Initiation of ART treatment in Rwanda and understanding barriers to the Treat All approach

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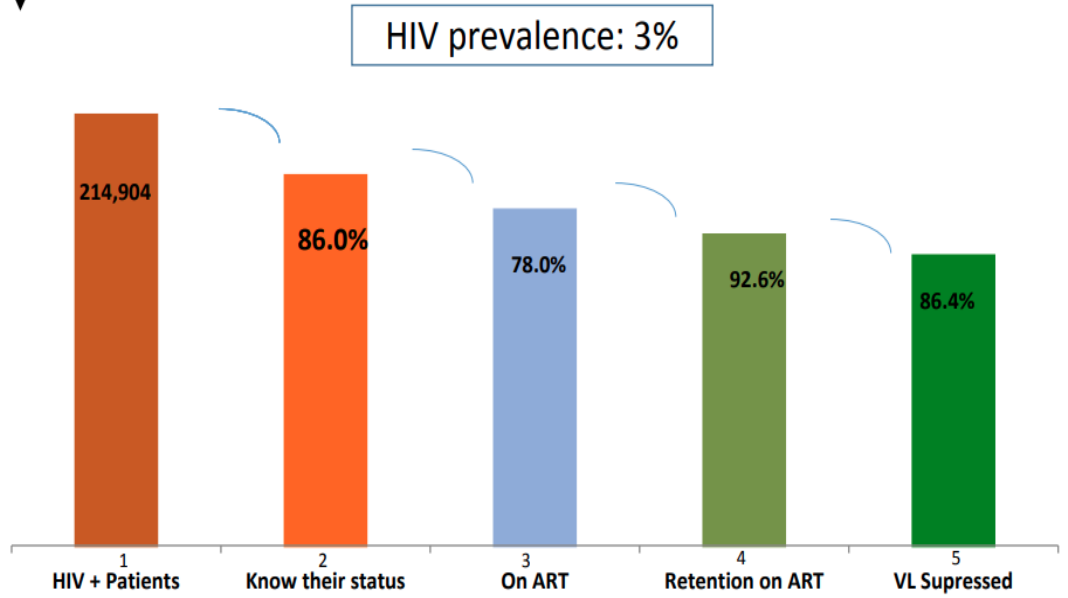
Incidence and Prevalence of HIV/AIDS in Rwanda

- 214,904 Rwandans are HIV+
- Incidence: About 3/1000 persons per annum
- For every ***10% increase*** in antiretroviral therapy (ART) coverage, there is a ***6% reduction*** in incidence



Data sources: 1. Epi spectrum estimates 2015; 2.DHS2015; 3,4,5: HMIS June 2016

RWANDA BIOMEDICAL CENTER
A Healthy People. A Wealthy Nation

Background: Treat All Protocol

What is the Treat All Protocol?

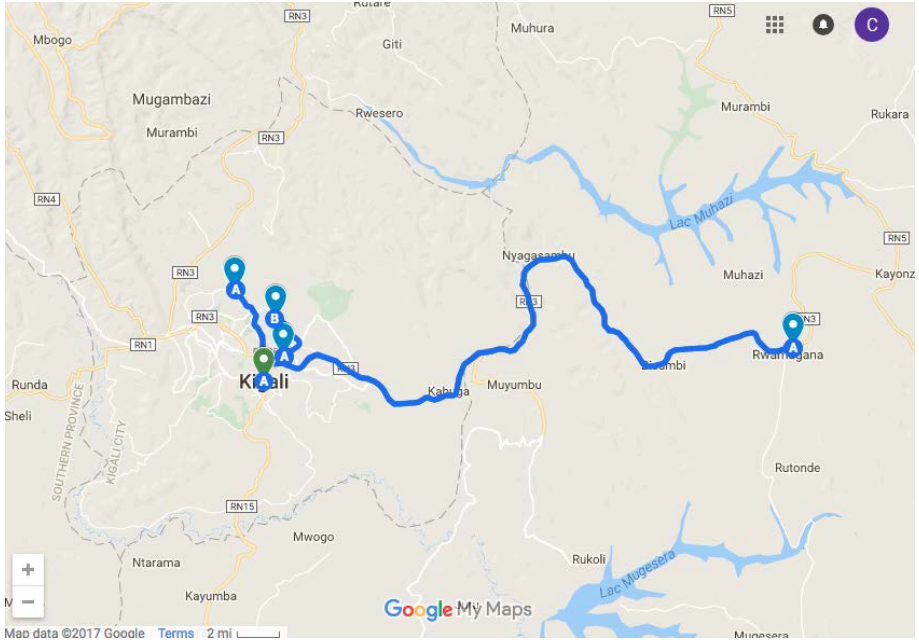
- The implementation of the WHO's evidence-based recommendation to remove conditions for initiation of antiretroviral therapy in patients infected with HIV/AIDS, and instead treat all patients affected with the disease

In Rwanda:

- HIV infected: Initiation on first-line ART therapy
- Patients see HCPs every three months for HIV/AIDS care consultation and medication refills
- DSDM: Consistent viral load suppression, allows for patients to come every six months

Our Project: ART Initiation and Understanding Barriers to the Treat All Approach

- Three Days of Clinic Visits
  - Day 1: Kagugu
  - Day 2: Avega
  - Day 3: Remera
- One Day in Hospital
  - Day 4: Kibagabaga Hospital



Our Project: Typical Clinic Visit

- Setting:
  - Generally conducted a small to medium sized room inside of the clinic
  - There is a table that separates the patient from the healthcare provider
    - Examination table may be present, but patients do not use it
  - Patients waited on benches or chairs outside of the room, and were called in by the next patient
- Providers: Doctors or Nurses
  - HCPs interview the patient about their condition
    - Review their CD4 count and viral load
    - Ask about compliance
    - Problems with the medications
    - Other symptoms/medical concerns
    - Write a refill for their next supply of medication or suggest a change in therapy
  - They complete each patient's dossier (paper health record) with what happened during the patient encounter

Understanding Barriers to Care

- Familial Problems
- Religious Beliefs
- Type of Employment
- Financial and Resource Limitations
- Training of Healthcare Providers

The overarching cause of virologic failure is **poor adherence**

2017 HIV Scientific Workshop

Global HIV and Viral Hepatitis scientific updates to inform comprehensive HIV guidelines for Rwanda

HIV Scientific W orkshop

- HIV Prevention
- HIV Care & Treatment
- Sexually Transmitted Infections (STIs) and Other Blood Borne Infections (OBBIs)

https://pbs.twimg.com/profile_images/3063848123/f49ddde4e95c6c06c7b892b9489c07b4_400x400.jpeg

HIV Prevention

- **Testing: self, targeted, linkage to care**
- Tetanus vaccine in context of voluntary medical male circumcision (VMMC)
- Prevention of mother-to-child transmission (PMTCT)
- Vaccine

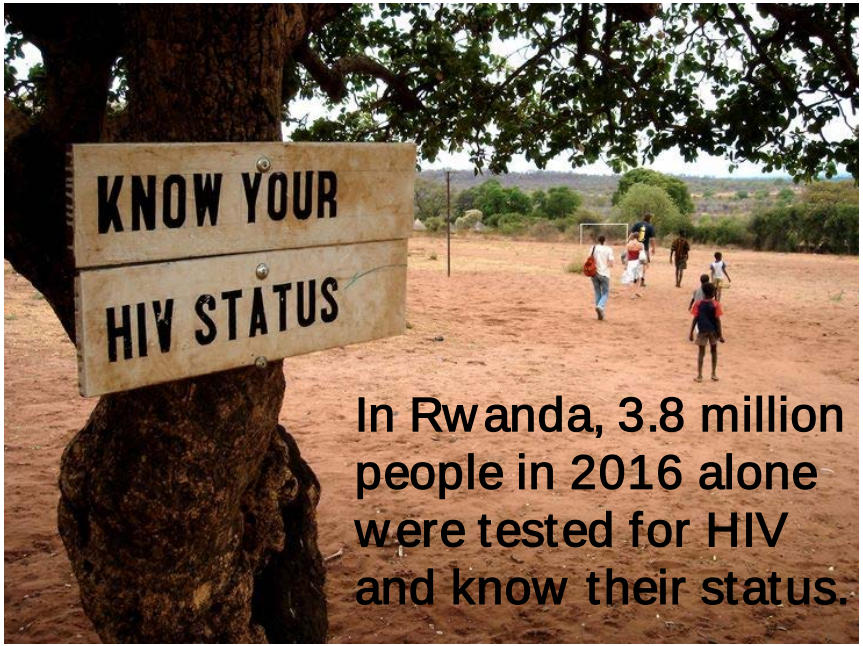
http://www.who.int/hiv/pub/mtct/mtct_training.gif

HIV Prevention: Testing

- Targeted testing
- Self testing
- Linkage to care

Risk group*	Contributions to HIV incidence (MOT)	HIV prevalence
SDC	65%	3.43%[1]
FSW	20%	51%[2]
Youth	10%	1%[1]
MSM/MSW	5%	13.7%[3]

[1]: Rwanda DHS 2010 [2]: BSS FSW, Rwanda 2010 [3]: BSS MSM, Kampala, Uganda



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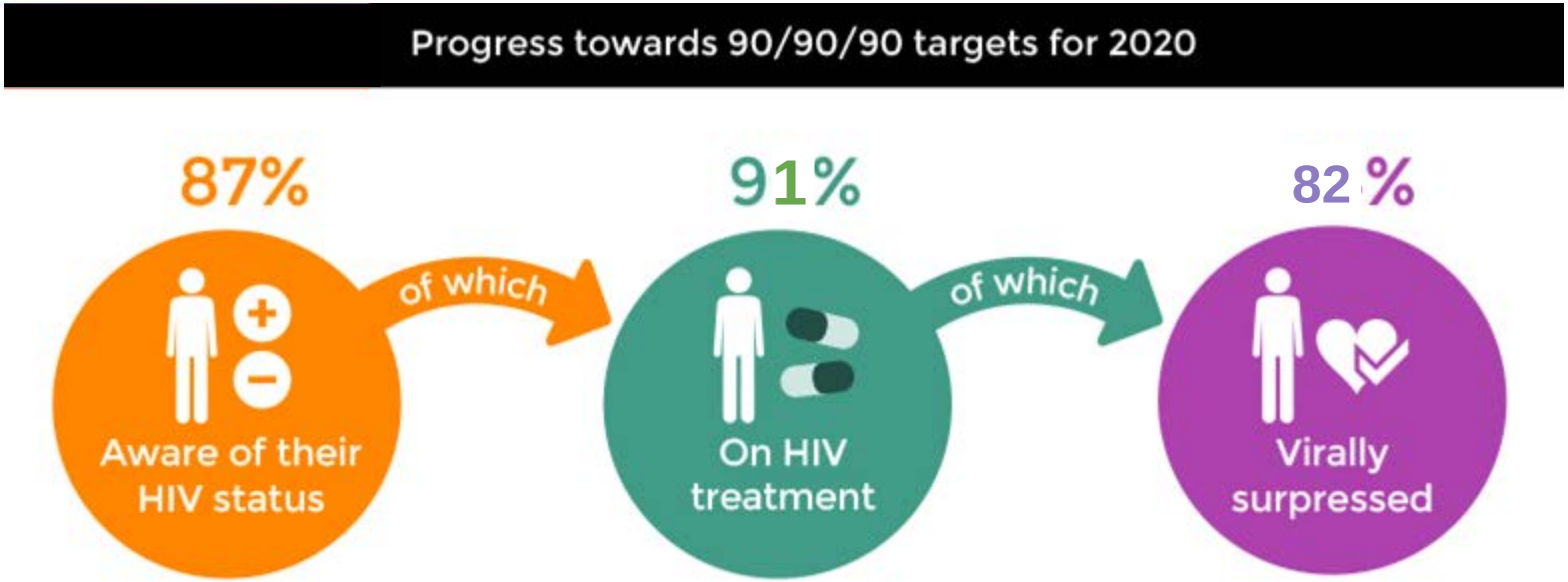
HIV Care & Treatment

- **Community actors in achieving 90/90/90**
- Novel ART Therapies
- **Adherence, Monitoring with Differentiated Service Delivery Model (DSDM)**
- Comorbidities & opportunistic infections (OI) prophylaxis
- **Children & adolescents**

http://consumentenkring.com/wp-content/uploads/2016/03/aids-1170x781.jpg

HIV Care & Treatment: Community Actors & 90/90/90



AVERT & UNAIDS & Nsanzimana

HIV Care & Treatment: Community Actors & 90/90/90

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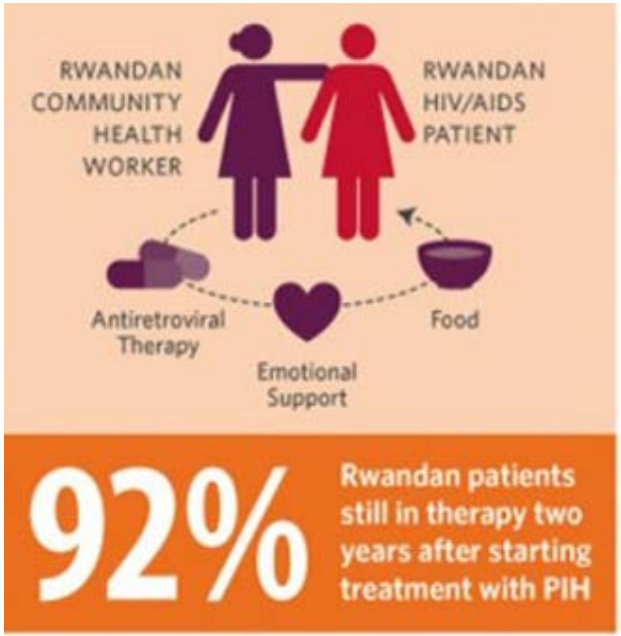
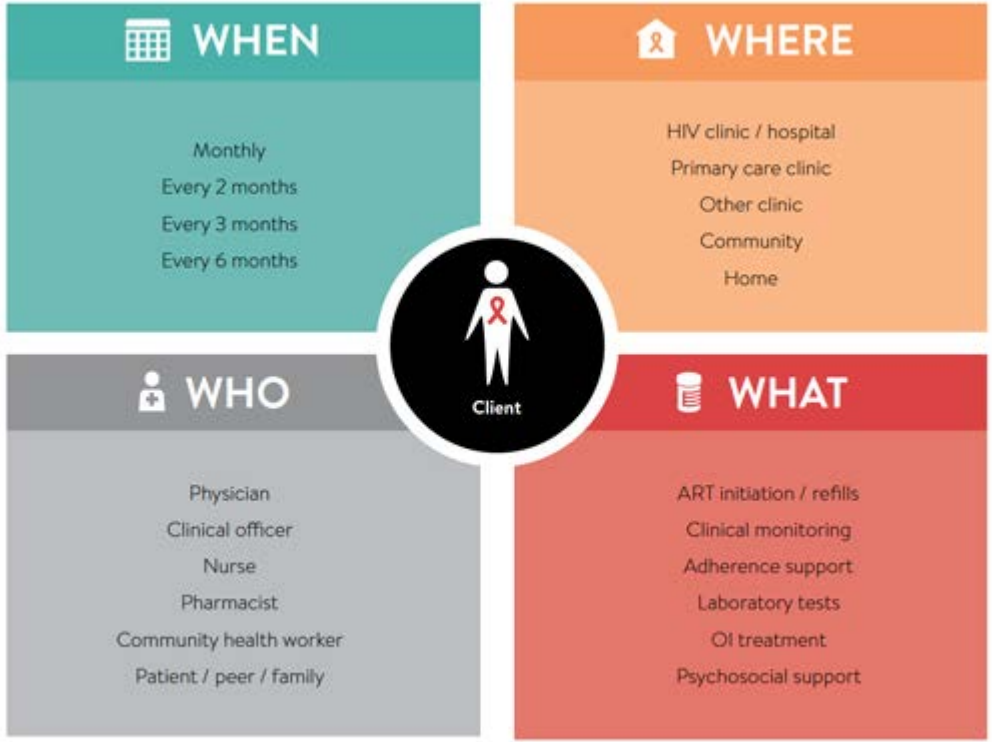


https://thumbnails-visually.netdna-ssl.com/we-can-end-hivaids-today-with-treatment_50291c42aef05_w450_h600.jpg

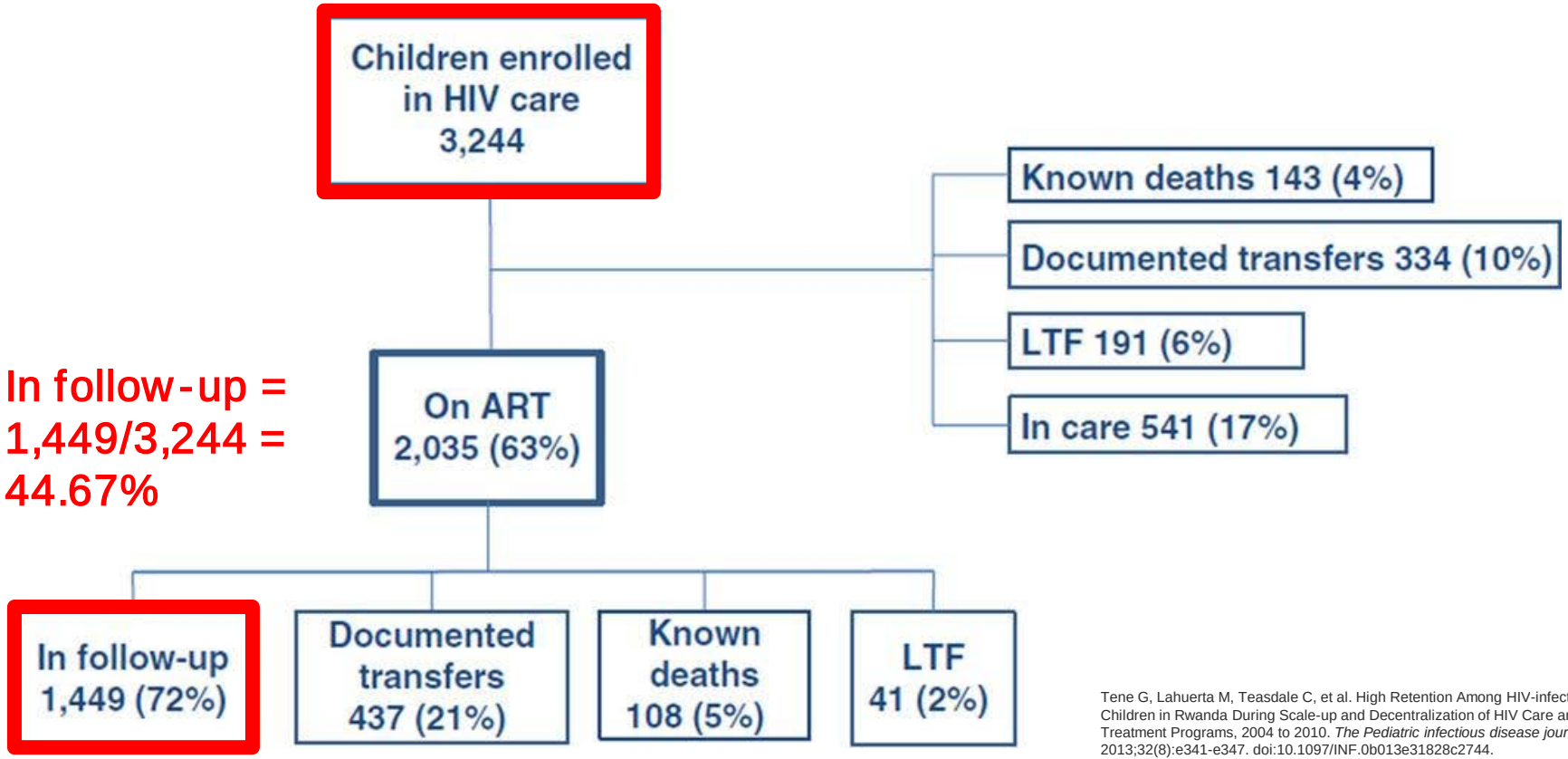
HIV Care & Treatment: Adherence, Monitoring, DSDM

- Retention
- Continuum of care
- Key populations
- Feasibility
- Task shifting
- Cost effectiveness
- Integration



WHO

HIV Care & Treatment: Children & Adolescents



In follow-up = 1,449/3,244 = 44.67%

Tene G, Lahuerta M, Teasdale C, et al. High Retention Among HIV-infected Children in Rwanda During Scale-up and Decentralization of HIV Care and Treatment Programs, 2004 to 2010. *The Pediatric infectious disease journal*. 2013;32(8):e341-e347. doi:10.1097/INF.0b013e31828c2744.

Reflections and Conclusions

- We were humbled to deepen our learning about the genocidal history of Rwanda, yet awed at how far the country has come in rebuilding and revitalizing itself.

- There is much to be learned from the country's commitment to "Never go back"

Thank you!

Questions?

Acknowledgements

Dr. David Riedel, our mentor

All healthcare providers we worked with in Rwanda

References

Consolidated Guidelines on the Use of Antiretroviral Drugs for Treating and Preventing HIV Infection . 2016, apps.who.int/iris/bitstream/10665/208825/1/9789241549684_eng.pdf?ua=1.

“National Guidelines for Comprehensive Care of People Living with HIV in Rwanda .” aidsfree.usaid.gov/sites/default/files/tx_rwanda_2011.pdf.

Ndahimana, J d, et al. *HIV Drug Resistance Mutations among Patients Failing Second-Line Antiretroviral Therapy in Rwanda.* U.S. National Library of Medicine, 12 Nov. 2015, www.ncbi.nlm.nih.gov/pubmed/26562173.

Nsanzimana, Sabin. “‘Treat All’ HIV+ In Rwanda .” Geneva IAPAC Meeting . Geneva IAPAC Meeting , Oct. 2013.

Other references also included on individual slides