



PEPFAR

U.S. President's Emergency Plan for AIDS Relief

The PEPFAR Approach to Advanced HIV Disease

Katy Godfrey

Senior Technical Advisor for Adult Care and Treatment, Office of the Global AIDS Coordinator

29 July 2020

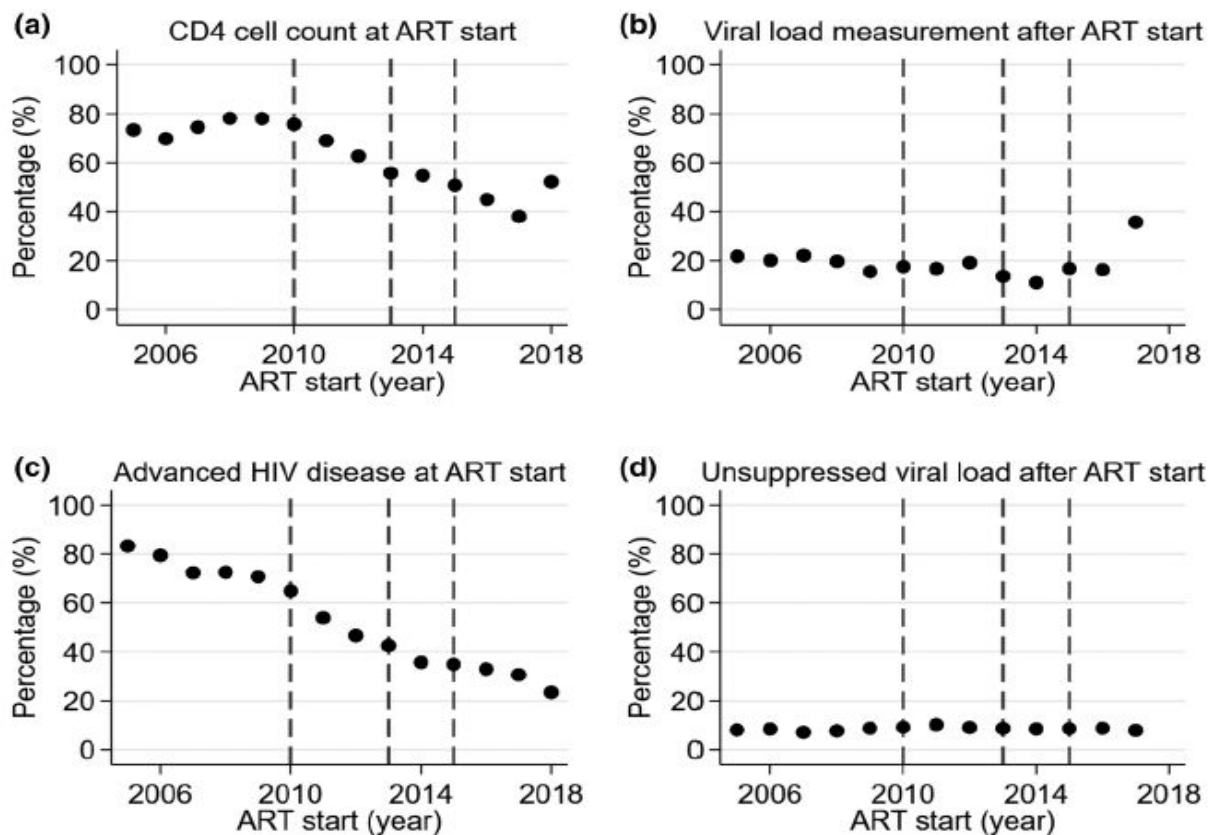
17 YEARS OF SAVING LIVES THROUGH AMERICAN GENEROSITY AND PARTNERSHIPS

PEPFAR's Approach to CD4 Testing

- Supported to identify individuals with advanced disease; not for monitoring response to ART
 - Persistent viremia in individuals older than 5. Persistent viremia defined as documented viremia \geq 1 year.
 - Individuals initiating ART in geographic regions where the documented (or suspected) prevalence of advanced disease is $>15\%$
 - Geographic prevalence can include SNUs, specific populations and high volume sites implementing advanced disease
 - Individuals off therapy for a year or more could potentially be considered a population at risk for advanced disease
- CD4 Testing networks need to be optimized:
 - Health facility and test location inventories; priority on places that have capacity for treating advanced disease
 - Testing volumes



Trends in Prevalence of Advanced Disease



(IeDEA Collaboration, Zaniewski E et al, JAIDS, 2020)

Burden of Disease in PEPFAR countries

Zimbabwe PHIA

AFRICOS

Using the Pefpar mortality as a surrogate marker for advanced disease.

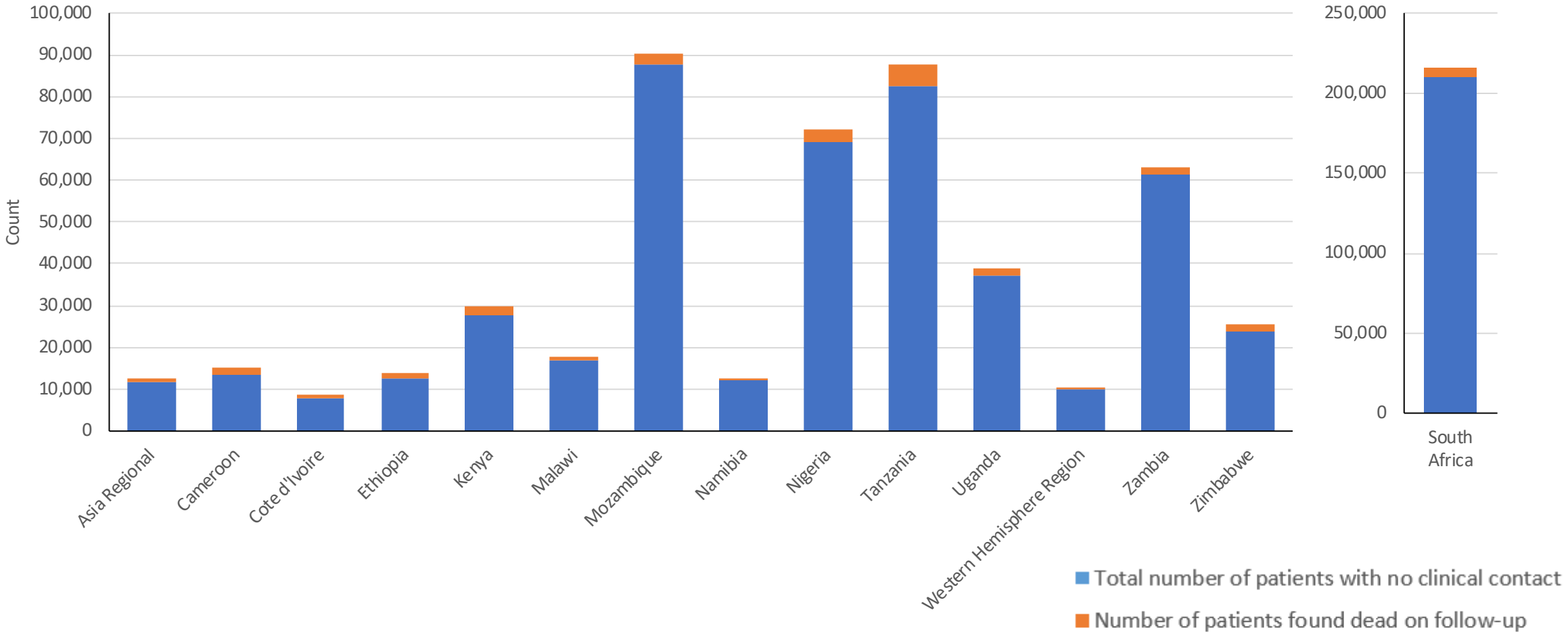
Zimbabwe PHIA 2015-2016

Table 1. Characteristics of ZIMPHIA 2015–16 HIV-positive study population disaggregated by CD4 count.

	CD4 < 200 cells/mm ³			CD4 ≥ 200 cells/mm ³			
	n	weighted%	95% CI	n	weighted%	95% CI	p-value
Sex	542	100.0		2,924	100.0		p < 0.001
Female	252	39.5	(34.5–44.4)	2,003	63.0	(61.2–64.8)	
Male	290	60.5	(55.6–65.5)	921	37.0	(35.2–38.8)	
Age	542	100.0		2,924	100.0		p = 0.11
15–24	41	8.9	(6.0–11.9)	298	11.5	(10.0–13.1)	
25–34	117	23.8	(19.5–28.1)	725	27.2	(25.5–28.9)	
35–49	255	47.1	(42.2–52.1)	1,269	43.5	(41.6–45.4)	
50+	129	20.1	(16.1–24.1)	632	17.7	(16.3–19.1)	

Balachandra et al. 2020

Mortality in Select PEPFAR Countries — 2020 Q2

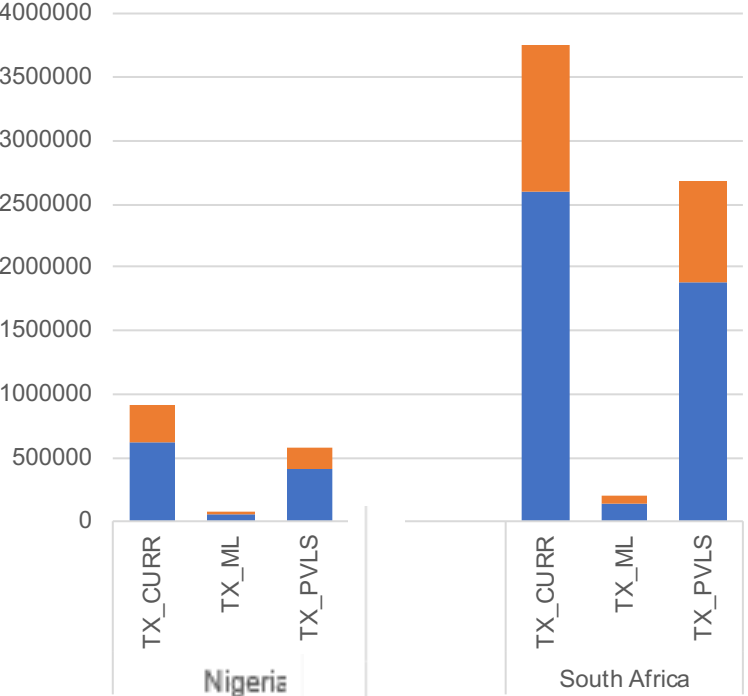
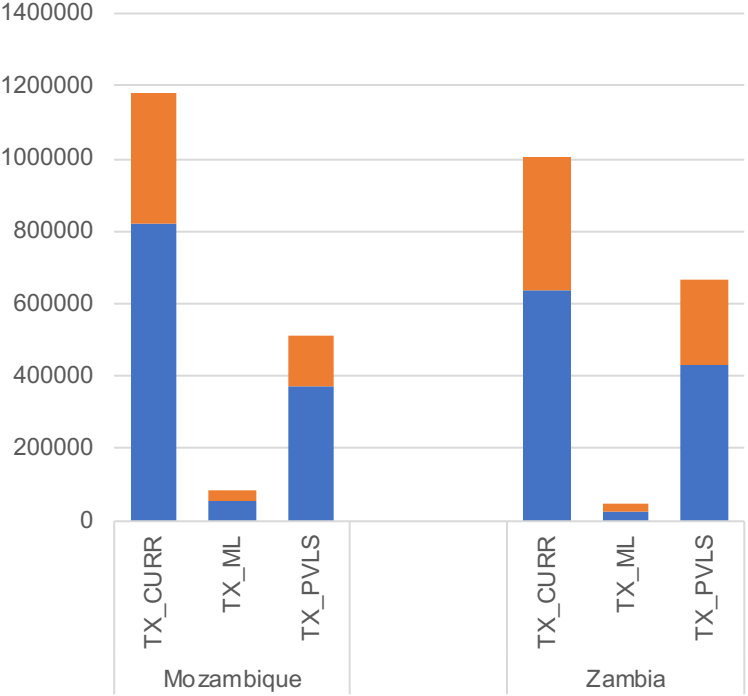
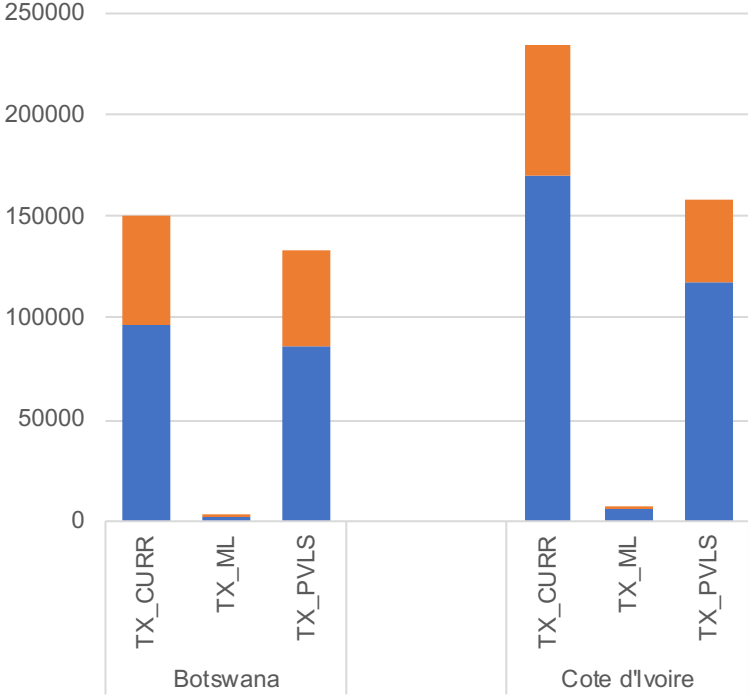


Estimates of mean VLS, and VLS-adjusted mortality proportion

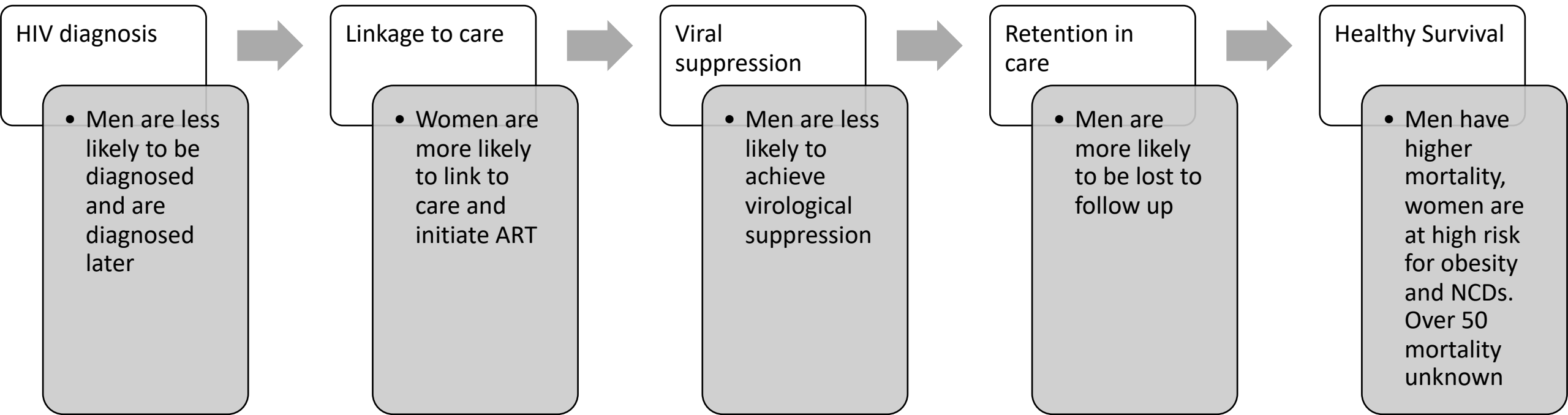
	VLS [†]				Mortality [‡]					
	n	N	Model 1 ^a VLS%		n	N	Model 2 ^b Mortality per 1000 persons		Model 3 ^c VLS-adjusted Mortality	
			Estimate	95% CI			Estimate	95% CI	Estimate	95% CI
Country										
Angola	21,924	29,259	75.3	69.2, 81.5	35	22,961	1.58	0.70, 3.56	1.11	0.46, 2.64
Botswana	282,699	287,792	98.7	96.3, 1.01	165	154,413	1.30	0.91, 1.84	2.03	1.24, 3.32
Cote d'Ivoire	301,129	374,083	80.7	78.8, 82.6	1,371	253,799	7.67	6.41, 9.18	6.20	4.89, 7.88
Mozambique	850,654	1,040,901	81.7	80.7, 82.7	6,398	1,037,320	8.19	6.65, 10.09	6.93	5.44, 8.83
South Africa	4,859,363	5,198,880	93.9	93.4, 94.5	17,362	4,586,139	5.73	4.50, 7.30	7.30	5.37, 9.91
Zambia	1,053,868	1,172,926	90.5	89.5, 91.5	4,036	935,829	5.05	4.05, 6.31	5.73	4.48, 7.33
Age group										
15-49	5,859,888	6,488,701	85.1	83.9, 86.3	20,857	5,857,818	3.16	2.62, 3.82	2.96	2.43, 3.60
50 and over	1,509,749	1,615,140	88.5	87.1, 89.9	8,510	1,132,643	4.91	4.03, 5.97	5.38	4.35, 6.65
Sex										
Male	2,298,670	2,554,641	85.7	84.4, 87.0	13,877	2,244,331	5.08	4.19, 6.17	4.90	4.03, 5.97
Female	5,070,967	5,549,200	87.9	86.7, 89.1	15,490	4,746,130	3.05	2.52, 3.69	3.25	2.66, 3.96



Sex Differences in Mortality in Select PEPFAR countries — 2020 q2



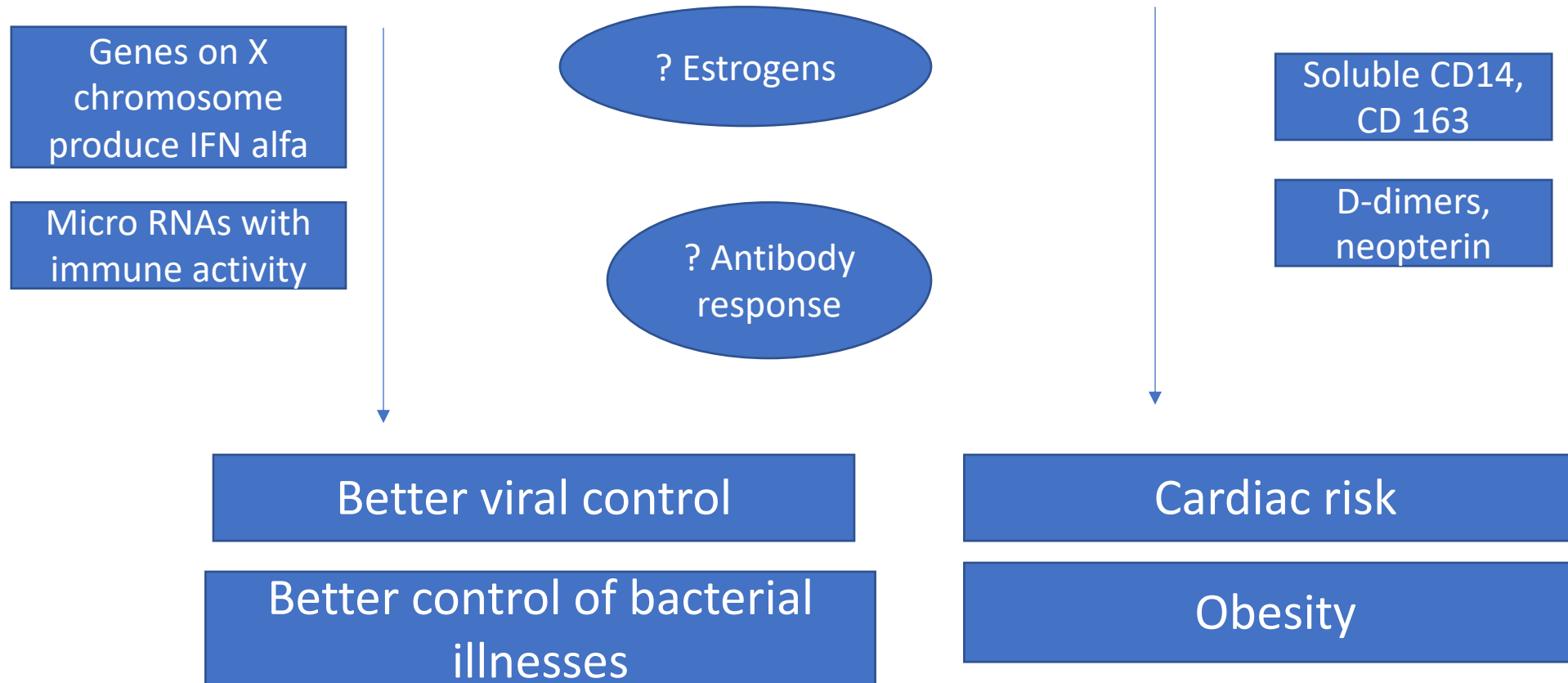
■ Female ■ Male



Men are less likely to engage in care, present to care late and have greater rates of virologic failure, loss-to-follow-up, higher rates of AIDS-defining illnesses: Predisposition to earlier mortality, HIV-related mortality

Women are more likely to be diagnosed and retained in care

Increased inflammation and immune activation



Interventions to reduce mortality

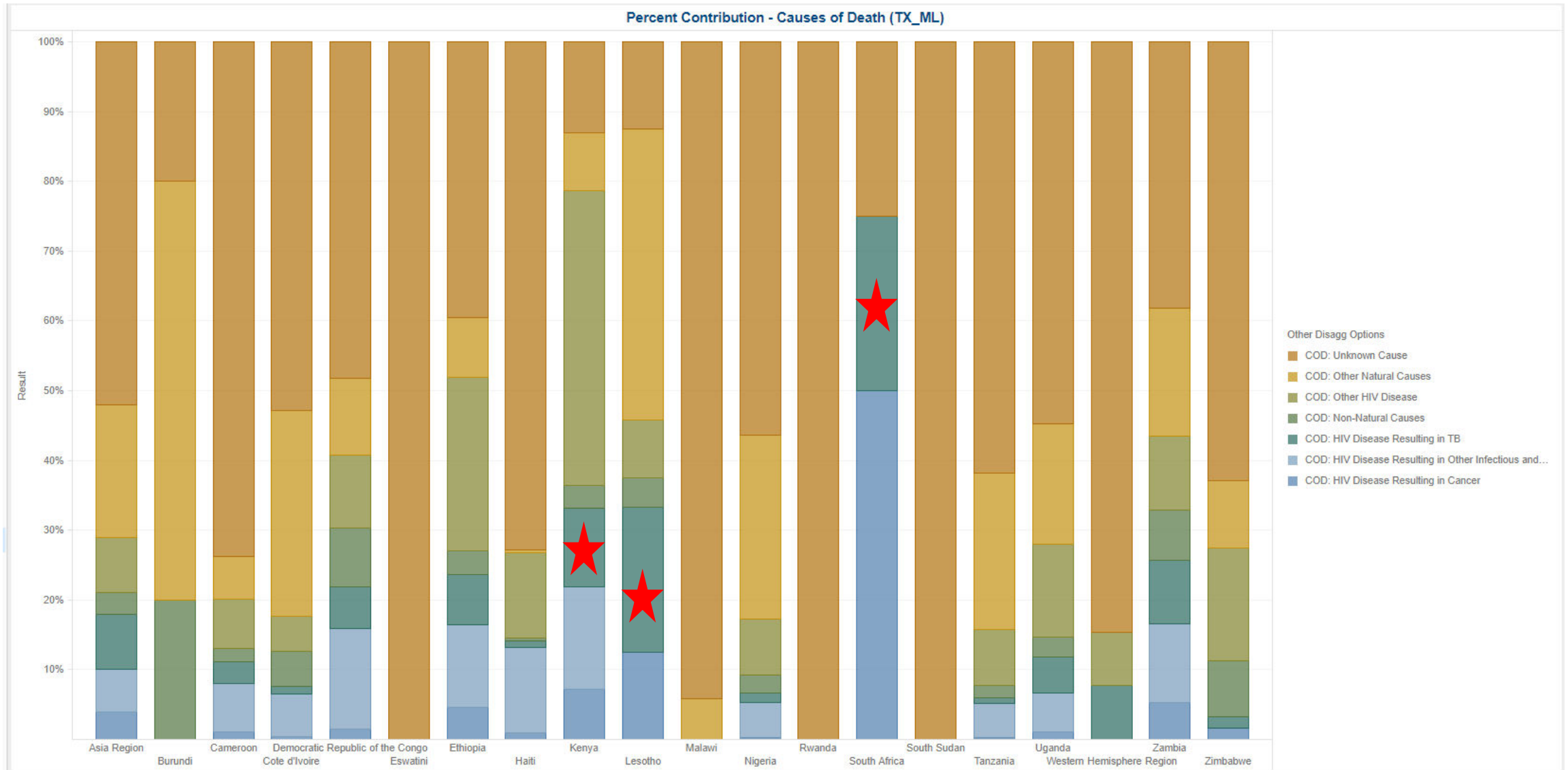
Rapid initiation of ART in the absence of contraindications

Cotrimoxazole

TB action

Cryptococcal action

TB Still Plays a Major Role in HIV Mortality



In the context of COVID-19, PEPFAR is firmly focused on



Ensuring continuity of care for people living with HIV

1



Leveraging PEPFAR-supported health systems and infrastructure

2



Reducing exposure of staff and HIV clients to health care settings that may be overburdened and/or sources for potential exposure to COVID-19

3



Providing flexibility for PEPFAR programs in how to optimally serve our HIV clients in areas affected by COVID-19

4

PEPFAR
U.S. President's Emergency Plan for AIDS Relief



Advanced disease in the setting of COVID-19

Should evaluation of newly diagnosed clients for advanced disease continue during the COVID-19 pandemic?

Yes. Extant activities for the evaluation and management of advanced disease in clients newly diagnosed during the COVID-19 pandemic should continue.

Other interventions in our guidance:

- Streamlined access for individuals with advanced disease
- Multimonth dispensing: policy changes allowing individuals with advanced disease to access MMD
- Separation of drug delivery from clinical care.
- Enhanced infection protection and control
- <https://www.state.gov/pepfar/coronavirus/>

Acknowledgments

Danielle Fernandez

Ikwo Oboho and the Advanced Disease unit at CDC Atlanta

Hammad Ali

PEPFAR Interagency Short Term Task Team on Advanced Disease