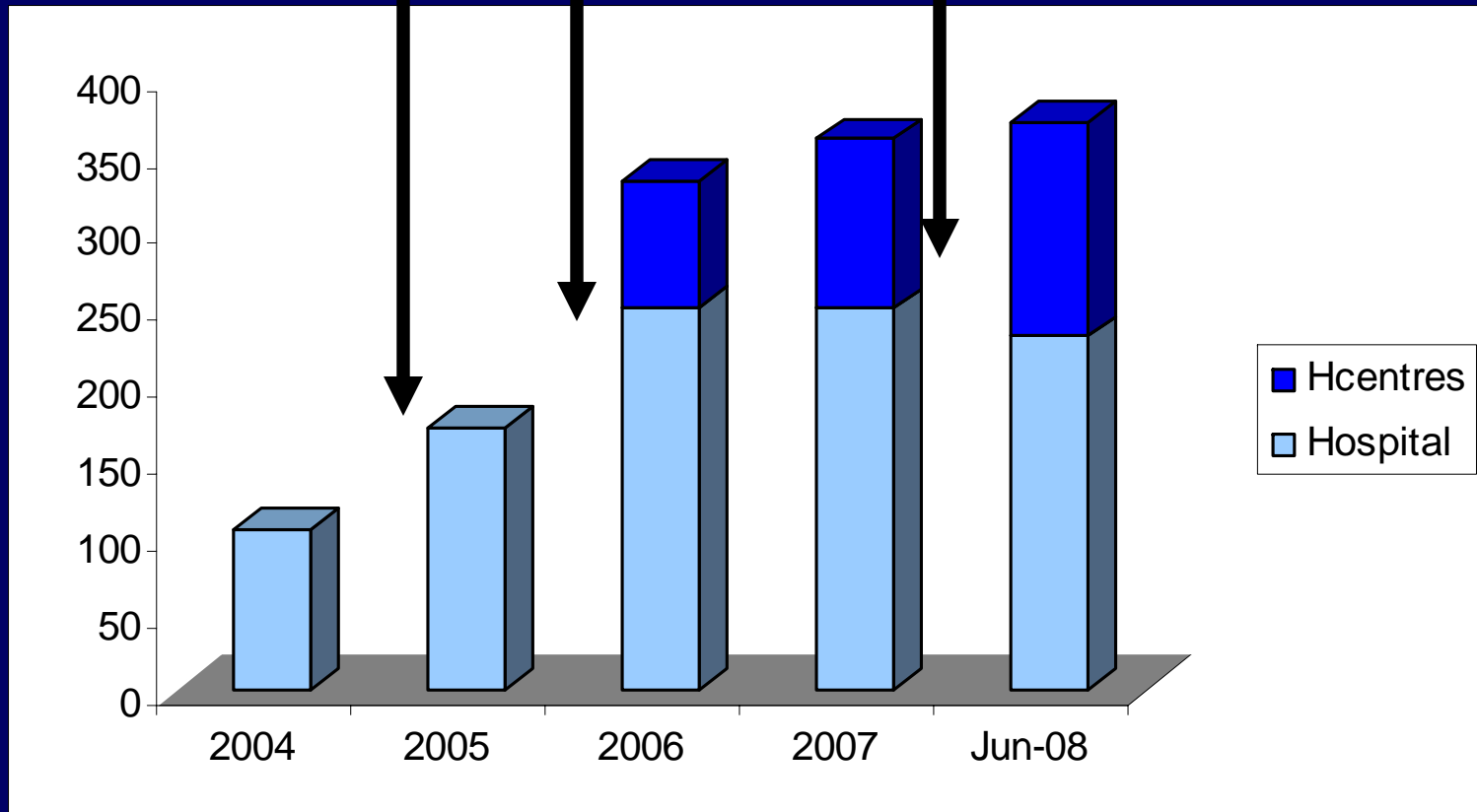
# RESULTS Clinical care:

## ART: New inclusions/Month (2 hospitals, HCs)

“Partial” task shifting  
to medical assistants

Task shifting to medical assistants, nurses & PLWA’s in HCs

7 health centres ++



# Thyolo District

*Overall 13,702 ever started on ART, of which 10,360 (77%) retained on treatment*

## Comparative analysis hospital / health centers

	<b>Hospital</b> <i>(June 06-June 07)</i>	<b>Health Centre</b> <i>(June 06-June 07)</i>	<b>P-value</b>
<b>Ever started on ART</b>	2,904	1,170	
<b>Retained</b>	2,463 <b>(84.9%)</b>	999 <b>(85.4%)</b>	<0.001
<i>Alive &amp; Active</i>	82.1%	85%	<0.001
<i>Transferred out</i>	2.7%	0.4%	<0.001
<b>Attrition</b>	439 (15.1%)	171 (14.6%)	0.5
<i>Died</i>	7%	12.8%	<0.001
<i>Defaulted</i>	7.8%	1.5%	< 0.001
<i>Stopped</i>	<0.4%	<0.3	0.6

# ART outcomes (Dec 2004)

	Community care <u>YES</u>	Community care <u>NO</u>	
<b>Placed on ART (n-1634)</b>	<b>895</b>	<b>739</b>	
• <b>Alive &amp; on ART</b>	856 (96%)	560 (76%)	<i>P&lt;0.001</i>
• <b>Died</b>	31 (3.5%)	115 (15.5%)	<i>P&lt;0.001</i>
• <b>Loss to follow up</b>	1 (0.1%)	39 (5.2%)	<i>P&lt;0.001</i>
• <b>Stopped</b>	7 (0.8%)	25 (3.3%)	<i>P&lt;0.001</i>

*Better standardized outcomes among pts on ART receiving community support, than those without*

# Results

## *Increased access and reducing workload for HC/hospital:*

- UA objective achieved in 2007
- Contribution community network:
  - Pts counselled (stage 3,4) & referred for ART initiation: **±250 p/m** (2007)
  - Number of consultations p/month: 1400-2000 (2007)
  - **71%** of pts on ART under community care:  
*Coverage allows enhancing adherence*

## *Human Resources needs*

- with re-organisation/task shifting approach: 7 nurses extra
- **For 1000 patients on ART: 4 FTE** (*in hospital*)
- **Volunteers used p/community clinic day – 5-8**
- **±3 community nurses needed for referrals of 1000 pts to be initiated on ART (per yr) (further task shifting possible).**

# Opportunities

- Feasibility UA for ART in a resource poor, high prevalence country
  - without adding too many HRH
  - without losing quality
- Task shifting within facility and to community to volunteers & HSA:
  - relieved workload from clinic staff,
  - eases access and adherence
- Involvement of motivated PLWHAs /volunteers/ community in HIV/AIDS activities is **key**

# Challenges

- Public health services vs Community burden:
  - Not replacing clinical work but complement and expand it
- Next step: nurses initiating ART- but what about overload nurses?
- Who will provide support package & close supervision? (start up & continued)

# Acknowledgements

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