

# Advanced HIV Disease Update from WHO

Nathan Ford

Dept HIV, Viral Hepatitis and STIs

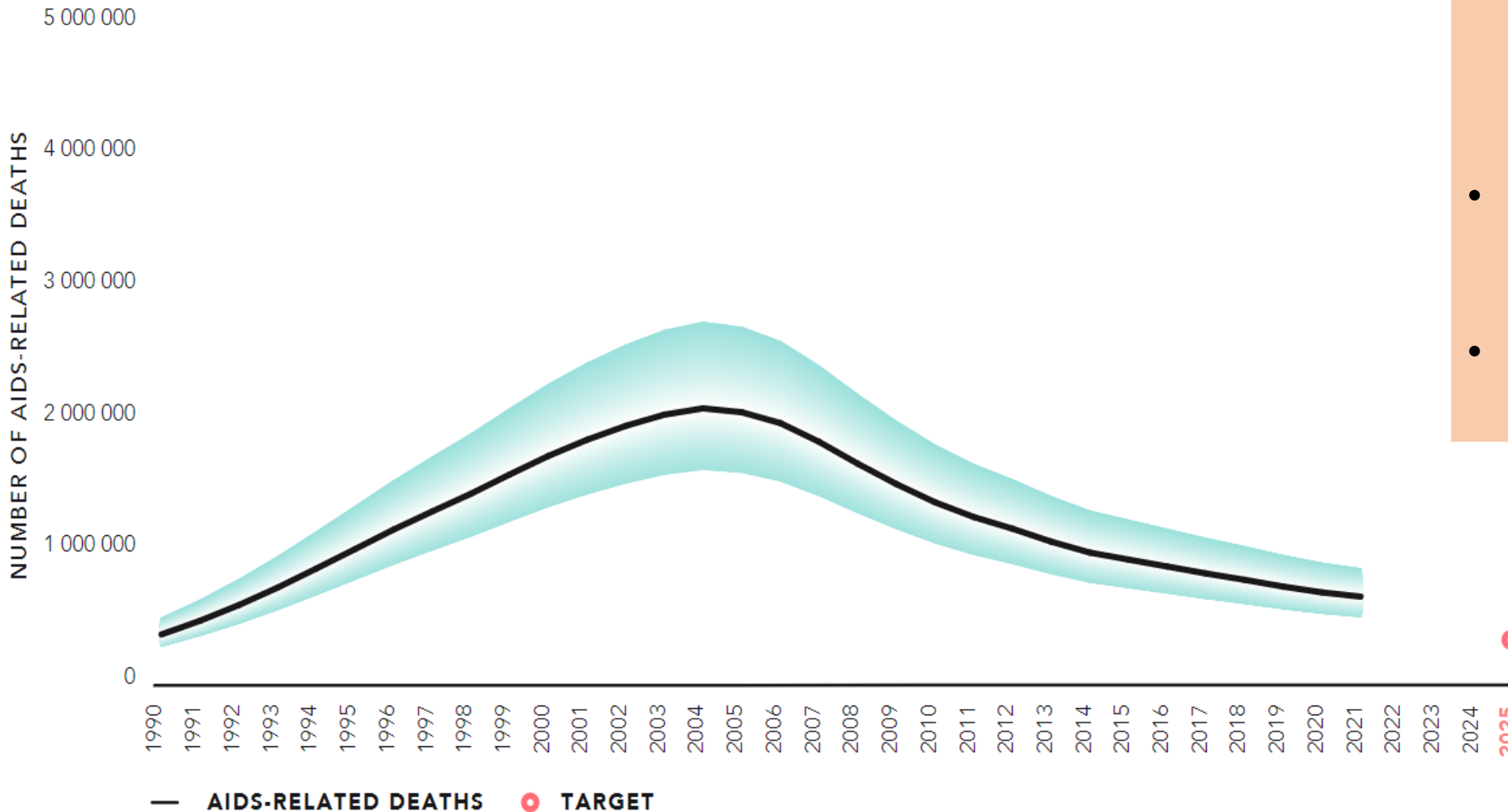
WHO, Geneva

**CQUIN 6<sup>th</sup> Annual Meeting**

December 6 – 9, 2022 | Durban, South Africa



# Slow decline in AIDS-related deaths

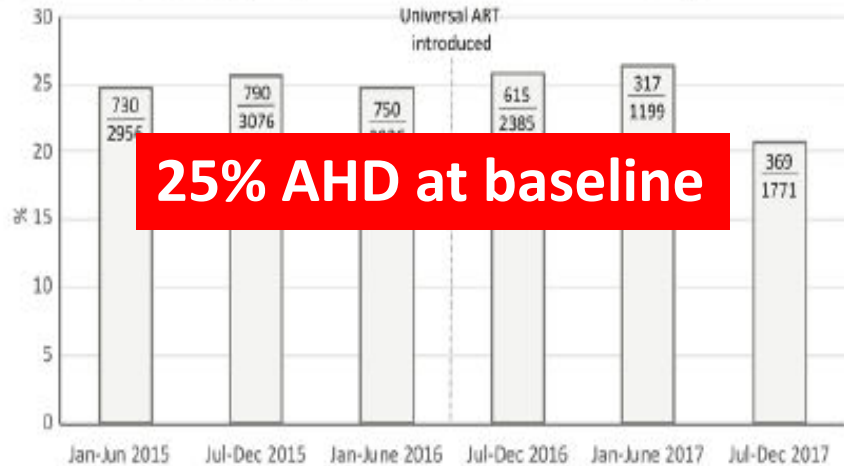


- **AIDS-related mortality remains a significant challenge**
- **650,000 deaths due to AIDS in 2021**
- **East and Southern Africa worse affected**

# Persistence of advanced HIV disease

## Botswana 2015-2018

(c) Percentage of patients with baseline CD4 < 200 cells/ $\mu$ L



**25% AHD at baseline**

## SA & Kenya 2017-2018

Table 4. Baseline CD4 cell counts and stratified by self-reported symptoms and prior treatment status<sup>a</sup>

Baseline CD4 count	Kenya (SLATE I) (N = 221)			South Africa (SLATE II) (N = 273)		
	Total	0 symptom	≥1 symptom	Total	0 symptom	≥1 symptom
Median (IQR)	272 (124, 522)			294 (135, 464)		
<100 cells/mm <sup>3</sup>	21%	6%	14%	18%	4%	14%
≥100 cells/mm <sup>3</sup>	46	14	22	48	10	38
≥200 cells/mm <sup>3</sup>	139	95	44	174	111	63
Number treatment naïve	206			242		
Median (IQR) if treatment naïve	278 (133,525)			291 (136,464)		
Number prior default	15			31		
Median (IQR) if prior default	195 (64, 408)			346 (128, 449)		

**36-37% AHD at baseline**

## Malawi 2017 (Hospital)

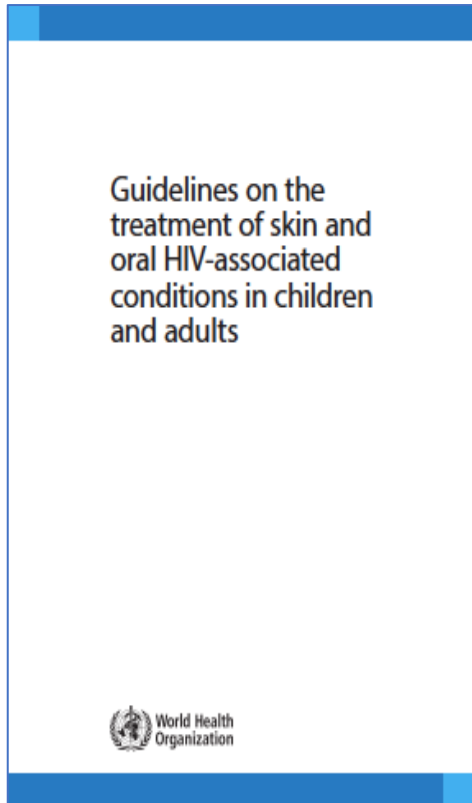
Table 1. Demographic and Clinical Characteristics at Admission of 387 Hospitalized HIV Patients, Malawi, 2017

	Patients, No. (%)
Female	216 (55.8)
Age, median (IQR), y	38 [32-45]
BMI, median (IQR), kg/m <sup>2</sup>	18.4 [16.6-20.7]
CD4 count, median (IQR), cells/ $\mu$ L	178 [51-270]
CD4 count categories	
<100 cells/ $\mu$ L	63 (16.0)
100-199 cells/ $\mu$ L	74 (19.5)
200-349 cells/ $\mu$ L	102 (26.8)
≥350 cells/ $\mu$ L	7
Missing	7
On ART at admission	305 (81.1)

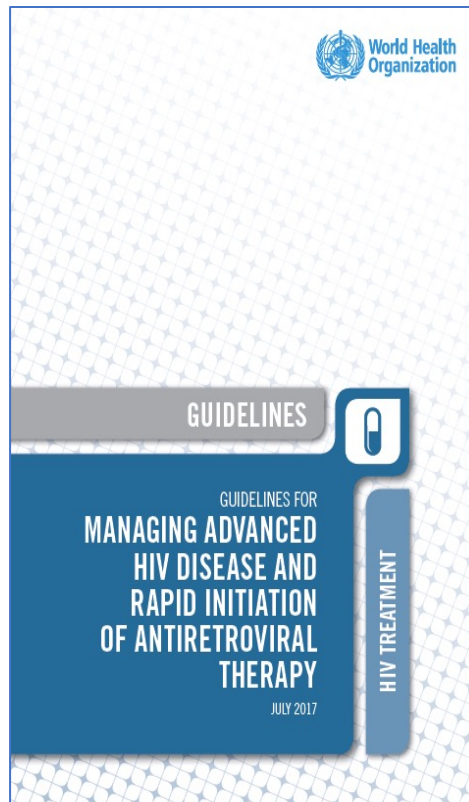
**54% AHD at admission  
81% on ART**

# Advanced HIV Disease: WHO Guidelines

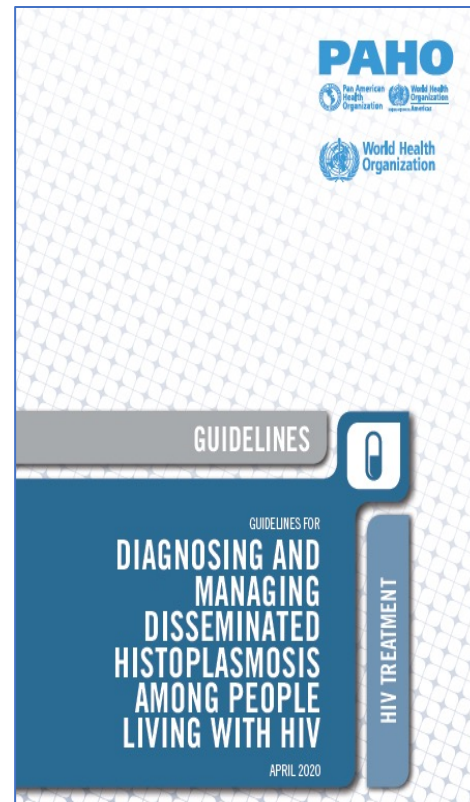
## Skin and oral conditions 2014



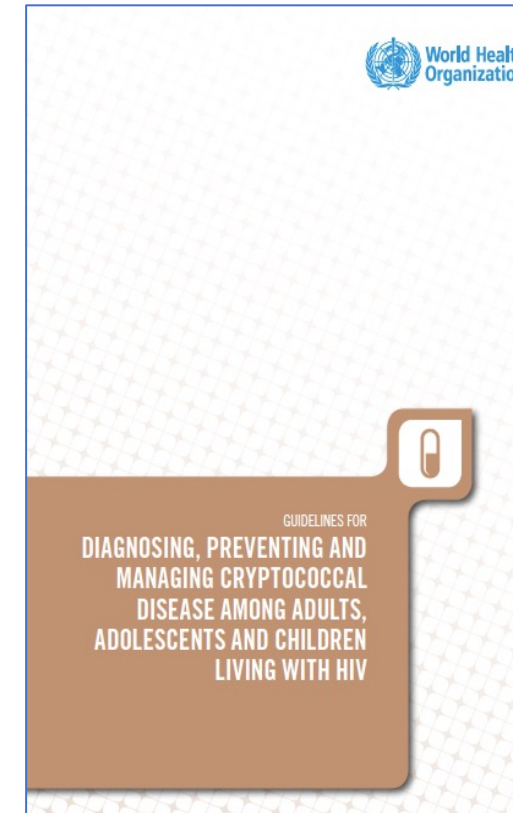
## AHD package 2017



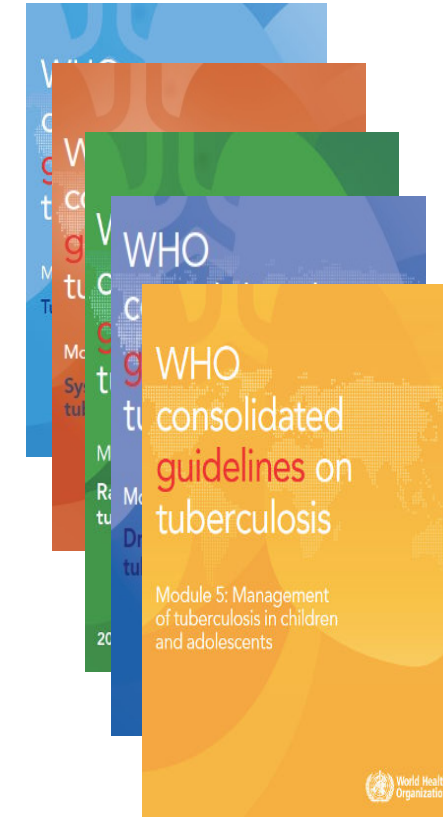
## Histoplasmosis 2020



## Cryptococcal Disease 2022



## Consolidated TB Guidelines



# What's in the AHD Package

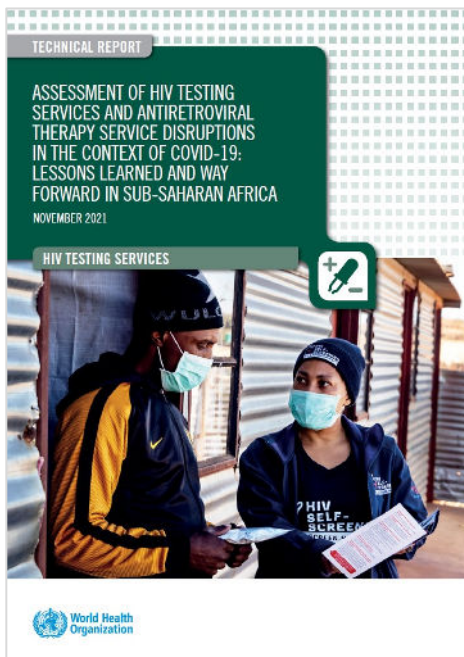
## Requirements

Requirements		
<b>WHEN?</b>	Initial diagnosis Re-engagement	Training and mentorship Follow-up, adherence support
<b>WHERE?</b>	Hospital & peripheral sites according to clinical status	Clear care pathways with access to high-level clinical management when required
<b>WHO?</b>	Doctors, nurses, mid-level workers	Training and mentorship Clear care pathways Clear referral criteria
<b>WHAT?</b>	Package of care for AHD Treatment of specific conditions	CD4 testing Near PoC diagnostics (LF LAM, Gene Xpert, CrAg) Co-trimoxazole, TB preventative therapy (TPT), fluconazole & ART

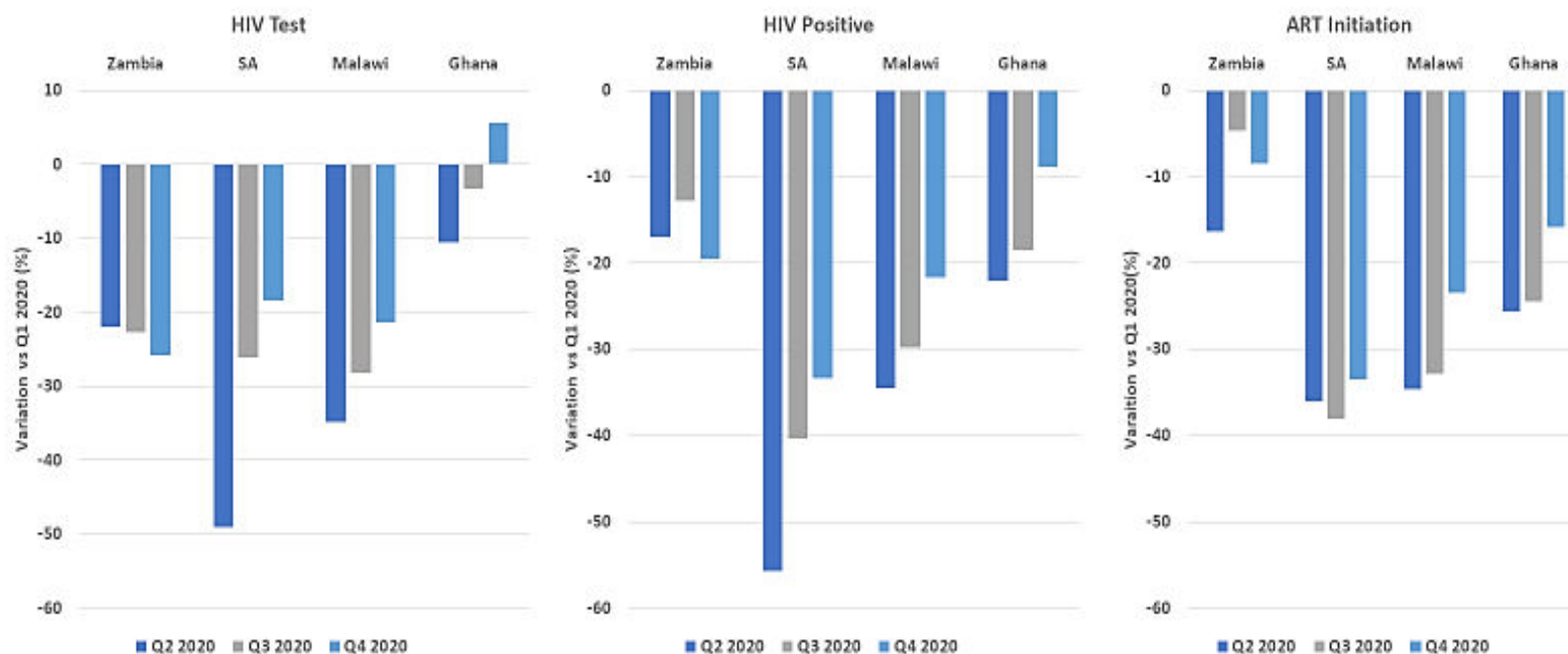




# Impact of COVID-19 on AHD



## HIV Testing – ART Initiation



Source: MOH Zambia, NDOH South Africa, MOH Malawi, MOH Ghana



Source: <https://www.who.int/publications/i/item/9789240039599>

# Impact of COVID-19 on AHD



## HIV Testing – ART Initiation



Reduction in HIV testing and ART initiation in many countries

Need to monitor impact on AHD

Source: MOH Zambia, NDOH South Africa, MOH Malawi, MOH Ghana





# Disengagement and AHD

**Table 1. Demographic and Clinical Characteristics at Admission of 387 Hospitalized HIV Patients, Malawi, 2017**

	Patients, No. (%)
Female	216 (55.8)
Age, median (IQR), y	38 (32–45)
BM	0.71
CD	0]
CD	
<100 cells/μL	141 (37.1)
100–199 cells/μL	63 (16.6)
200–349 cells/μL	74 (19.5)
≥350 cells/μL	102 (26.8)
Missing	7
On ART at admission	305 (81.1)

**54% AHD at admission**  
**81% on ART**

Huerga, OFID 2021

Mirzazadeh, Plos Med 2022

## WHO Recommendation (2021)

HIV programmes should implement interventions to trace people who have disengaged from care and provide support for re-engagement

Study ID	Proportion (95% CI)	% Weight
Alamo (2012)	0.16 (0.12, 0.22)	6.41
Saafir-Callaway (2020)	0.27 (0.21, 0.33)	6.31
Ardura-Garci (2015)	0.45 (0.35, 0.55)	5.82
Chang (2019)	0.50 (0.45, 0.55)	6.41
Udeagu (2018)	0.51 (0.48, 0.54)	6.56

**58% returned to care after tracing**

Udeagu (2013)	0.59 (0.54, 0.63)	6.42
Sharp (2019)	0.60 (0.36, 0.81)	3.94
Rebeiro (2017)	0.63 (0.62, 0.64)	6.62
Tweya (2010)	0.66 (0.63, 0.69)	6.56
Fernández-Luis (2019)	0.70 (0.51, 0.85)	4.71
Tesoriero (2017)	0.71 (0.65, 0.77)	6.32
Lubelcheck (2016)	0.83 (0.66, 0.93)	5.31
Healey (2018)	0.87 (0.66, 0.97)	5.01
Wohl (2016)	0.94 (0.86, 0.98)	6.31
Overall (I-squared = 97.7%, p = 0.000)	0.58 (0.51, 0.65)	100.00

NOTE: Weights are from random effects analysis

Re-engagement contact outcome

# Summary

- Reducing AIDS-related deaths remains a key programme challenge
- The AHD package aims to cover the leading causes within a public health approach
  - Recent guideline updates to support improved prevention, diagnosis and treatment of leading infections
  - Tracing and reengagement
- Important to monitor impact of disruptions and ensure continued scale up of the AHD package and related treatment and care

# Thank you!

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