

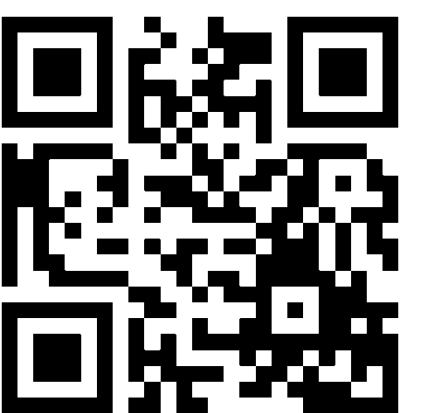


<https://www.lablite.org>

Baseline Pharmacy Assessment of Stock Status of ART Drugs, Non-ART drugs and HIV Test Kits in Lablite Demonstration Sites in Zimbabwe Prior to Decentralization of ART Services

M Muzambi¹, T Mabugu¹, DM Gibb², F Cataldo⁴, J Seely^{6,7}, C Kityo³, A Reid¹, W Tinago¹, A Chan^{4,5}, E Katabira⁸, C Gilks¹⁰, D Ford², J Hakim¹, for Lablite Project Team

¹University of Zimbabwe Clinical Research Centre, Harare, Zimbabwe; ²Medical Research Council Clinical Trials Unit, London, UK; ³Joint Clinical Research Centre, Kampala, Uganda; ⁴Dignitas International, Toronto, Canada; ⁵University of Toronto, Toronto, Canada; ⁶Medical Research Council/Uganda Virus Research Institute, Entebbe, Uganda; ⁷University of East Anglia, UK; ⁸Infectious Diseases Institute, Kampala, Uganda; ⁹Chancellor College, Zomba, Malawi; ¹⁰Imperial College London UK



To subscribe to the Lablite newsletter, scan this QR code

Introduction

- Availability of ART and supporting pharmaceuticals products is critical to roll-out of ART services to lower level health care facilities in Zimbabwe.
- The Lablite project aims to facilitate optimal decentralization of ART services working with Ministries of health in 3 African countries, Malawi, Uganda & Zimbabwe.
- In Zimbabwe, a pharmacy assessment was conducted in 4 health care facilities to ascertain pharmacy & logistical issues on the ground before implementation of decentralization.

Methods

- A descriptive cross-sectional study in four health care facilities within one district selected for the Lablite demonstration project.
- Sample included the District hospital (an ART initiating site), 2 ART follow up sites and 1 ART naive site. We interviewed; pharmacy managers and a pharmacy technician.
- Data on stock levels of ART drugs, basic non-ART drugs, HIV testing kits, paediatric & PMTCT drugs were collected.
- Interviews covered stock-outs, ordering criteria, pharmacy and logistical challenges, training needs of cadres and turnover time of drugs from National Pharmaceutical Stores (NatPharm).

Results

- 4 pharmacy managers – 1 at each facility, 1 pharmacy technician (at district hospital), and 3 nurses (2 from ART follow-up site and 1 from ART naive site) were interviewed between June and July 2013.
- Availability of 12 ART drugs and 6 regimens was assessed.
- One paediatric Combivir (3TC/ZDV) stock out reported in last 3 months at ART follow-up site.
- No reported stock out of PMTCT drugs, non-ART drugs and HIV-testing kits.

Table 1: ART Drugs assessed for stock out at health care facilities

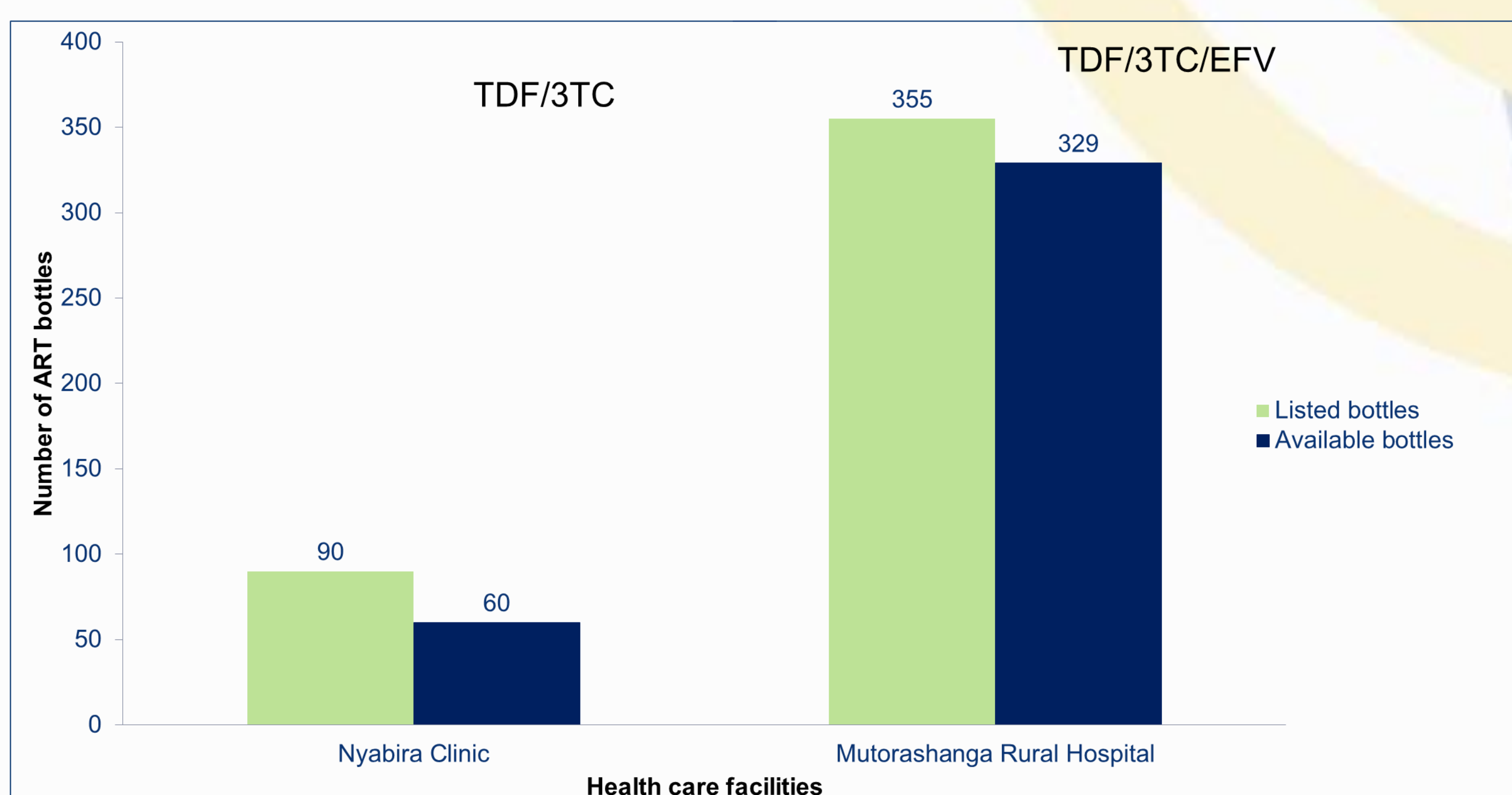
Drug name	Basket	Availability of drugs at health facility		
		Nyabira	Mutorashanga	*Zowa (ART Naive site)
Abacavir	✓.	✓.	✓.	-
Coviro	✓.	✓.	✓.	-
Didanosine	✓.	✓.	✓.	-
Tenofovir	✓.	✓.	✓.	-
Stalanev	✓.	✓.	✓.	-
Zidolom/Combivir	✓.	X	✓.	-
Zidovudine	✓.	✓.	✓.	✓.
Efavirenz	✓.	✓.	✓.	-
Nevirapine	✓.	✓.	✓.	✓.
Aluvia	✓.	✓.	✓.	-
Atazanavir	✓.	✓.	✓.	-

Drug Inventory Storage

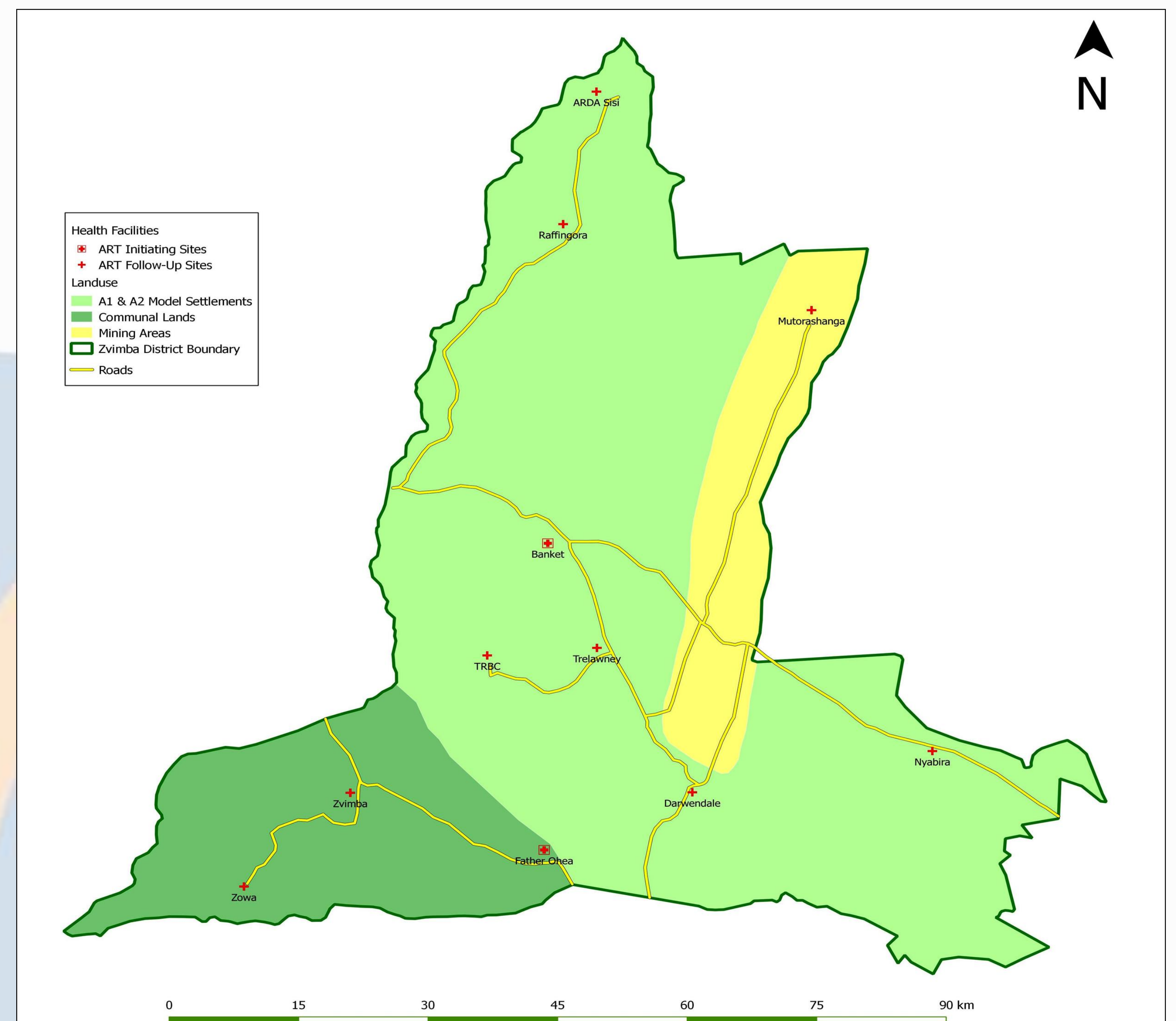
- 2 ART follow-up sites facilities had discrepancies between listed boxes and available ART boxes.
- 3/4 facilities reported insufficient storage space.
- Drug inventory management systems were available but not computerized and not consistent in all the 4 facilities visited.
- District Hospital did not have buffer stocks for any ART drugs.



Figure 1: Discrepancies in ART Drug Bottles



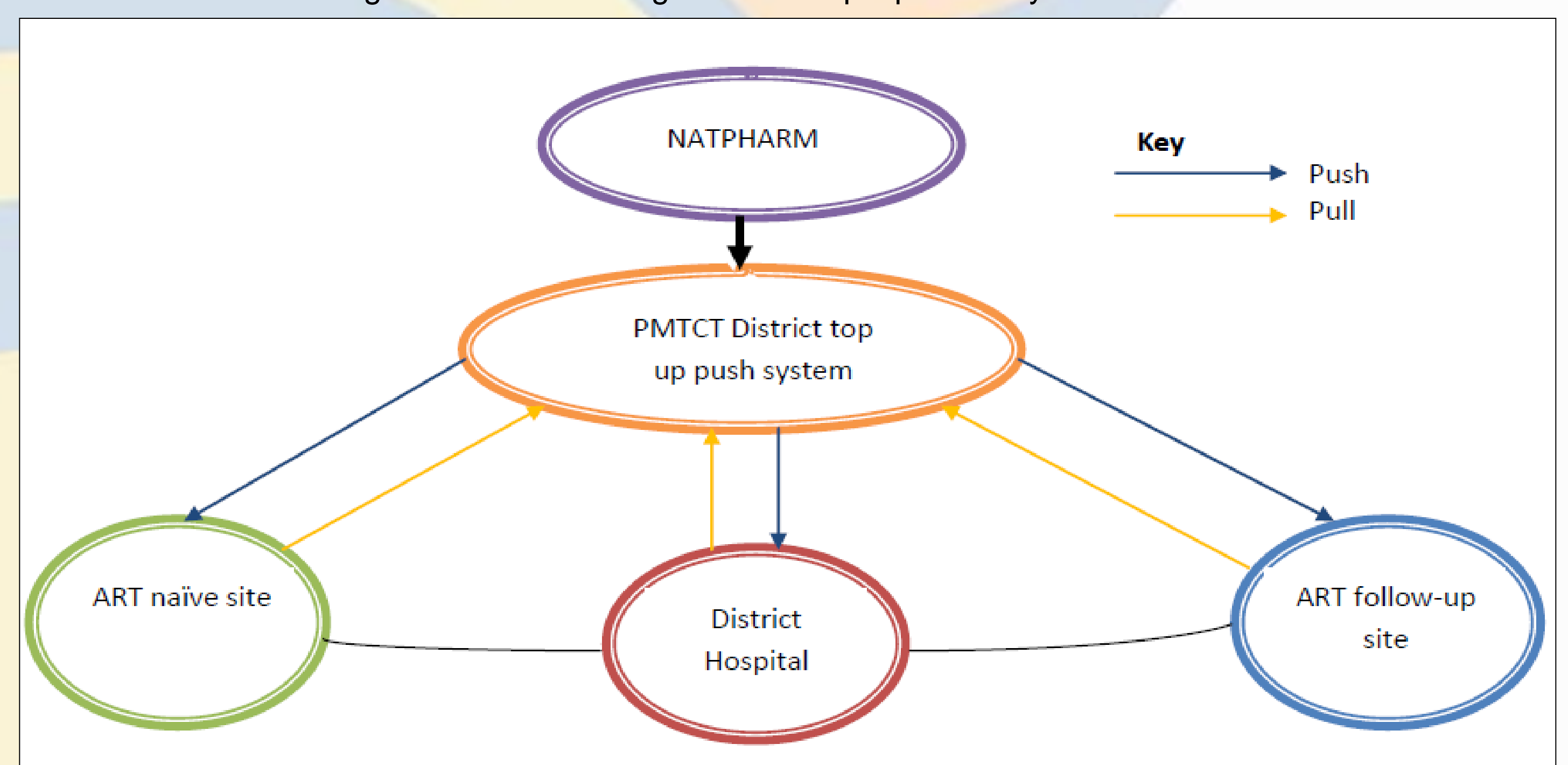
Lablite demonstration Sites in Zimbabwe



Drug Supply logistics

- ART drugs are ordered bi-monthly per consumption with a two and half months surplus.
- In these facilities, turnover of drugs from NatPharm ranged from 7 days to 3 months.
- When required, emergency ART supplies could be requested from the District hospital by follow-up sites and by District hospital from NatPharm and were usually delivered within two weeks.
- However lead-time for drug delivery during emergency varied, sometimes taking a long time from district hospital to follow up sites. E.G. as a result of transfer-in or decentralised patients on ART combinations not stocked by district (atazanavir was unavailable for a transferred patient).
- PMTCT drugs were being received via a 2 way system of push and pull directly to the health care facilities.

Figure 2: PMTCT Drugs District Top Up Push System



Staff Training

- All pharmacy managers interviewed had undergone training in pharmacy and logistics.
- 3/4 facilities, excluding the district hospital reported the need for additional training to cover off duty managers and sickness.

Conclusions

- NatPharm drugs supply to the 4 facilities was highly commendable.
- District top-up push system currently used to deliver PMTCT drugs to facilities from NatPharm were efficient and all facilities had adequate drug stocks of these drugs.

Recommendations

- Need for quality control checks of records and actual stock levels to avoid emergency orders. This will become more important as full decentralization of ART services & rollout of Option B+ for PMTCT increases.
- District Hospital needs buffer stocks to accommodate new enrolments on ART.
- Training of cadres in pharmacy & logistics is critical in order to ensure the smooth transition of drugs from Natpharm to the patients.

Acknowledgements

We thank the Ministry of Health and Child Care and Health Care Workers for their contribution to the study.