### The CQUIN Learning Network Annual Meeting

### International Consortium for Advanced HIV Disease (iCAHD) Ben Cheng GHIG & International Diagnostics Centre, LSHTM

February 13-15 Maputo, Mozambique



HIV LEARNING NETWORK The CQUIN Project for Differentiated Service Delivery



# iCAHD

Dedicated to advancing and implementing a sustainable advanced disease package of care in countries. Activities will include:

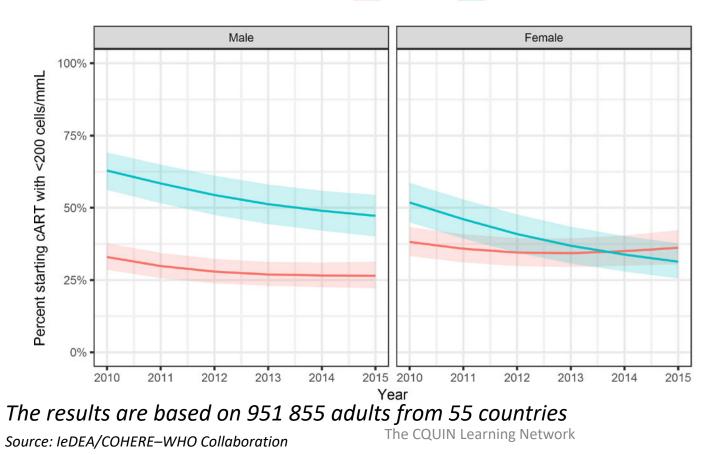
- Country-situation mapping
- Research-gap mapping
- Global market
- Global architecture and funding

### Advanced HIV Disease Advanced HIV disease remains a persistent problem

Income group

High-income

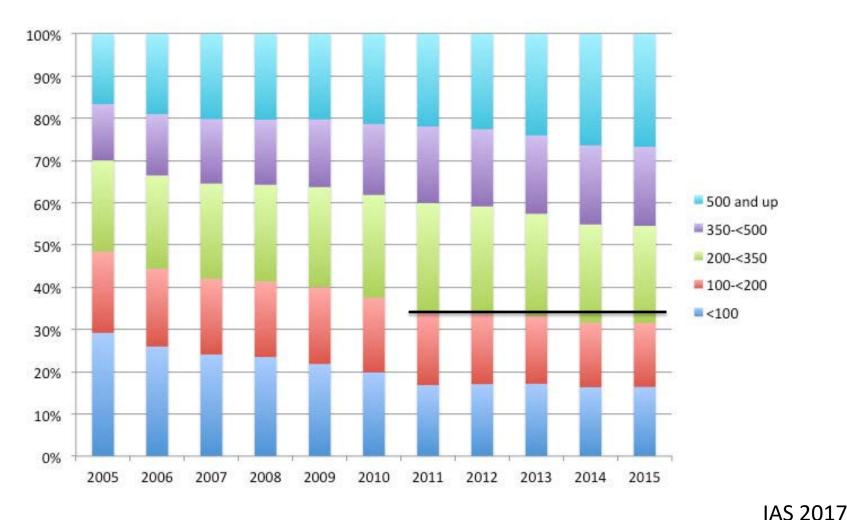
e — not HIC



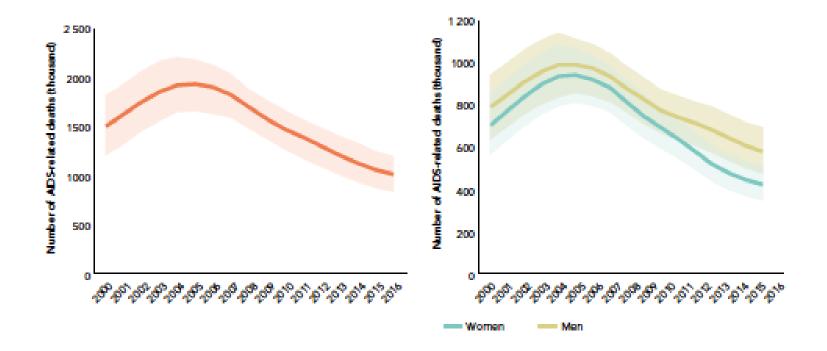
38% of patients start ART with advanced HIV disease

Higher in LMIC and among men

### Country Example of Advanced HIV Disease Proportions



### **HIV-Related Mortality Remains High**

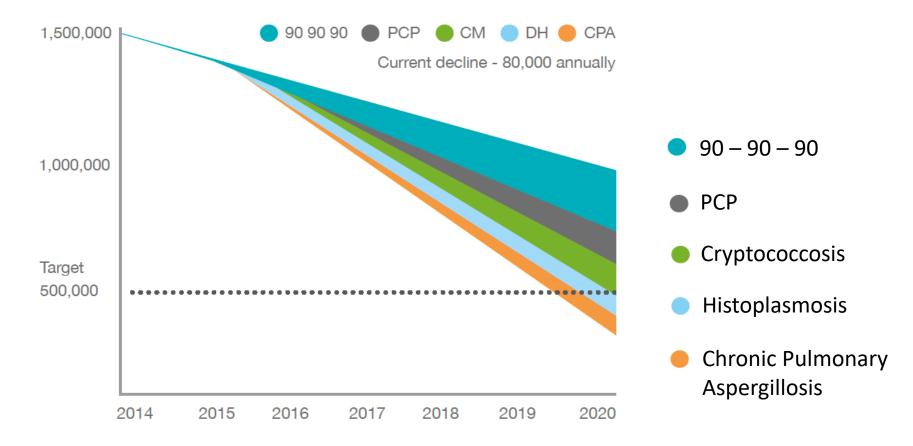


#### FIGURE 2.1. AIDS-RELATED DEATHS, ALL AGES, GLOBAL, 2000–2016 Source: UNAIDS 2017 estimates.

FIGURE 2.2. AIDS-RELATED DEATHS BY SEX, ALL AGES, GLOBAL, 2000-2016 Source: UNAIDS 2017 estimates.

**UNAIDS 2017 Estimates** 

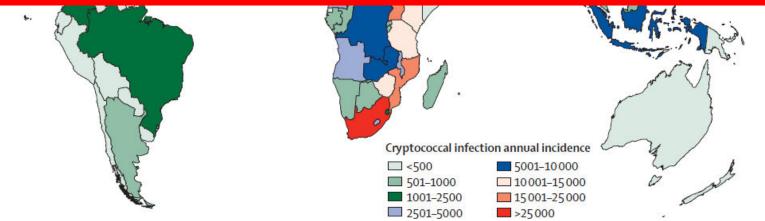
### Reduction in AIDS Deaths to Under ½ Million by 2020



### Global Burden of disease of HIV-Associated Cryptococcal Meningitis



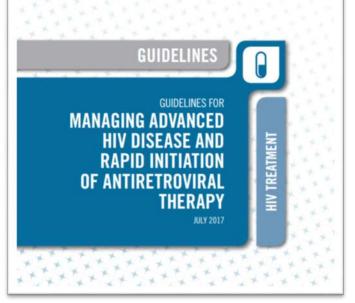
# Crypto accounts for 15% of all AIDS deaths (95% CI: 10%-19%)



Sub-Saharan Africa: 162 500 cases, 135 900 deaths

The CQUIN Learning Netvertaisasingham R, et al. Lancet Infect Dis 2017.

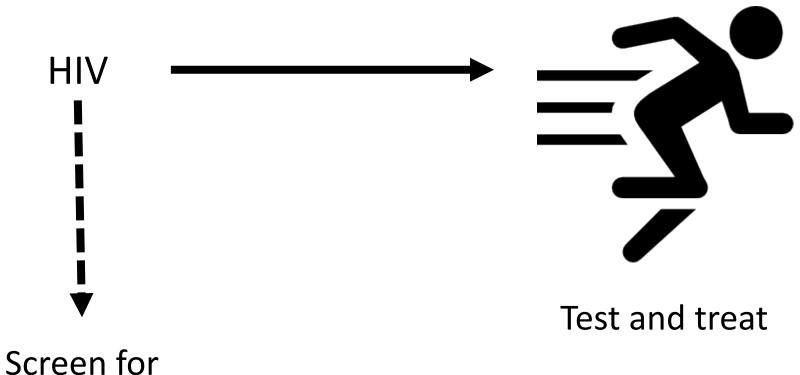
# WHO Guidelines for Management of Advanced Disease



#### Management of advanced HIV disease

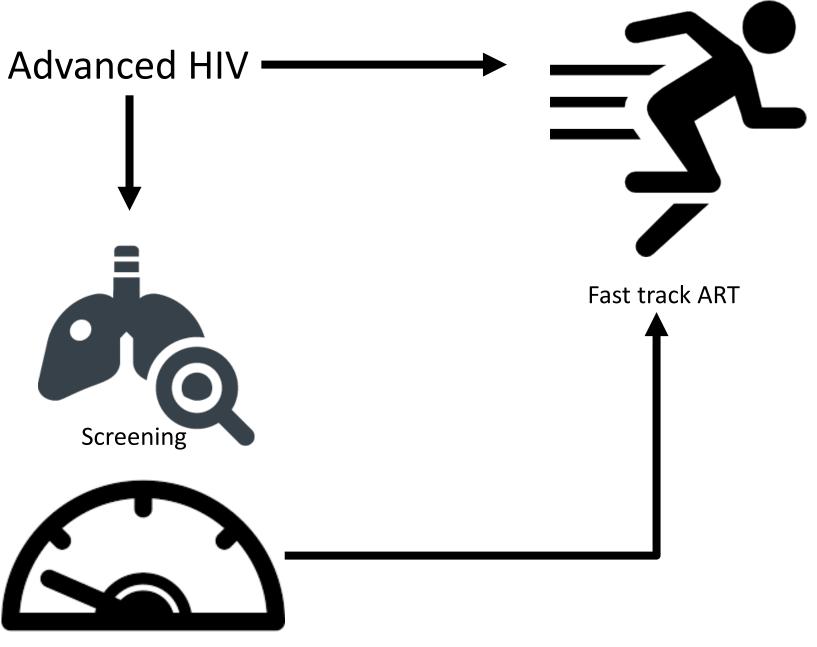
A package of interventions including screening, treatment and/or prophylaxis for major opportunistic infections, rapid ART initiation and intensified adherence support interventions should be offered to everyone presenting with advanced HIV disease.

(Strong recommendation, moderate-quality evidence)



advanced disease

# Patients with advanced HIV require differentiated care



Treat serious infections

# DSD for Patients with Advanced HIV Disease

- ART-naïve, late presenters, clinically well
- ART-naïve, late presenters, clinically unwell
- ART-exposed, treatment failure/LTFU, clinically well
- ART-exposed, treatment failure/LTFU, clinically unwell
- Resistance?

### The Enduring Challenge of Advanced HIV Infection

Nathan Ford, M.P.H., Ph.D., and Meg Doherty, M.D., Ph.D.

- In the REALITY trial, almost half the patients with a CD4+ count of fewer than 100 cells/mm<sup>3</sup> (the cut-off value for participation in the trial) had mild or no symptoms (WHO clinical stage 1 or 2 disease)
- This observation serves to highlight the limits of relying on clinical assessment alone to identify HIV-positive patients at high risk for severe disease and death
- It also reinforces the importance of maintaining the capacity to measure CD4+ cells
- In locations in which viral-load testing is available, the CD4+ count is no longer required in order to determine a patient's eligibility for antiretroviral therapy or to track the response to treatment, yet measurement of the CD4+ count remains *essential for assessing the risk of severe disease*, both in patients who newly present for care and in those who return for care after a period of treatment interruption

Ford N and Doherty M. N Engl J Med 2017

Country	СТР	IPT	GXP	CrAg/Fluc	TB LAM
Botswana (2016)		Children only?			
Ethiopia (2014)				In addendum	
Lesotho (2016)					
Malawi (2016)					
Mozambique (?)					
South Africa (2015)					Not in 2015 guidelines, but should be updated
Swaziland (2015)				*	*
Tanzania (2016)				*	
Uganda (2016)					Conditional
Zambia (2016)					
Zimbabwe (2016)					

# Challenges to DSD for Advanced HIV Disease Patients

- Drugs and diagnostic tests are not routinely available in may health facilities
- Drug formulation
- Cold chain requirements
- In country registration of drugs and diagnostics
- Toxicity monitoring
- How will advanced disease interventions be funded, and how much will they cost?

# Acknowledgements

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UNITAID

MSF

### WHO