

Extending Prescribing Beyond Doctors in Uganda Opportunities and Challenges

Dr. Andrew D Kambugu, FRCP (UK)
Infectious Diseases Institute,
Makerere University



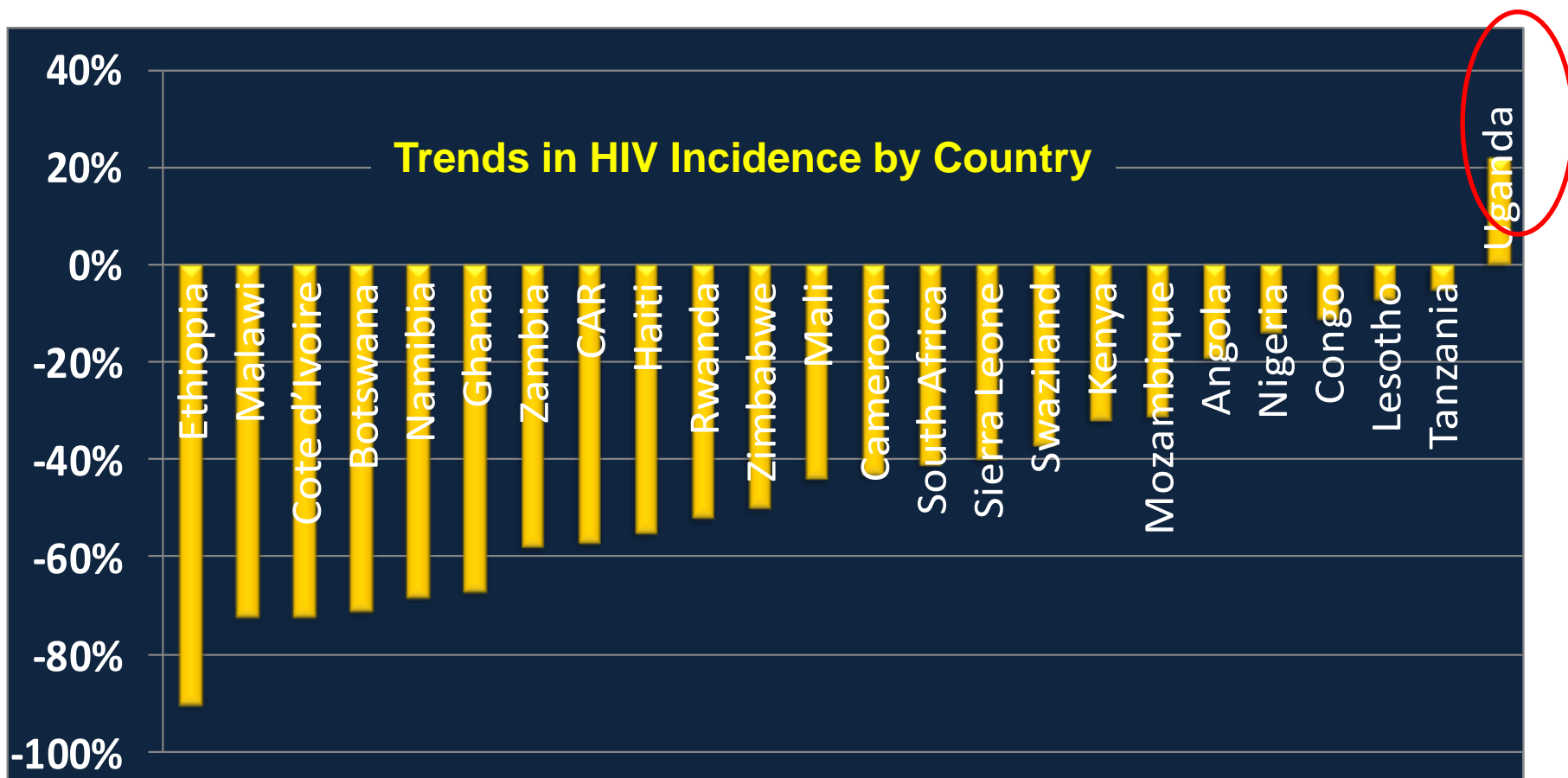
SA HIV Clinicians Society Conference 2014 Cape Town SA



Anatomy of the Talk

- **Challenges:**
 - Huge Demand for HIV care and Treatment
 - Training Demands Generated by changing guidelines/practices
 - Lack of Supportive Policies
- **Opportunities:**
 - Limited Doctors Numbers
 - Change in ART Treatment guidelines for Earlier Initiation
 - Increase in higher level training for nurses and allied health care worker
- **Current Efforts :**
 - Generating evidence: The SHARE Project
 - IT Tools to Support prescribing: The ICEA Experience at IDI

The HIV/AIDS Epidemic In Uganda Requires a More Vigorous Response



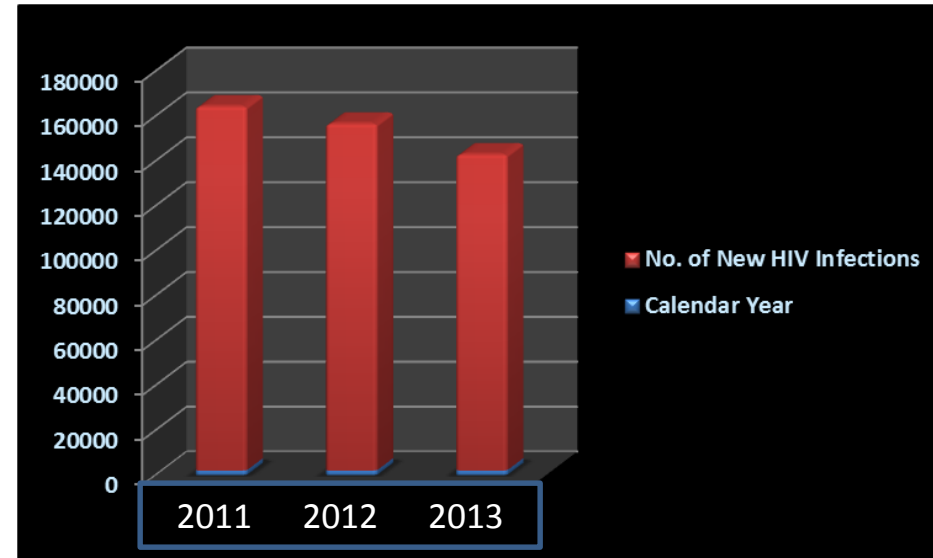
Data source: UNAIDS Global Report 2012

New Infections Still High

Over 130K new infections in 2013

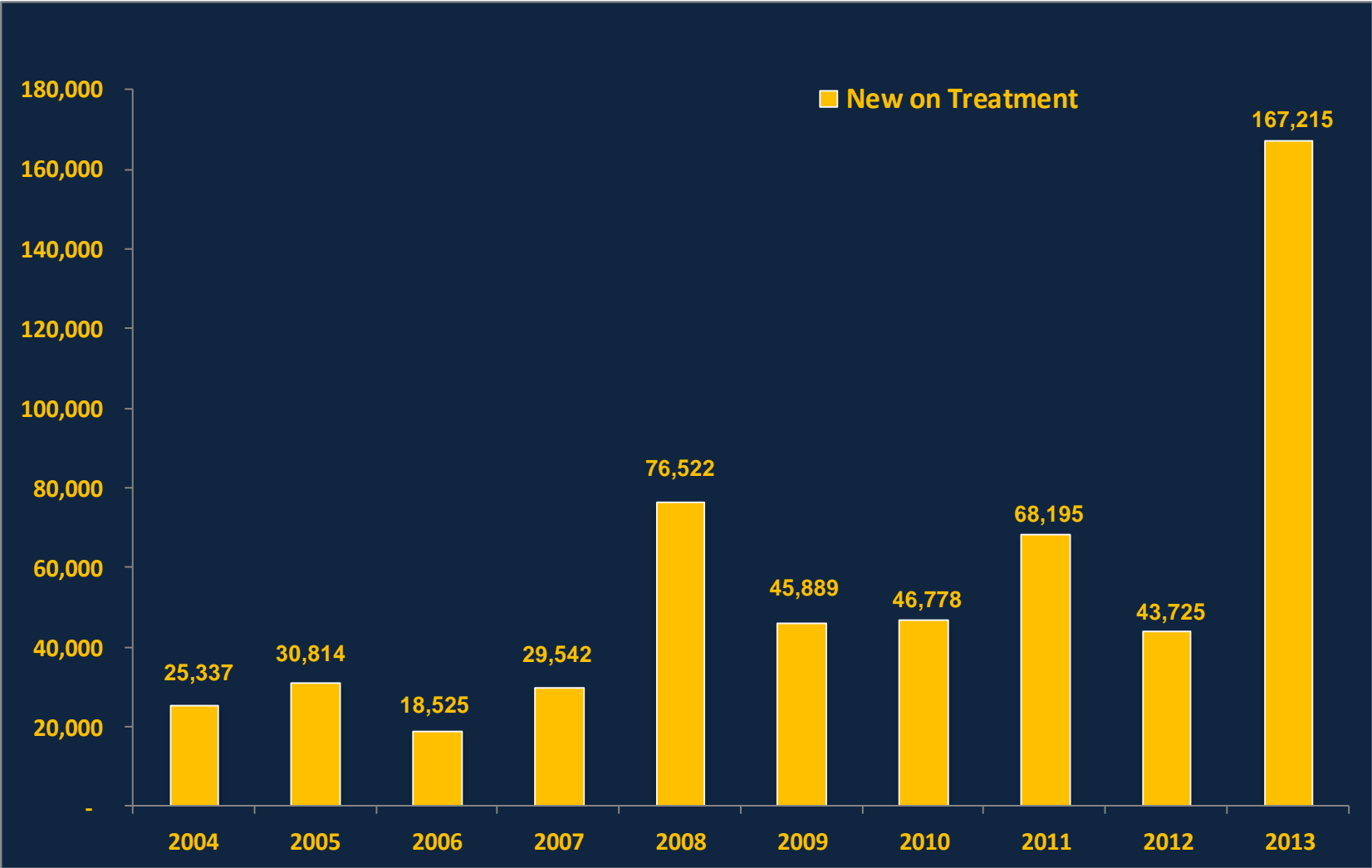
Drivers Include:

- High-risk Groups
 - Fisher Folks (>40% prevalence)
 - CSWs and partners
 - MSM (13% prevalence)
- * 35% of new infections in self-reported monogamous relationships
- Low ART Coverage (41%)
 - Adolescents
 - PMCTC (Option B+)



SOURCE: Mid-Term Review of 2011/12-2014/2015 Uganda NSP Draft Report 2014

Uganda New PLWHA on ART, 2003 - 2013

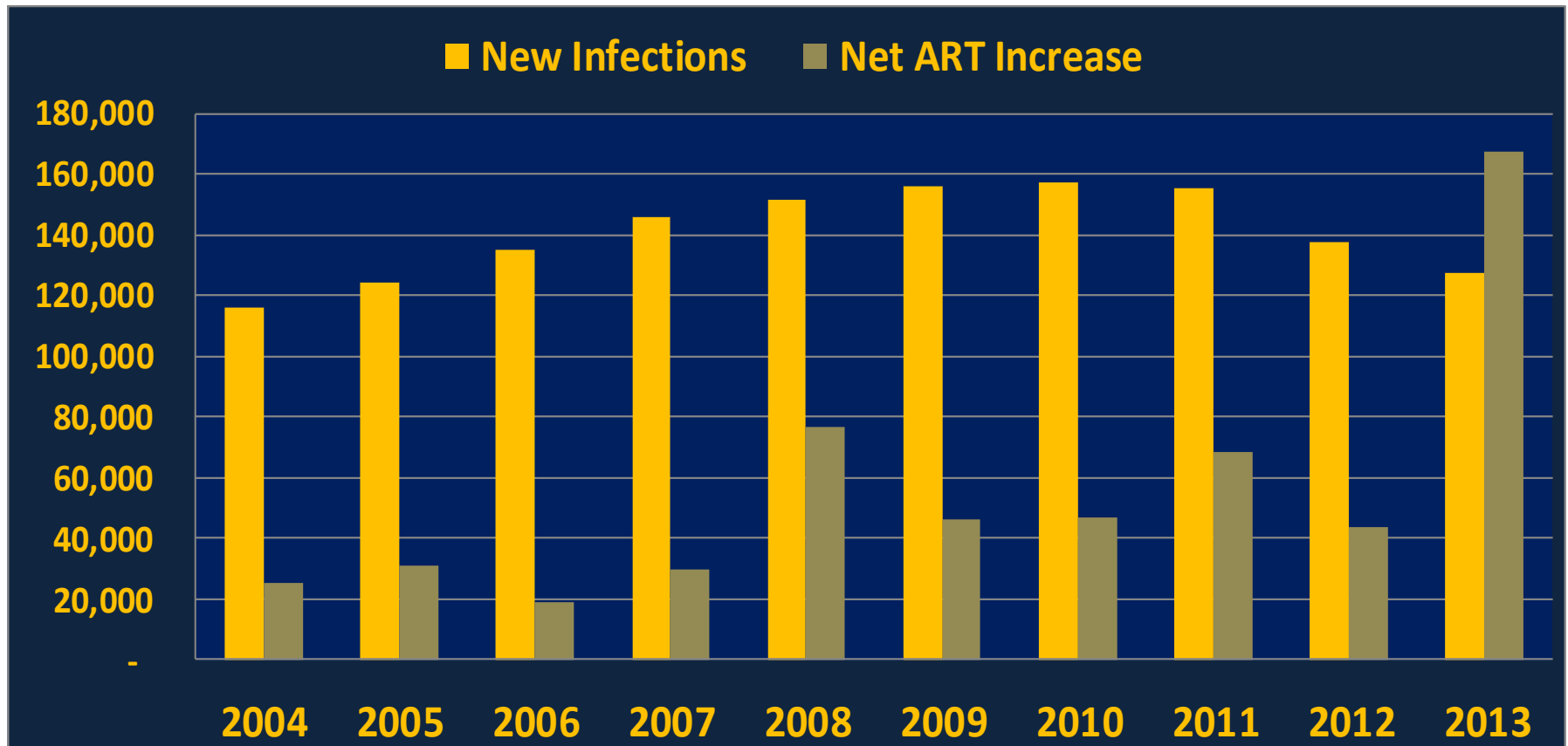


SOURCE: Uganda National AIDS Control Program Report 2013

Programmatic Tipping Point

Ratio of new infections / net increase in ART

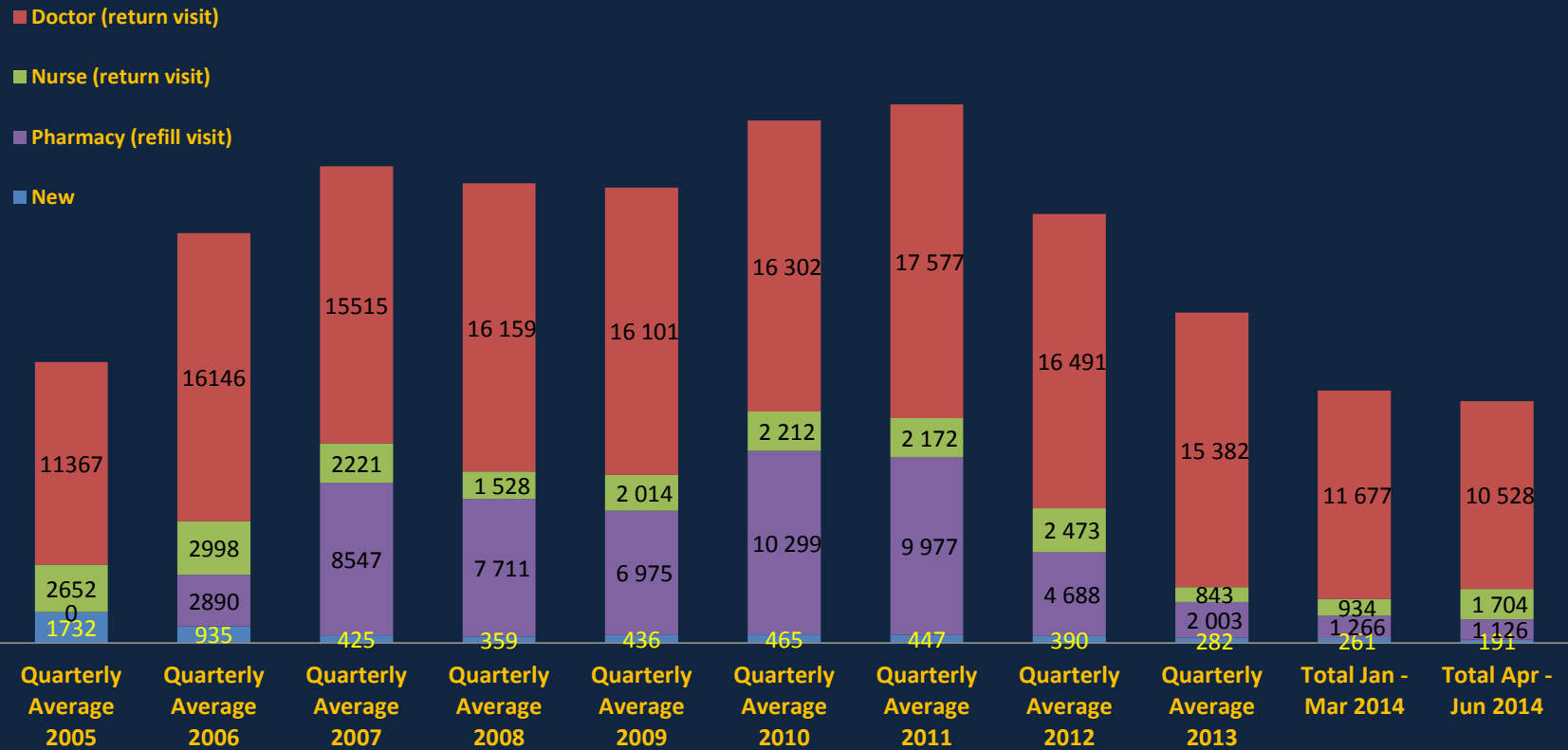
Tipping point: ≤ 1.0



SOURCE: Uganda National AIDS Control Program Report 2013

Nurse Contribution to Demand Management at IDI

Quarterly Average Client Visits by Type at IDI Clinic, Mulago



Introduced Nurse Visits

Active Transfer-Out

Only Half of the Health Care Worker Positions are Filled!

Baine and Kasangaki *BMC Health Services Research* 2014, **14**:184
<http://www.biomedcentral.com/1472-6963/14/184>

Page 3 of 11

Table 1 Approved and filled positions by trained personnel in the public health sector, October 2010

Cadre of staff	Mulago Hospital		Butabika Hospital		Regional Referral Hospitals		District Health Offices		District Health Units		Total Norms	Total filled	% filled
	Norms	Filled	Norms	Filled	Norms	Filled	Norms	Filled	Norms	Filled			
	Doctors	241	203	26	15	520	204	80	63	824	306	1,691	791
Clinical officers	45	56	12	14	395	261	0	5	2,598	1,678	3,050	2,014	66%
Nurses	940	846	154	127	1,371	1,102	80	10	9,098	4,721	11,643	6,806	58%
Midwives	121	95	0	0	701	477	0	0	4,536	3,002	5,358	3,574	67%
Pharmacists	8	4	2	2	36	13	0	2	40	3	86	24	28%
Dispensers	34	26	5	5	80	36	0	0	244	78	363	145	40%
Lab. scientists	63	55	6	6	180	108	0	1	2,236	958	2,485	1,128	45%
Radiographers	33	28	2	3	53	35	0	0	80	22	168	88	52%
Health assistants	0	0	0	0	0	0	0	0	2,573	1,570	2,573	1,570	61%
Other health related staff	252	168	87	92	356	173	320	210	4,951	1,816	5,966	2,459	41%
Grand total	1,737	1,481	294	264	3,692	2,409	480	291	27,180	14,154	33,383	18,599	56%

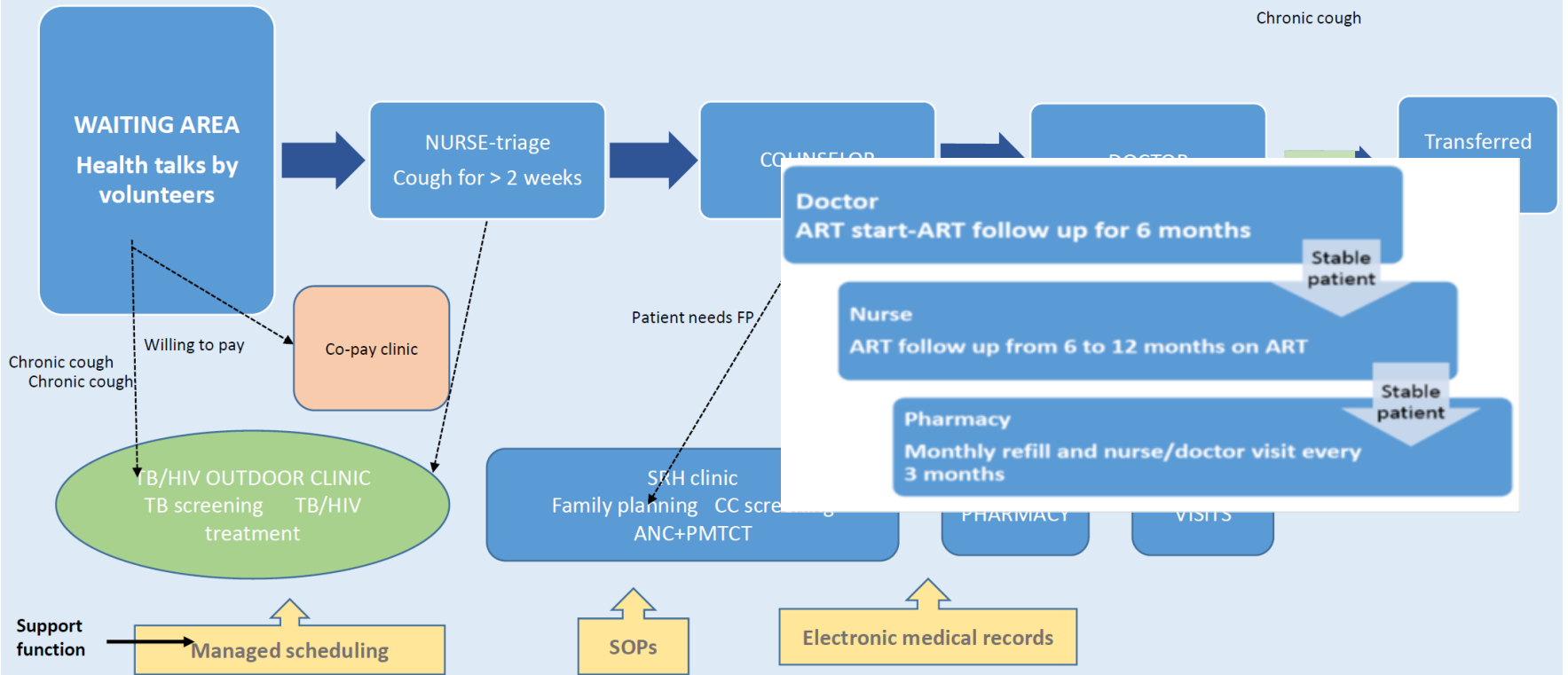
Source: Ministry of Health (March, 2011).



The Expanded Role out would not have been possibly without Task-Shifting/Sharing



IDI CARE MODEL: integration of care, decongestion, sustainability



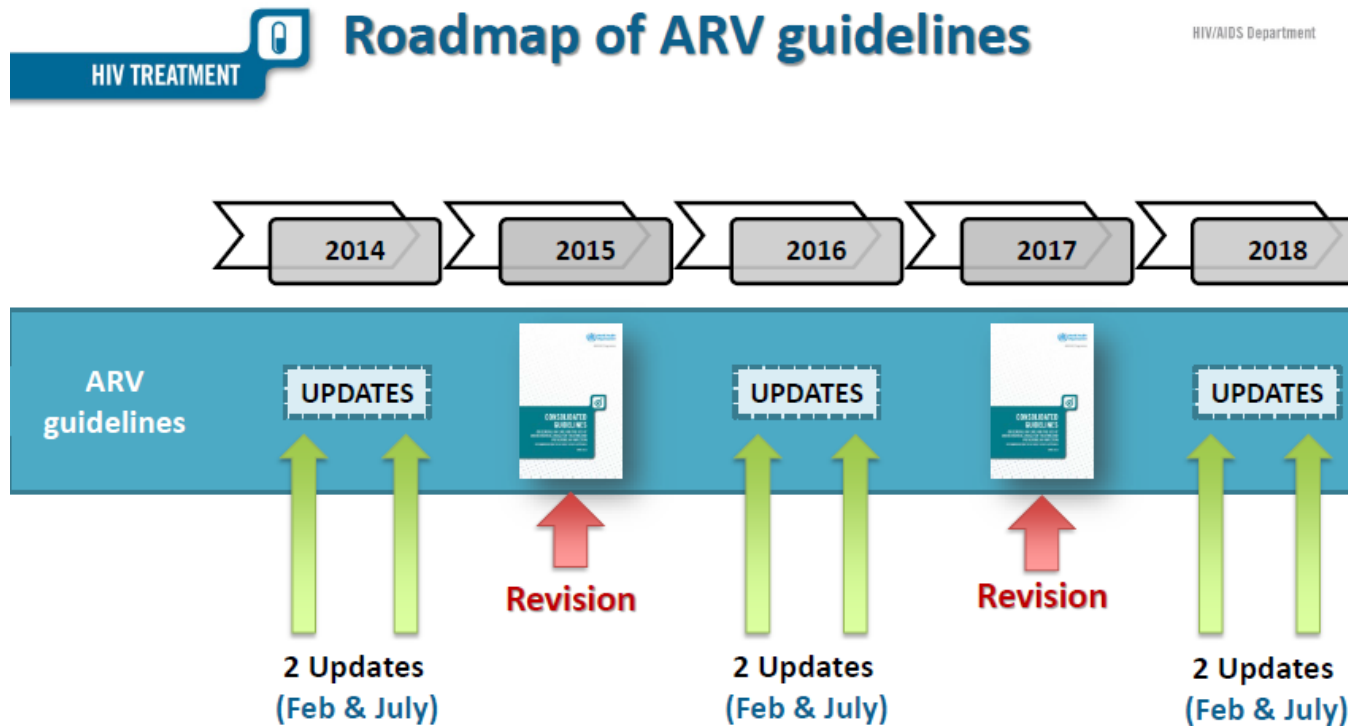
Key Outcomes

Intensive case finding
 Reduction of lost to follow up during TB treatment
 Prompt start of ART

???????



Cost reduction
 Reduction of time patients spend in the clinic
 Cost effectiveness

HIV Medicine is a Rapidly Changing Field with Regular Revision and Updating of Guidelines: One Consequence is the Training Needs



SOURCE: Doherty M et al, WHO 2014

Regular Refresher Training is the Reality




INFECTIOUS DISEASE INSTITUTE

COURSE: COMPREHENSIVE ART MANAGEMENT FOR CLINICAL OFFICERS,
NURSES AND MIDWIVES

INTRODUCTION TO THE COURSE

(October - 2008)



Population: Doctor Ratio: Global Picture





“Impact of task Shifting Type II for ART Delivery on Patient and Process Outcomes in Uganda”

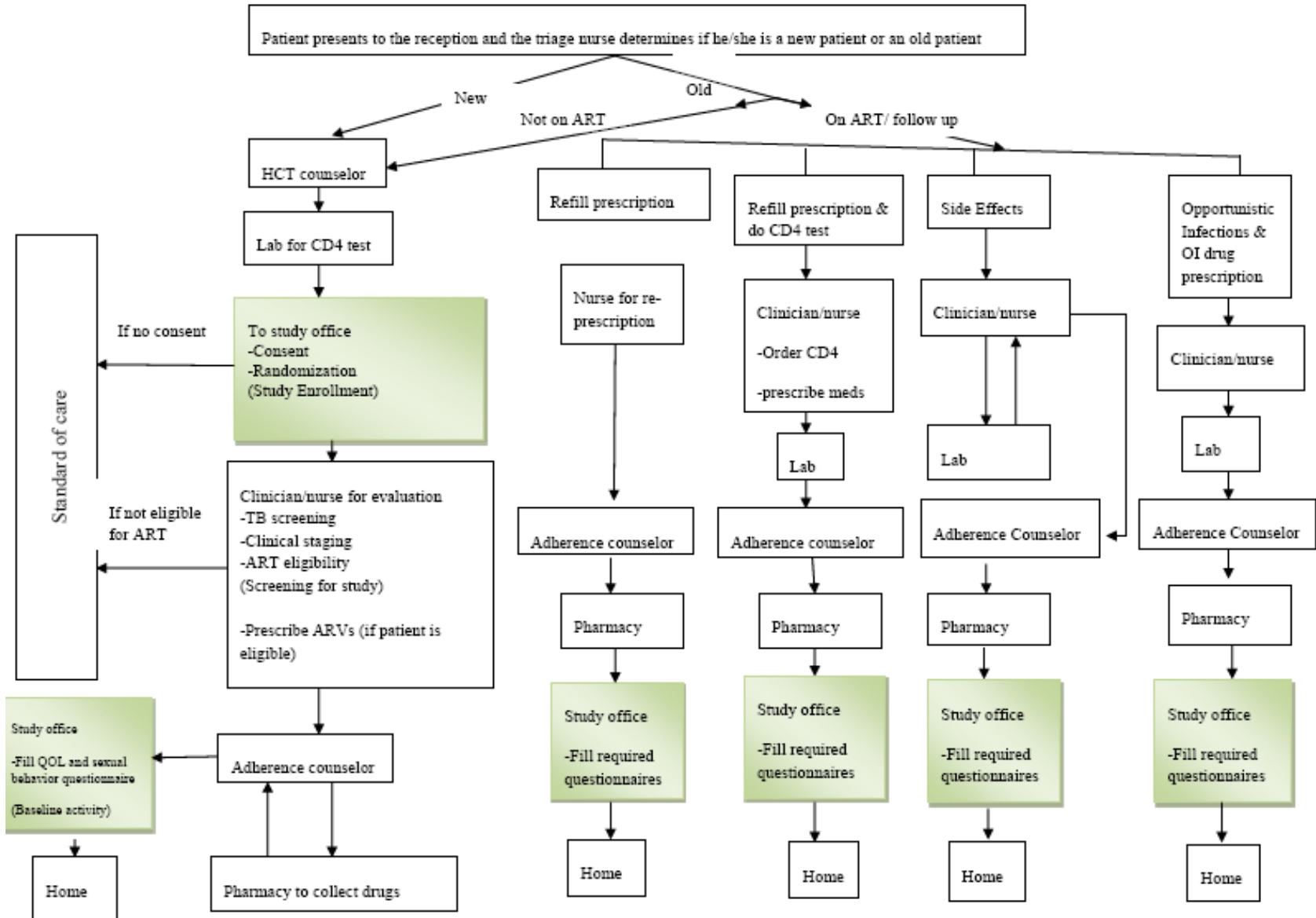
SHARE PHE: Overview and Update

**Damazo T. Kadengye, PhD (PI, CDC)
Andrew Kambugu, M.MED, FRCP (PI, IDI)**

August 11, 2014



SHARE Study: Screening/Enrolment/Follow-up



Summary of Study Design

- ▶ A randomized field intervention PHE at 8 Regional Referral Hosp.
- ▶ 2 study Arms: A clinician Arm (Doctor or clinical Officer) and Nurse Arm
- ▶ The task-shifting model will include nurse initiation
- ▶ Primary end point is VL suppression and Immunological response



Prescription

Prescription

Prescription.
Create or Edit Prescriptions for your system.

Prescription

Prescription No: 842724 NORMAL

Full Name: **Hussein Mulefu, MHM. Musisi** Funding: A2: MAP/Global Fund

Provider: Nansikombi Sarah (Nurse) Prescription Date: 16-Oct-2012

Prescription Item

Drug: Type the starting characters of the drug name and select it from the list

Dose:

Tabs/Caps:

Schedule: No Of Days:

Quantity:

Prescription Items

Drug	No of Days	Quantity	Schedule
AZT/3TC <MOH> 300/150 mg	60	120	2 (BID)
Efavirenz <MOH> 600 mg	60	60	1 (OD)
Co-trimoxazole 960 mg	60	60	1 (OD)
Fluconazole <Diflucan> 200 mg	60	60	1 (OD)

Notes

In-built Drug Prescriptions

Prescription

Prescription.
Create or Edit Prescriptions for your system.

Prescription

Prescription No: 893694 NORMAL

Full Name: **Name, N.C. Client** Funding: A2: MAP/Global Fund

Provider: **atusiime Christine (Medical Officer)** Prescription Date: 24-May-2013

Prescription Item

Drug: Type the starting characters of the drug name and select it from the list

Dose:

Tabs/Caps:

Schedule:

No Of Days:

Quantity:

Prescription Items

Drug	No of Days	Quantity	Schedule
Co-trimoxazole 960 mg	60	60	1 (OD)
TDF/3TC <MOH> 300/300 mg	60	60	1 (OD)
Aluvia <MOH> 200/50 mg	60	240	2 (BID)
Diclofenac 50 mg	5	15	3 (TID)

Notes

Drugs are prescribed and issued using the system, which makes stock tracking easier

Edit Prescription Item

Prescription Item.
Edit Prescription items for your system.

Prescription Item

Prescription: 886989 Schedule: 1 (OD)

Drug: Efavirenz <MOH> 600 mg No of Days: 30

Issue Date: 24-Apr-2013 Tabs/Caps:

Issued By: Ksembo John Quantity: 30

Pharmacist Notes:

Severity of Interaction color coded

Drug Interaction Details

HIV Drug Interactions From University Of Liverpool

You can check for details at <http://www.hiv-druginteractionslite.org>

Medication

Co-Medication: Rifampicin **HIV Drug:** Nelfinavir

Interaction **High Risk**

These drugs should not be coadministered

You must enter action taken below

Quality of Evidence

High

Summary

Coadministration is contraindicated as rifampicin decreases nelfinavir virologic response and possible resistance to nelfinavir or other coadministered HIV drugs.

[Click here for a detailed description](#)

Drug Interaction Details

HIV Drug Interactions From University Of Liverpool

You can check for details at <http://www.hiv-druginteractionslite.org>

Medication

Co-Medication: Lopinavir **HIV Drug:** Ritonavir

Interaction **Moderate Risk**

Potential interaction that may require close monitoring, alteration of drug dosage or timing of administration

You must enter action taken below

The Client will be monitored every week for any adverse effects

Quality of Evidence

Moderate

Summary

Coadministration of ritonavir (100 mg twice daily) and lopinavir/ritonavir (400/100 mg twice daily) increased lopinavir C_{max} (28%) and AUC (46%), and C_{min} (2.2-fold). Appropriate doses of additional ritonavir in combination with Kaletra with respect to safety and efficacy have not been established.

[Click here for a detailed description](#)

Save Close

Acknowledgements

- The IDC Management and Staff at IDI
- The SHARE Project Team