



IAS 2019

10TH IAS CONFERENCE ON HIV SCIENCE
Mexico City, Mexico 21-24 July 2019

Recent Infection Surveillance among Pregnant Adolescent Girls and Young Women in Malawi

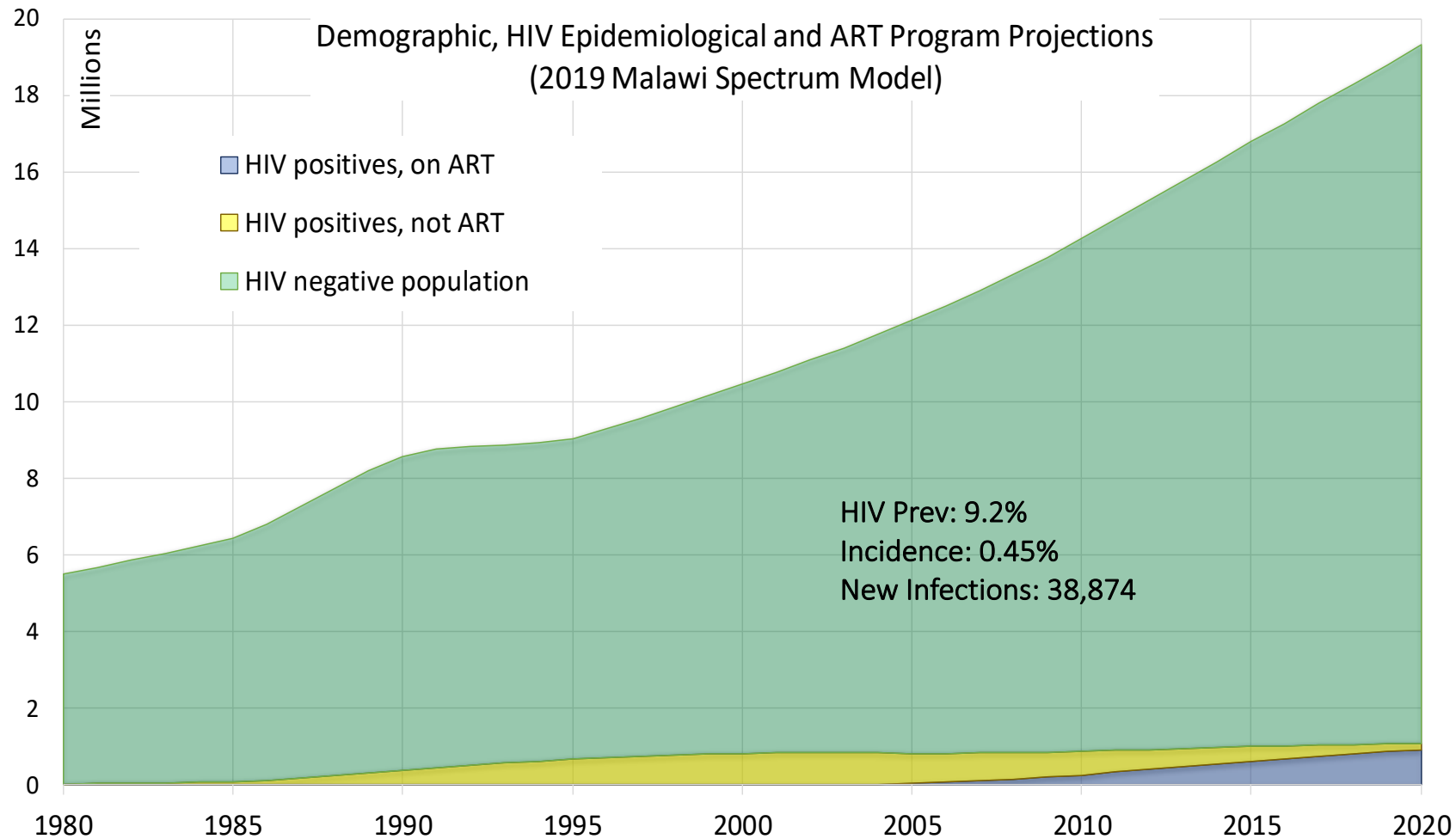
Rose Nyirenda
Ministry of Health, Malawi

Share your thoughts on this presentation with **#IAS2019**

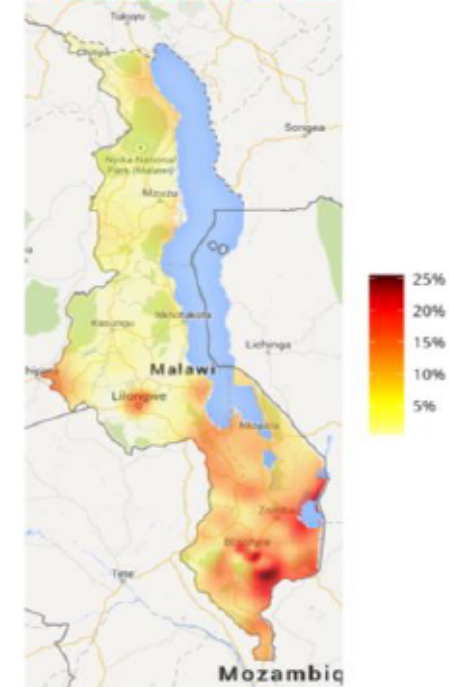


Share your thoughts using **#IAS2019**
Find this presentation on **www.ias2019.org**

Malawi HIV Epidemic



Variations in
HIV prevalence
(2016)



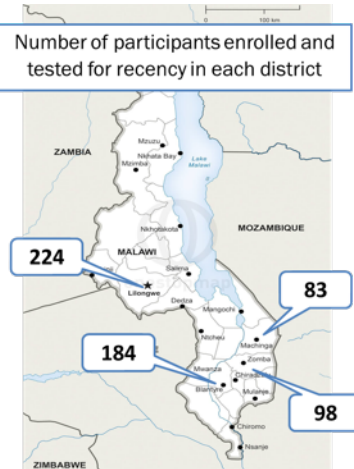
Share your thoughts using **#IAS2019**
Find this presentation on **www.ias2019.org**

Implementation Timeline

Recency pilot infection
among AGYW in 4
districts

Lab evaluation
comparing LAg avidity
assay to Asante Rapid
test for recent
infection (RTRI)

Nov 2017



Field evaluation of RTRI
(Sedia Asante & Maxim
Swift) at HTS compared to
LAg avidity assay at lab
Include recency testing as
operational research in
HTS guidelines

July 2019

Include as
part of HIV
testing
algorithm in
HTS guidelines

2020+

April 2019

**Routine recent
infection
surveillance at
23 sites in
Blantyre District**



August 2019

**Begin expansion of
routine recent
infection
surveillance to
230 sites in 27
districts**

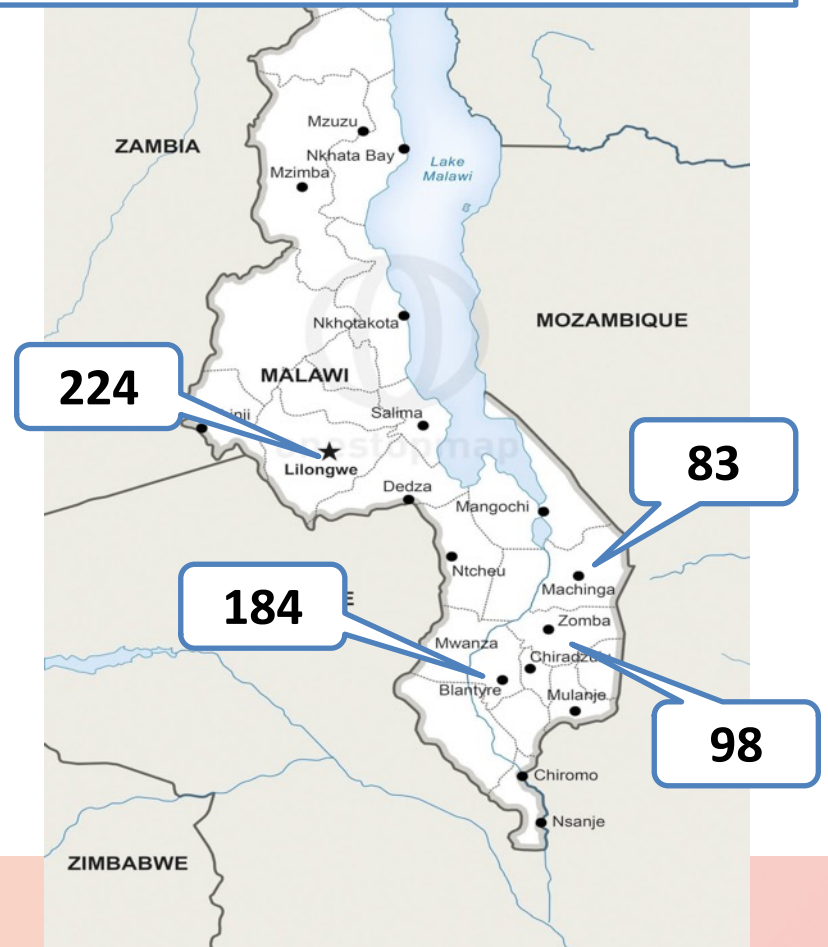


Share your thoughts using **#IAS2019**
Find this presentation on **www.ias2019.org**

HIV Recency Pilot

- Objectives
 - To generate cross-sectional estimates of HIV incidence and recent infection among pregnant adolescent girls and young women (AGYW) attending their first ANC visit in public facilities
 - To integrate recency testing and return of recency results into routine program service delivery
 - To validate rapid test for recent infection (RTRI)
- Population: AGYW attending first ANC visit and newly diagnosed HIV+ in Blantyre, Lilongwe, Machinga, & Zomba districts

Number of participants enrolled and tested for recency in each district



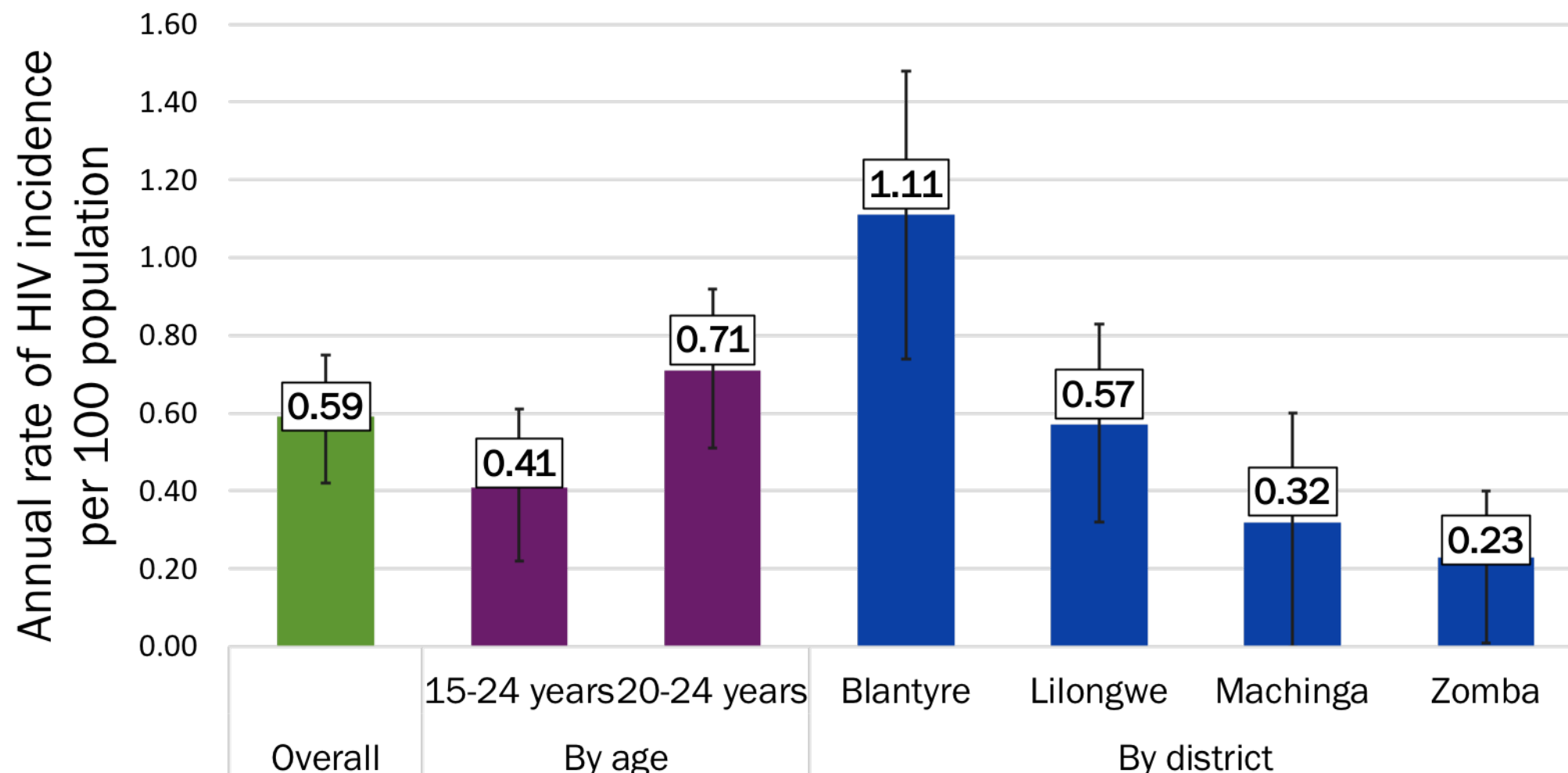
HIV Recency Pilot Results

District	Tested N	LAg RITA Recent Infections	
		#	%
Blantyre	184	22	12.0
Lilongwe	224	32	14.3
Machinga	83	9	10.8
Zomba	98	5	5.1
Total	589	68	11.7

- About 1 in 10 newly diagnosed pregnant AGYW at ANC were recently infected.
- Proportion of recent infections was lower in Zomba than other districts.
- Results indicated that AGYW were not being tested frequently/early enough.



Estimates of HIV Incidence Among Pregnant AGYW, 2017-2018



Correlation of Asante RTRI with LAg-Avidity

Asante visual at lab with VL	LAg avidity EIA with VL	
	Long-Term	Recent
	Long-Term	Recent
	312	12
	Recent	5
	41	

N=370

95% agreement

Kappa = 0.82

Strong agreement between Asante RTRI and LAg when performed in lab and viral load testing included.



Return of HIV Recency Test Results

- LAg + VL recency results returned to clinics: 99.5%
- Results returned to AGYW: 78.6%
- Results anecdotally well-received
- Low return to scheduled follow up visits observed at some facilities

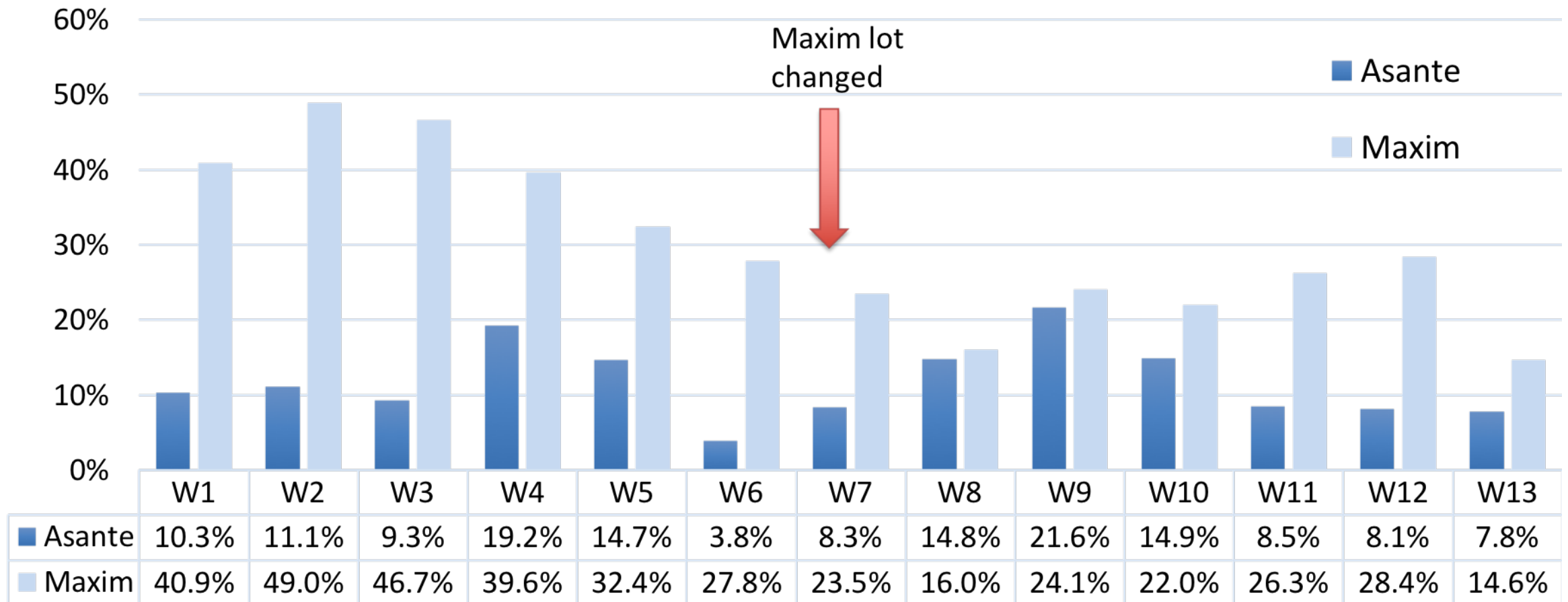


HIV RECENT INFECTION SURVEILLANCE IN ROUTINE HTS

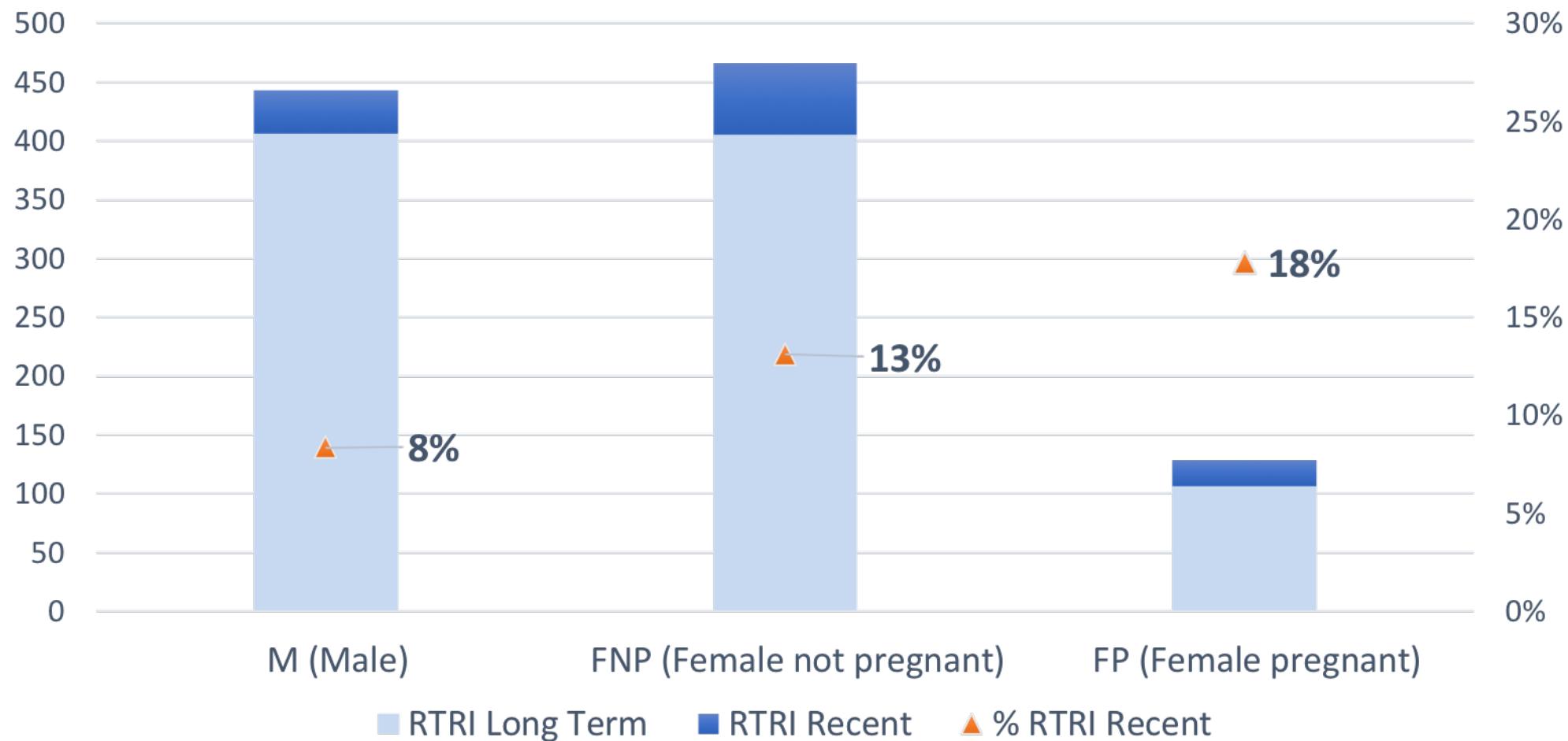


Share your thoughts using **#IAS2019**
Find this presentation on **www.ias2019.org**

Proportion RTRI Recency Among Newly Diagnosed HIV Cases Enrolled by Test, Blantyre, Apr 4-Jul 5, 2019

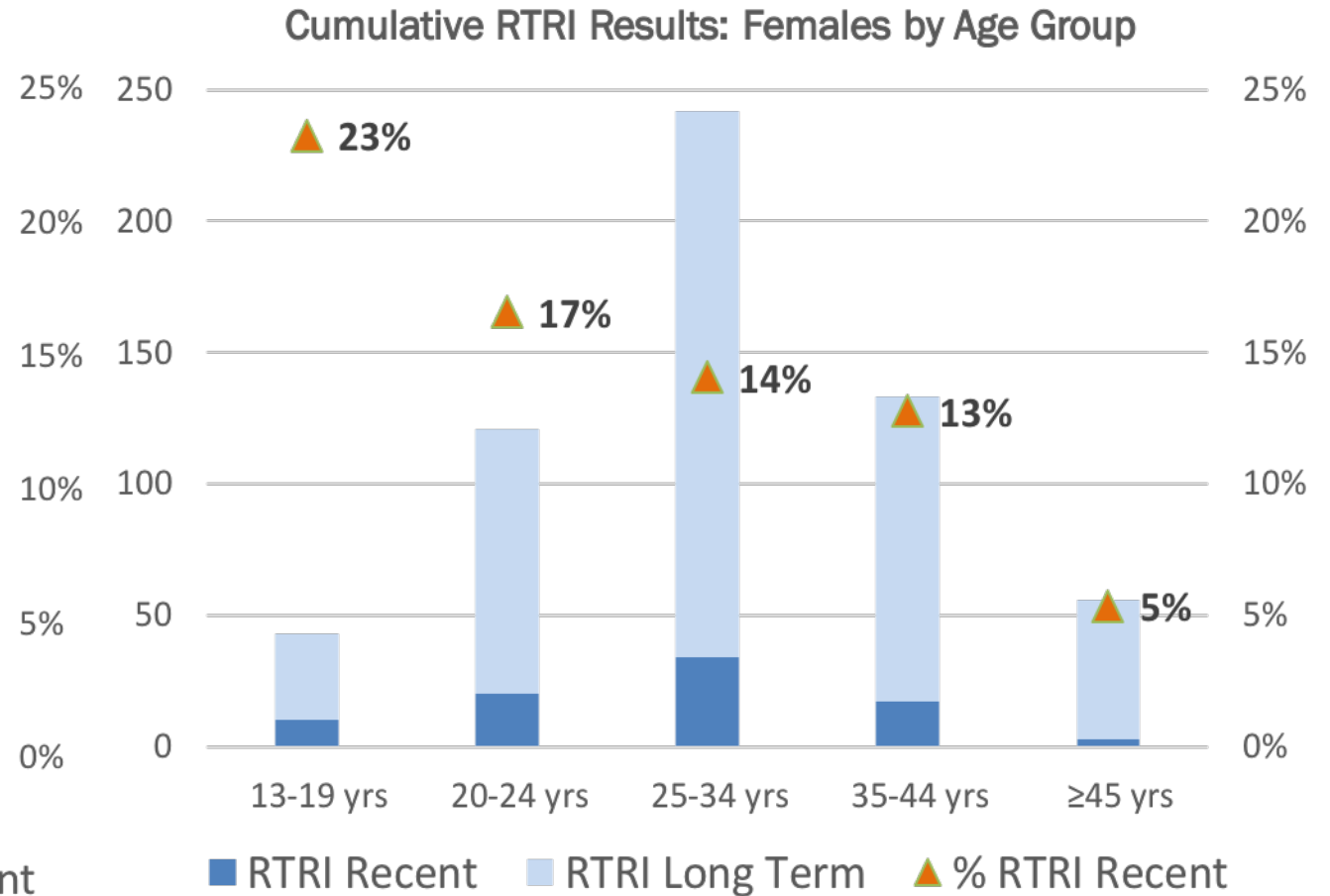
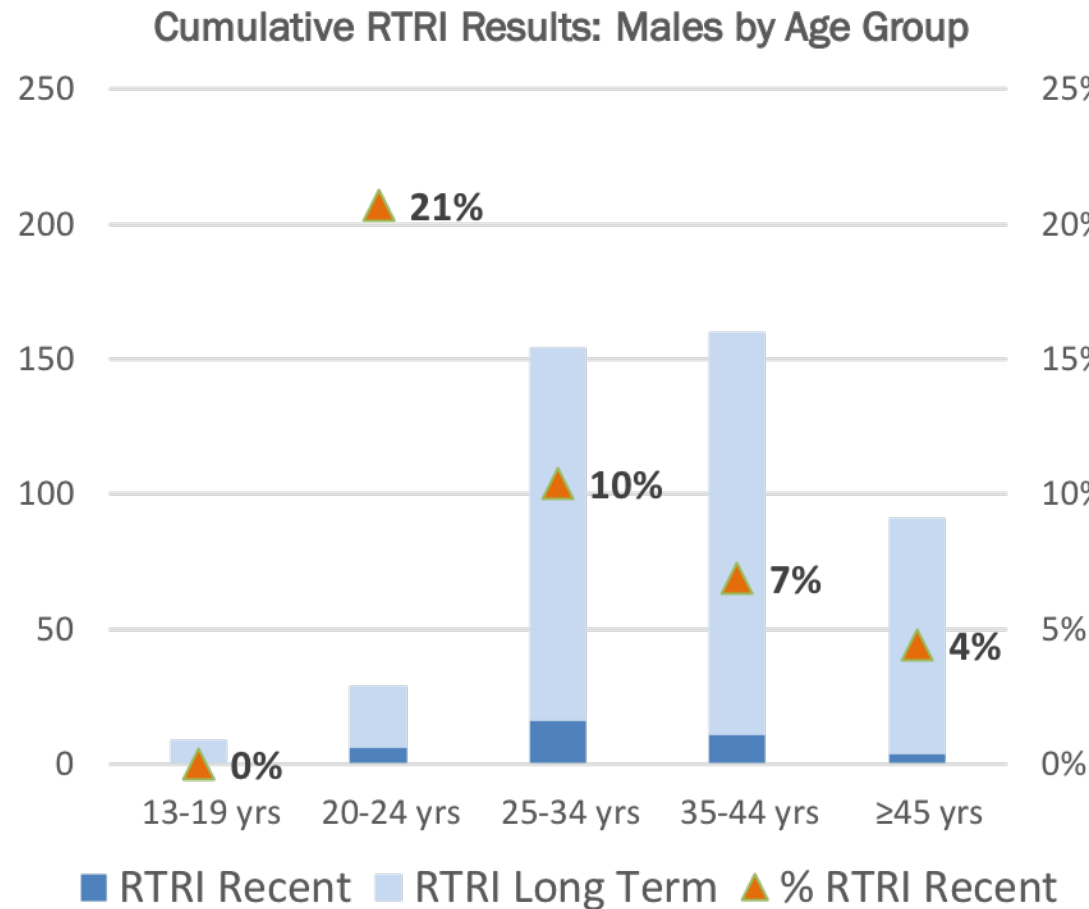


RTRI Results by Sex, April 4-July 5, 2019 (n=1038, Asante Sites)



Share your thoughts using **#IAS2019**
Find this presentation on **www.ias2019.org**

Recency Surveillance Preliminary Data, April 4-July 5, 2019 (n=1038, Asante Sites)



Share your thoughts using **#IAS2019**
Find this presentation on **www.ias2019.org**

Next Steps



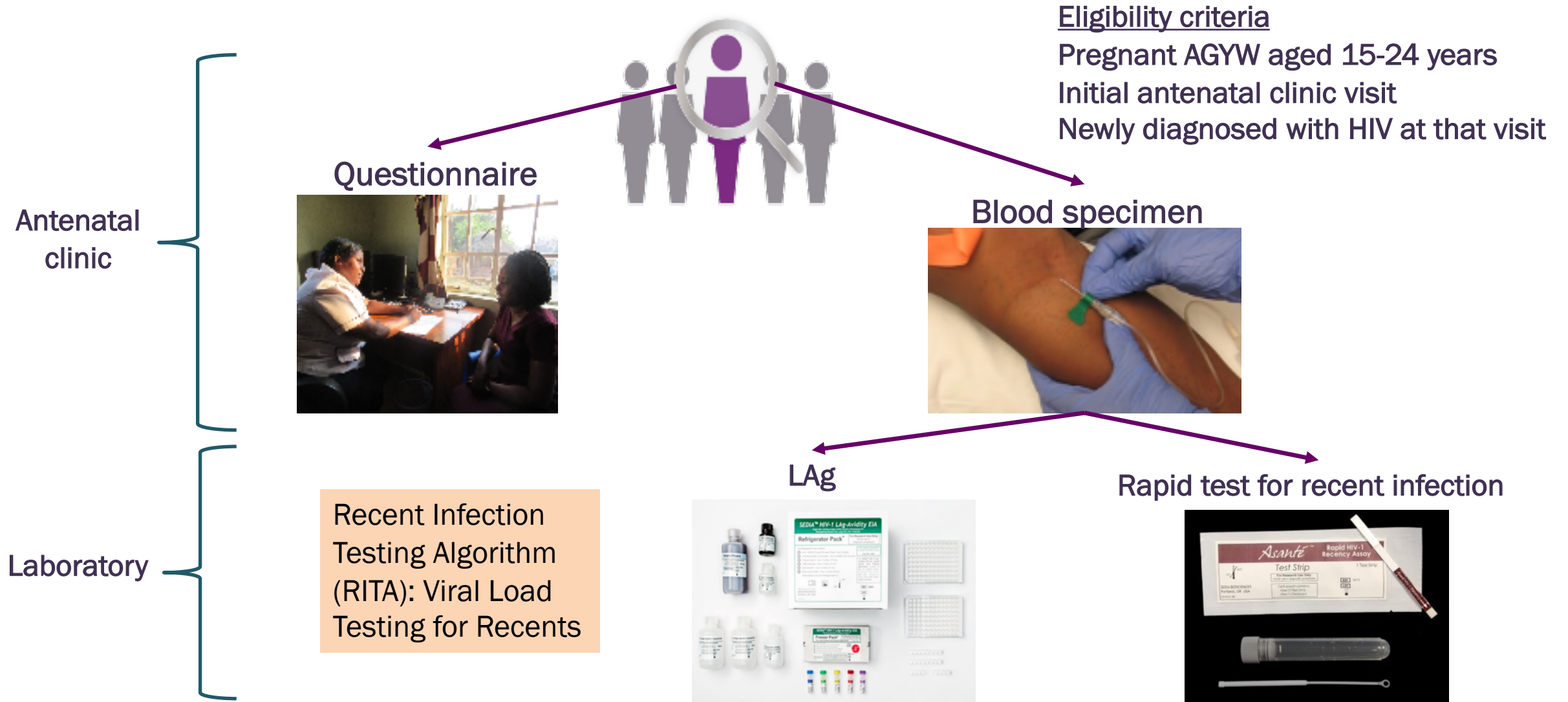
- Complete field evaluation of RTRI at HTS vs. LAg at lab
- Expand in phases to 27 districts
- Use data for public health response
 - Real-time dashboard to visualize results
 - Discuss how to interpret and use results (e.g., prioritize geographic areas or sub-populations for HIV prevention interventions)

Zikomo!

- Malawi Ministry of Health
- Christian Health Association of Malawi
- Office of the Global AIDS Coordinator (OGAC)
- I-TECH, Malawi and Washington
- University of California, San Francisco (UCSF)
- Global AIDS Interfaith Alliance (GAIA), Malawi
- Deforay, Inc
- US Centers for Disease Control and Prevention (CDC), Malawi and Atlanta
- USAID, Malawi
- Antenatal clinic staff in participating districts
- Laboratory staff (Kamuzu Central, Zomba Central, Queen Elizabeth, Machinga District hospital)
- Participating adolescents girls and young women



HIV Recency Pilot Design



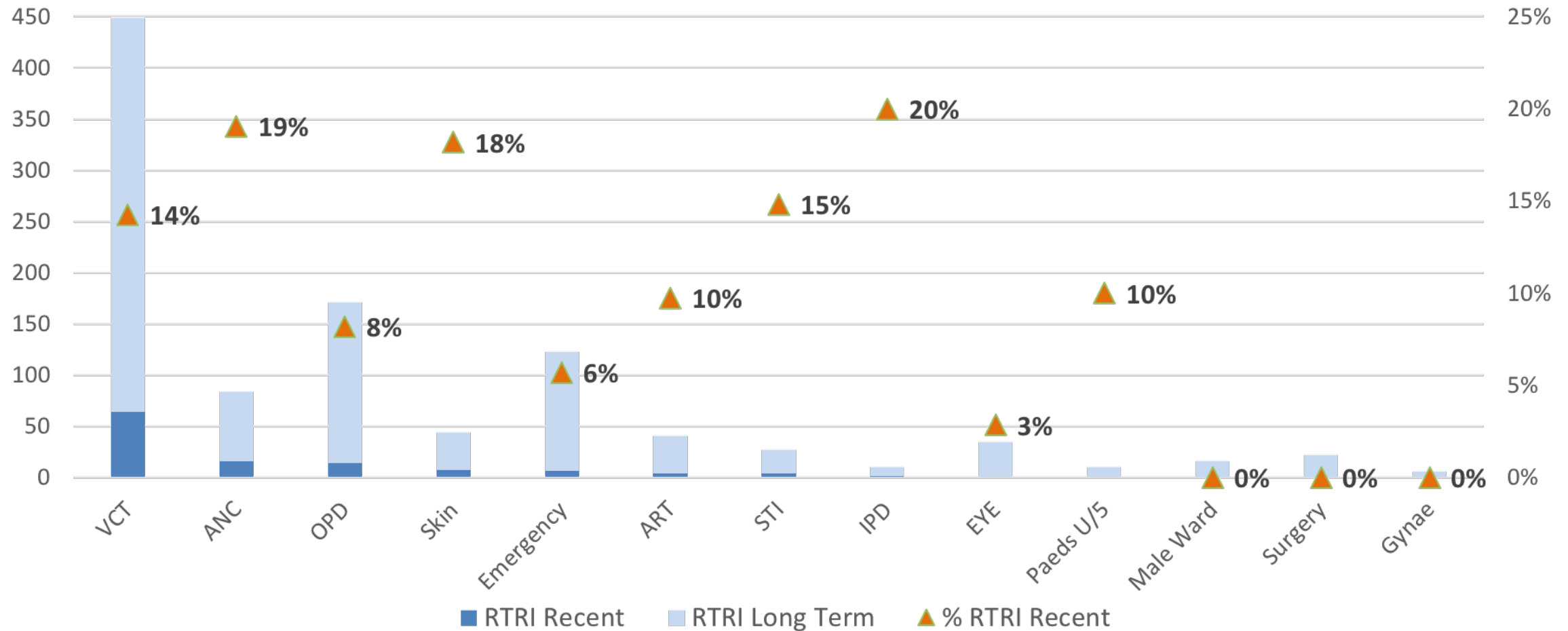
HIV Recent Infection Surveillance in Routine HTS

- RTRI performed by HIV Diagnostic Assistants within routine HIV testing (parallel to Test 2)
- DBS collected for viral load confirmation of recent infection
- Client RTRI results not returned; district recency test results to be made available during pre-test counseling
- In planning: dashboard, cluster detection and response strategy



Recency Surveillance Preliminary data – April 4-July 5, 2019 (n=1038, Asante Sites)

Cumulative RTRI Results by HTS Point of Service



Share your thoughts using **#IAS2019**
Find this presentation on **www.ias2019.org**