ART Programming in Mozambique in the Time of COVID-19

CDC Mozambique

July 8, 2020



Overview

- Status of the HIV epidemic before Covid-19
- Epidemiology and Public Health Response to Covid-19 in Mozambique
- Advancing HIV services in the setting of COVID
- Technical Area Considerations
 - Testing
 - Care and treatment
 - MCH
- Conclusions

Status of the HIV Epidemic Before Covid-19

Mozambique: Second Largest HIV Epidemic, Severe Structural Challenges

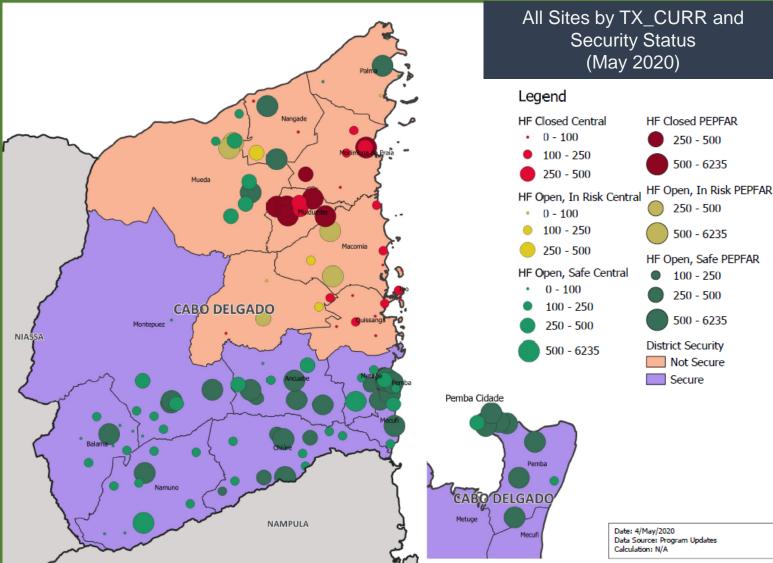


- Population 32.5 million
- 2.3 million PLWH, HIV prevalence 13.2%*
- 2015 Human Development Index ranked Mozambique 180 out of 187 countries
- World Bank estimates 60% of Mozambicans in 2014 lived on less than \$1.25 per day
- 1.5% of adult women reached secondary school education, 6% of adult men**
- Gender Inequality Index 2017 ranked Mozambique 138 of 155 countries

* Immunization, Malaria and HIV/AIDS survey 2015

** 2017 Census, Mozambique

Insecurity in Northern Mozambique Undermines Progress



The Emergence of Violent Extremism in Northern Mozambique

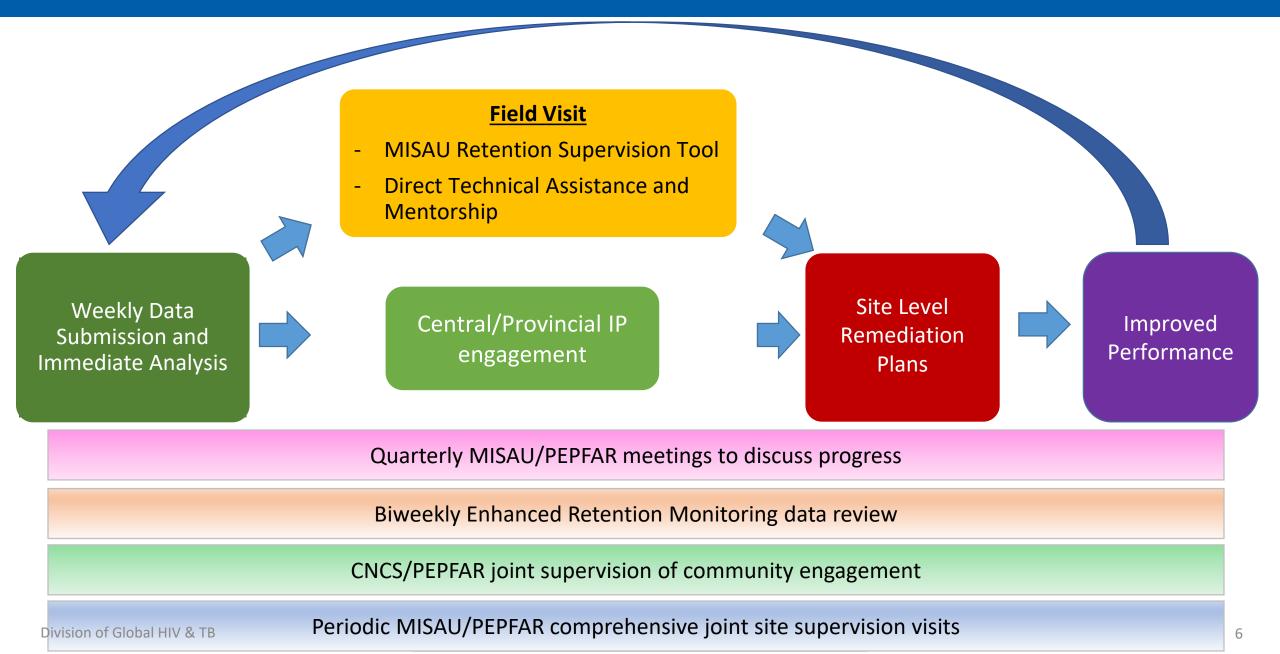
Also available in: Français | Português

By <u>Gregory Pirio, Robert Pittelli, and Yussuf Adam</u> March 25, 2018

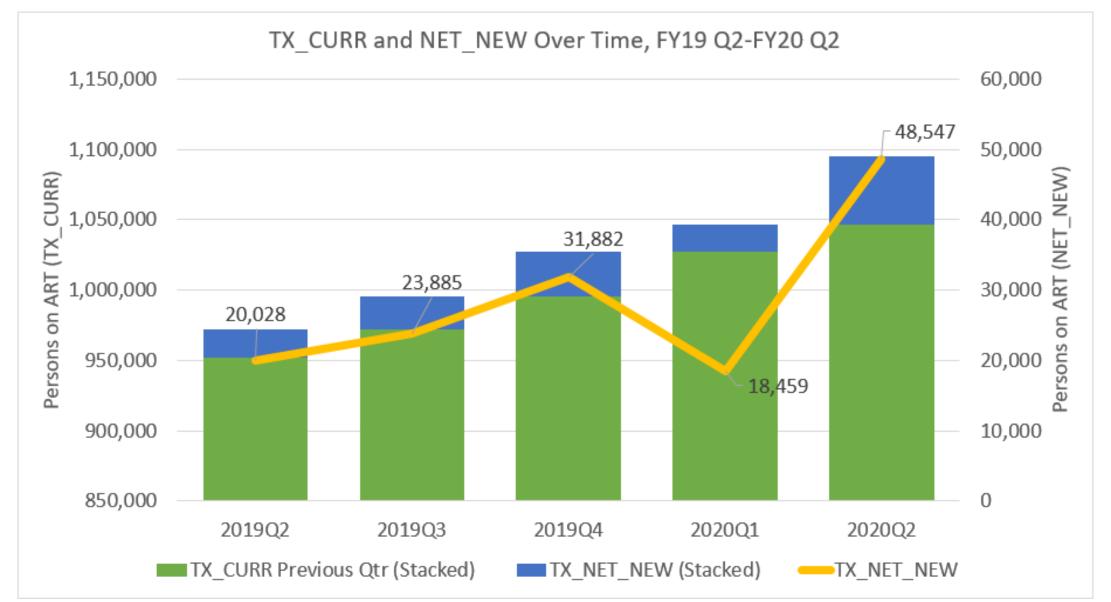
The emergence of a new militant Islamist group in northern Mozambique raises a host of concerns over the influence of international jihadist ideology, social and economic marginalization of local Muslim communities, and a heavy-handed security response.



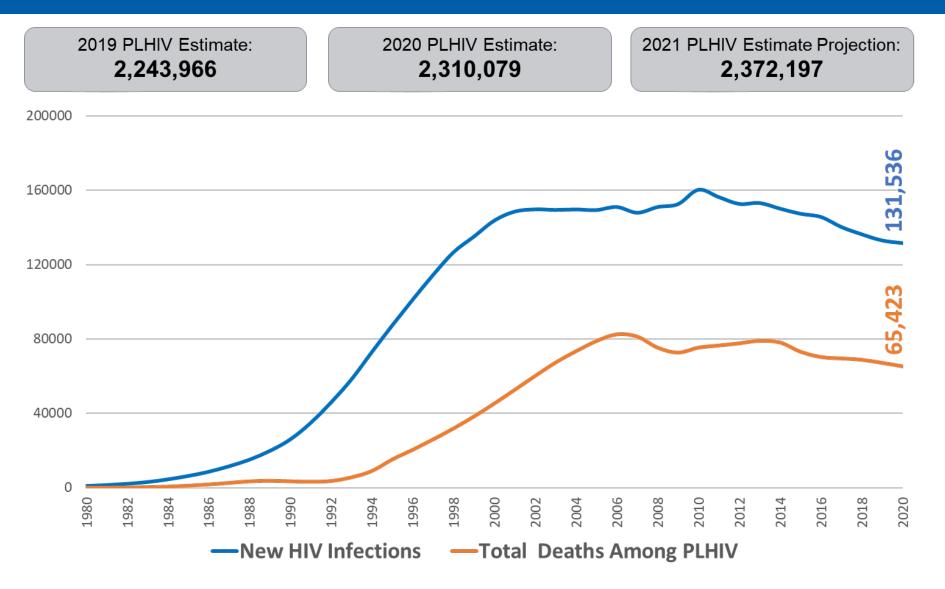
Granular Site Management in Mozambique – AJUDA Strategy



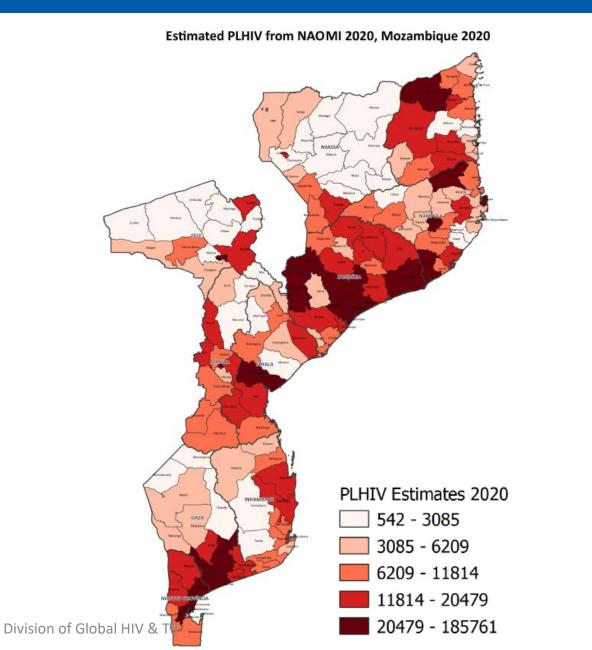
Strong TX_NET_NEW Growth at AJUDA Sites



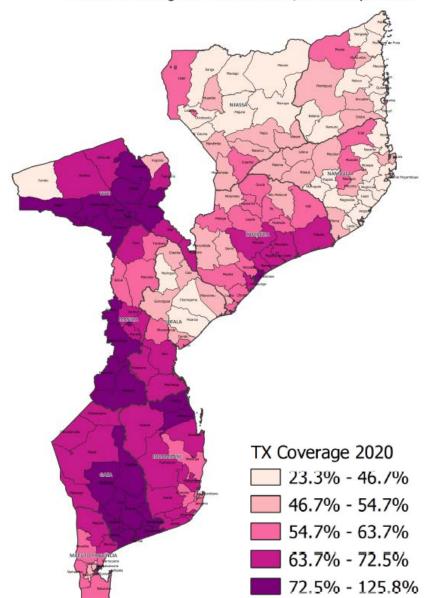
Decreasing HIV Incidence and Mortality in Mozambique



PLHIV Disease Burden and ART Coverage – Long Way to Go

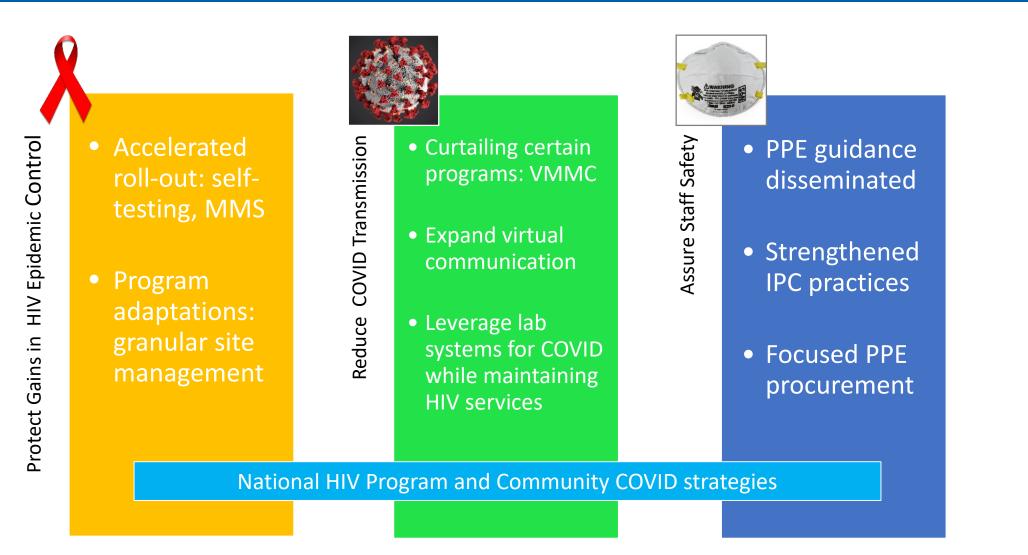


Treatment Coverage from NAOMI 2020, Mozambique 2020



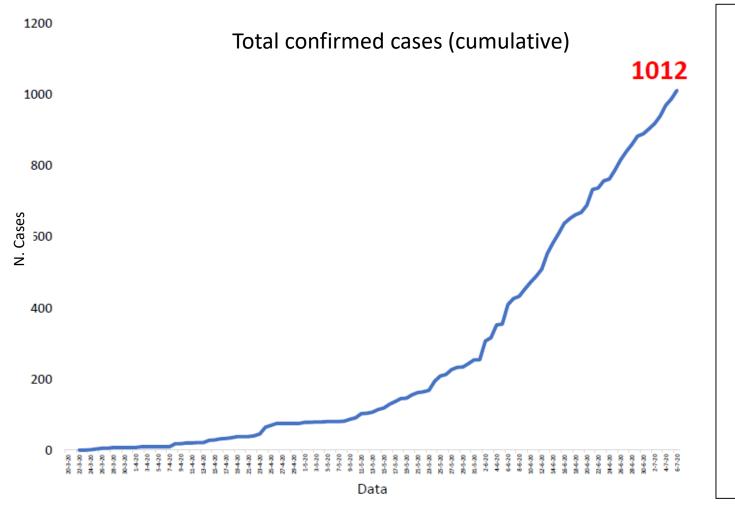
9

Moving Forward Despite COVID



Epidemiology and Public Health Response to Covid-19 in Mozambique

Mozambique COVID Epidemic Still Growing



Outlook

- Rising cases but overall numbers still low
 - 8 deaths reported to date (0.2 deaths per 1 million inhabitants)
 - Two provinces with confirmed community transmission; likely to occur in at least two others
 - Case severity: 55% asymptomatic; 37% light symptoms; 8% moderate

Challenges

- Supply chain constraints on testing and PPE
- Limited compliance with State of Emergency and prevention measures

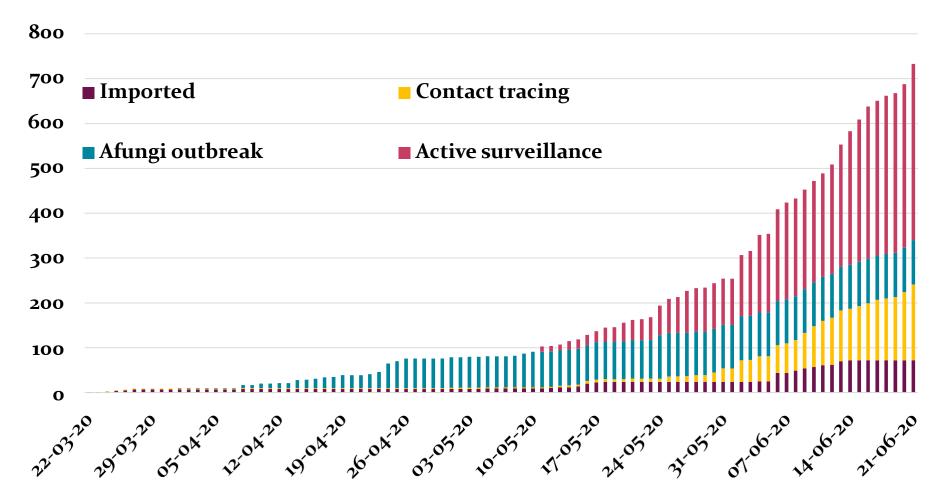
Overall Epidemiologic Situation



REPUBLICA DE MOÇAMBIQUE Ministério da Saúde

Active Surveillance Is Finding Most New Cases

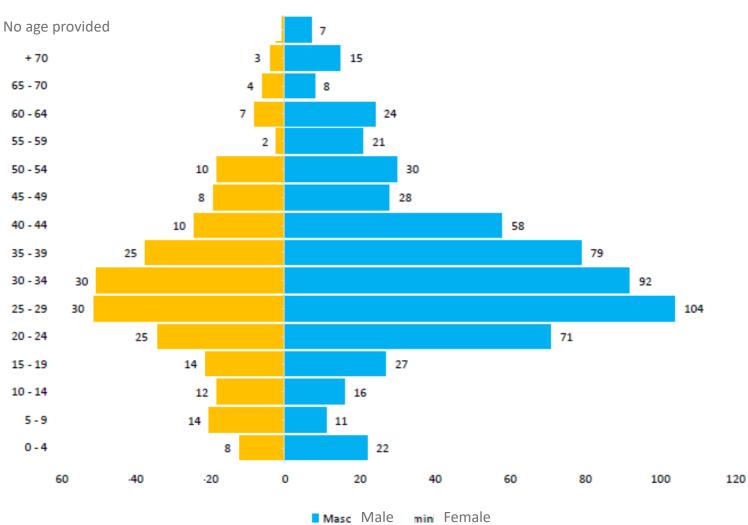
Case source overtime, Mozambique March-June 2020 (n=737)



Young Males Most Impacted

- Males represent
 65% of confirmed
 cases
- Mobility due to economic migration (mining, trucking, agriculture) within and through Mozambi que involve more males than females

Number of COVID Cases by Age and Gender, Mozambique July 2020



Contributing Factors for Community Transmission

Nampula (314 cases; 31% of cumulative cases)

- First region designated with "community transmission"
- Limited access to fresh water
- Historic mistrust of health care workers

Cabo Delgado (286 cases; 28% of cumulative cases)

- Collapse of primary health care system due to unrest
- Nearly 200,000 internally displaced people "resettled" in host community contributing to crowded living conditions



Fonte: MISAU | 16:00 horas de 29/6/2020



5

Results of Predictive Modeling

- Estimated Impact of COVID-19⁺
 - Range of expected cases: ~4.3M-9.2M
 - Range of expected deaths: ~35,000-75,000
 - Estimated date of peak of deaths: ~September-December 2020
- Caveats
 - Mortality is lower than expected; <1% (8/987) as of July 5
 - Decreases in health care service utilization may result in additional deaths
 - Actual impact will depend on government decision-making in coming months
- Results of Mozambique-specific modeling work by the COVID-19 International Modeling Consortium (COMO group) are forthcoming

Surveillance and Research Initiatives

- National Public Health Institute (INS) conducting SARS-CoV-2 seroprevalence survey in two provinces (17-June-20)
- Ongoing mortality surveillance using informal sources (village elders, morgue, funeral homes)
- INS and PEPFAR Mozambique to launch site-level study to characterize impact of COVID-19 on PLHIV, health care workers, and the health care system itself (COP20)
- National Health Observatory conducting monthly review of health service volume, morbidity, and mortality (DHIS-2)



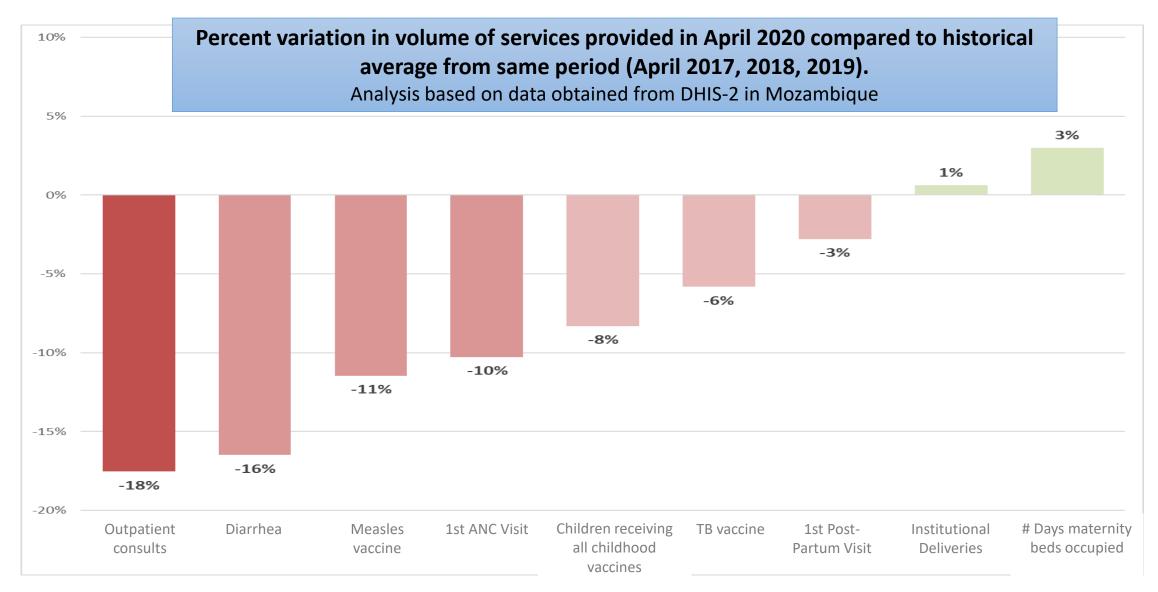
Public transportation hub





Family communal living-Muahivire

Decreasing Contact with Health Facilities, Especially Outpatient Services



Overview of Public Health Response in Mozambique

Early Action	State of Emergency	Outreach	Testing Strategy	Decisive MOH Action		
First case (Cabo Delgado): March 22	"State of Emergency" (Level 3) since April 1	Abundant public health messaging and education messaging	INS ramped up testing rapidly, 35 hospitals in all provinces (viral load and GeneXpert network)	Policy changes, including expansion of 3MDD eligibility		
Rapid comprehensive contact tracing characterized initial response	Extended three times in 30-day increments	Organized daily briefings and development of dashboard for transparent public communication	Developing criteria for prioritized testing allocation	criteria and cessation of community-based HIV activities		

Advancing HIV Services in the Setting of COVID

Guiding Principles for Provision of HIV Services

Protect the Gains

- Expansion 3MDD eligibility
- Community ART distribution, prioritizing LTFU clients
- Site-level checklist for weekly HF assessment to review continuity of HIV/TB services
- COVID-19 Community Response Framework developed with HIV services inclusion
- Daily/weekly TX_CURR and DSD monitoring at OpenMRS sites
- Weekly/bi-weekly corrdination calls between PEPFAR, IP, Province, and District to address issues promptly
- Use of community radio and TV campaigns specific to PLHIV

Healthcare Worker Safety

- Ensure PPE continuity for PEPFAR staff
- Removal of personnel with comorbidities from direct patient care
- Suspension of enhanced weekly ficha mestra monitoring and manual data collection

Reduce Transmission

- Suspension of defaulter tracing and preventive home visits by lay staff
- Patient flow through outpatient units redesigned
- Introduction of block appointments
- Establishment of alternative ARV pick-up points in facility
- AJUDA site visits suspended

Hygiene demonstrations

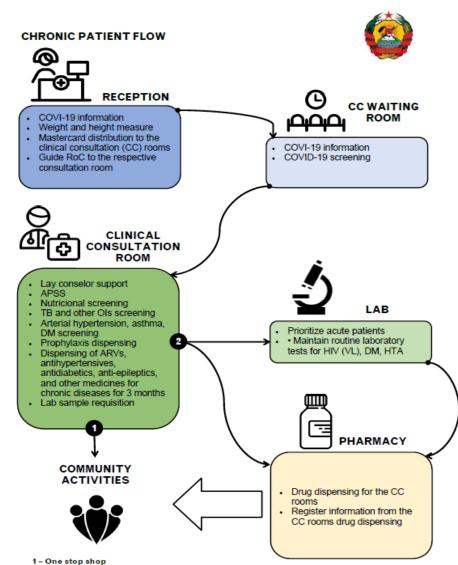
Repurpose Resources

- VMMC PPE and vehicles redirected to HIV outpatient sectors
- Community index case testing and defaulter tracing lay workers assigned to waiting rooms to reinforce social distancing and cough etiquette

COVID-19 Community Response: Maintain Safety While Providing Services

Objectivo estratégico/ Serviços essenciais		Acções a implementar				mplementação/ modalidade	Frequência	Actores comunitários	
Eccontial convicos		 D pnibilizar e promover o uso do preservativo de forma p stente 	do preservativo de forma correcta e			PPE, hygiene, and so precautions for vari			
					Routine householMobile brigade or				
 Disseminate key messages about both HIV and COVID (19) 				TARV,		Community COVII	D-19 case mai	nagement	
	 Provide condoms and lubricant Promete PPEP 								
Screen for HIV (refer to facility for testing) Promote ARV adherence Tuberculose Find and refer defaulters					unity cadres include v trained community health worker				
				RedLay	ers -	Activistas			
		sseminate key messages about DSD	tosse for	· · · ·	itional h				
					ligious leaders				
Division of Global HIV & TB				• Villa	ge heal	th committees		22	

Adapting Clinic Flow to Reduce Exposures



	I. PREVENÇÃO E CONTROLO DE INFECÇÕES											
#	Pergunta	Circunde a resposta correcta				Loc	Local a avaliar ou pessoa a entrevistar (Ponto focal de PCI ou Enfermeiro Chefe da US) Métodos para avalição e pontuação					
1	Os profissionais de saúde foram capacitados sobre manejo de COVID e higiene e prevenção e controlo de infeções incluindo o uso correto de EPI, colocação e retirada nos últimos 6 meses?	s	N	N/A		Para os clinicos inclui a componente de Manejo clinico						
2	Quantos pessoas formadas ? Quais categorias professionais?	Pre Triagem	Triagem	Con. Externa	B. Socorros	Saude Materna Infanti	Laboratório	Outro	Cálculo Total formado em cada linha	# Total de pessoas (Formado e não formado) em cada Categoria Professional	Cálculo % formadas em cada linha	
2.1	Medicos (Número trainado?)											Ē
2.2	Técnicos de medicina (Número treinado?)											
2.3	Agentes de medicina (Número treinado?)											
2.4	Enfermeiro (Número treinado?)											Ĺ
2.5	Tecnico de estomatologia (Número treinado?)											
2.6	Tecnico de Farmacia (Número treinado?)											
2.7	Tecnicos de Laboratorio (Número treinado?)											
2.8	Técnico de Nutrição (Número treinado?)											

2- Normal flow Source: IQUIN DSD presentation, 6/2/20

Other Adaptations

Laboratory										
Viral Load	Gene Xpert			Specimen Transport				Information Flow		
 Central and regional Abbott equipment in use for COVID-19 specimens 	 8 machines available across several provinces Dual use for COVID-19 and TB since June 			 Implementing partner networks (vehicle, drivers) moving viral load and COVID-19 specimens 				 PEFPAR Laboratory Information System automates COVID-19 result return to sub- regional facilities, thus shortening wait times 		
Facilities										
Treatment Centers		PEPFAR	R Re	porting		Mentorship/Technical Assistance				
 MISAU converted ART facilities to isolation centers Computers and paper medical records transferred 		 Manual enhance reporting non-le models, cervica PMTCT/EID) su Paper-based da outside health 	MEF al ca spei ata e	R indicators (DSD ncer, nded extraction occurs		 SIMS and other site level technical assistance by PEPFAR Mozambique staff suspended in all but 2 provinces 				

Effective Public Health Messaging to General Public

() MisauMocambique #EstamosJuntosEmCasa #FicaAtento



www.covid19.ins.gov.ma

COVID-19 **QUAL O DESINFECTANTE CORRECTO?**

Para eliminar eficazmente o vírus use um desinfectante com, pelo menos, 70% de álcool.



www.telessaude.co.mz | www.riscocovid19.misau.gov.mz Ligue grátis Tmcel 82149 ou 1490 | Vodacom 84146 | Movitel 1490 ou consulte *660# | () 84 331 8727

Disinfectant use

Community engagement

MisauMocambique #EstamosJuntosEmCasa #FicaAtenta



COVID-19 **UM POR TODOS**

Chegou o momento de mostrarmos que somos capazes de vencer o novo coronavírus. Ouanto mais cumprirmos com as medidas de prevenção, mais vidas serão poupadas e mais depressa voltaremos à normalidade.



Ligue grátis Tincel 82149 ou 1490 | Vodacom 84146 | Movitel 1490 ou consulte *660# | () 84 331 8727

Source: NASAU Grebentation, 76/25/20

Modes of transmission

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COVID-19 PARTILHA DE OBJECTOS

Evite partilhar objectos de uso pessoal como pratos, copos, talheres, toalhas, lençóis e celulares.



www.telessaude.co.mz www.riscocovid19.misau.gov.mz Ligue grátis Tincel 82149 ou 1490 | Vodacom 84146 | Movitel 1490 ou consulte *660# | 984 331 8727

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COVID-19 CRIANÇAS: USO DE MÁSCARA

As crianças com menos de 2 anos NÃO DEVEM usar máscara.



www.telessaude.co.mz | www.riscocovid19.misau.gov.mz Ligue grátis Tincel 82149 ou 1490 | Vodacom 84146 | Movitel 1490 ou consulte *660# | 984 331 8727

Use of masks

But Also Specifically Geared Towards PLHIV



How to obtain PrEP supplies

Continuation of ANC





Adherence of ART and clinic visits

Reliable sources of information



Technical Area Considerations

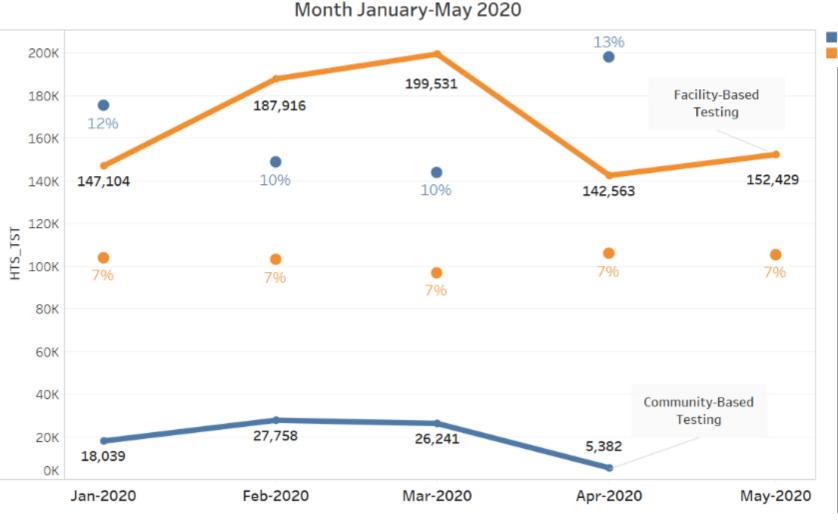
Testing

Adjustments to the HIV Testing Program During COVID

- While HIV testing community-based modalities have been halted, it's critical to optimize all facility-based testing modalities. To achieve that goal Mozambique has been implementing:
 - Facility based proactive screening and HIV testing lead by counselors.
 - Follow up calls and data analysis to ensure that providers are maximizing HIV screening and testing through PICT.
 - Regular calls with IPs to ensure that all MOH adjusted guidelines are being implemented.
- Optimize the facility-based index case testing through distribution of invitations for all sexual partners and other contacts of the index case.
- Implement HIV self-testing distribution.

Q3FY20: Impact of COVID on Community & Facility Testing

Numbers of Tests & Yield (Facility & Community Testing), PEPFAR Early Reporting Sites, by



Community-Based Testing Facility-Based Testing

- Monthly MOH data from enhanced retention monitoring sites indicate steep reductions in community testing due to COVID restrictions, starting in April of 2020.
- Slight increase in facilitybased testing starting in April 2020 (graph does not include ANC testing).

MOH Approved Community Strategy: Resuming Community ICT

Minimal requirements set by MOH:

- IP's need to ensure that only counselors below 55 years of age and with no pre-existing health conditions are sent to work in communities;
- All HTS Counselors must have appropriate PPE;
- HTS Counselors may only work in communities in which they live to minimize the use of public transportation;
- HTS Counselors must coordinate with local leaders & obtain prior approval to ensure safety;
- HTS Counselors must be monitored closely for signs of illness and tested regularly for COVID;

For consideration prior to implementation:

- Prioritize index cases with high viral load, pregnant women and key population;
- ✓ Prioritize HIV+ patients who were recently diagnosed (last 3 months);
- ✓ Prioritize sexual contacts and eligible parents of index cases;
- Prioritize districts with low numbers of COVID cases and high number of HIV cases;

HIV Self Testing: Innovative New Partnership With STAR Initiative

PEPFAR formalizing partnership with PSI (STAR project) and MOH to support community distribution of HIVST

- HIVST distribution to start during COP19 (earlier than planned).
- 160,000 HIVST targeted for community-based distribution over 12 months;
- Target groups: sero-discordant couples, KP, and at-risk adolescents;
- PSI (with MOH) providing technical leadership, HIVST kit logistics, ToT & demand creation materials;
- PEPFAR community counselors will integrate HIVST into ongoing HTS activities.

Next Steps

- Finalizing operational models, logistics, & reporting details of partnership;
- 22 priority districts selected; may select additional for accelerated scale-up;
- Finalizing training package (MOH-led TWG currently doing final revisions);
- Initiate HIVST distribution by end of FY20 Q4;
- PEPFAR exploring options for additional scale-up during COP20, based on timelines and results of initial phase implementation.

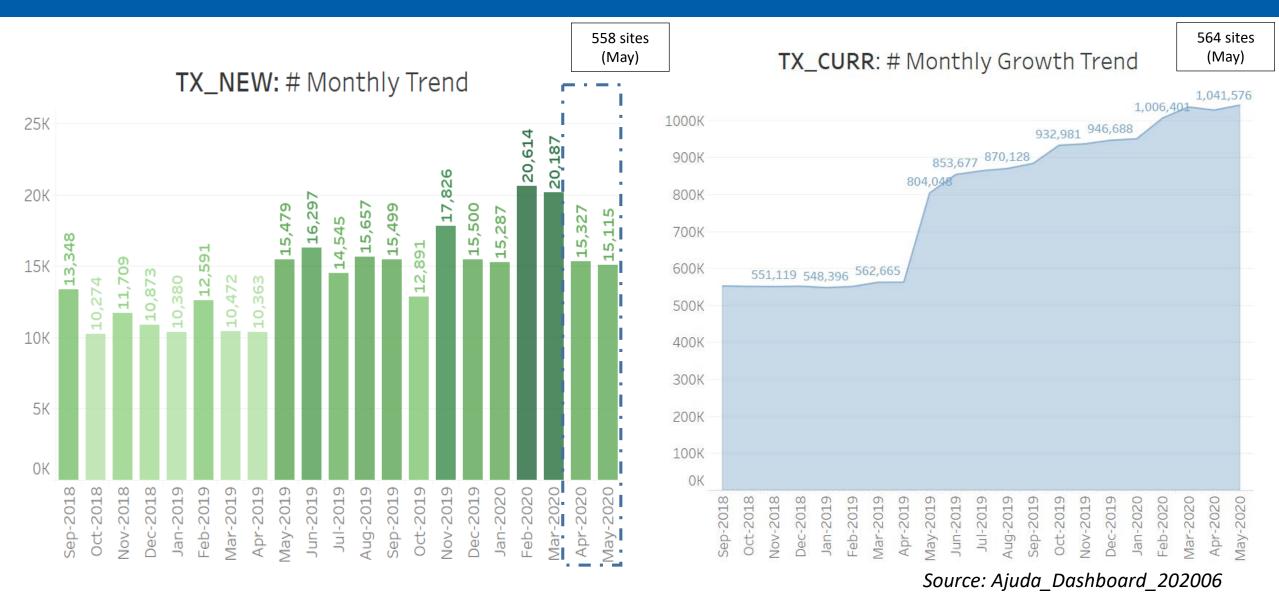




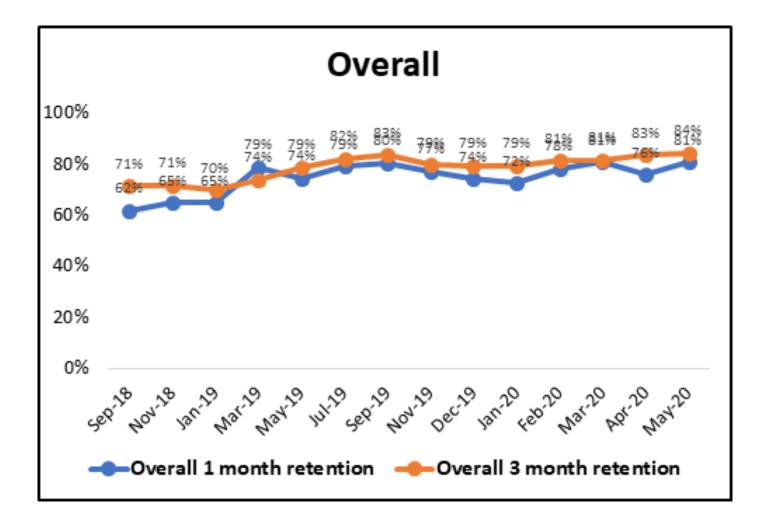
Examples of demand creation and community distribution from STAR project in other African countries

Technical Area Considerations Care and Treatment

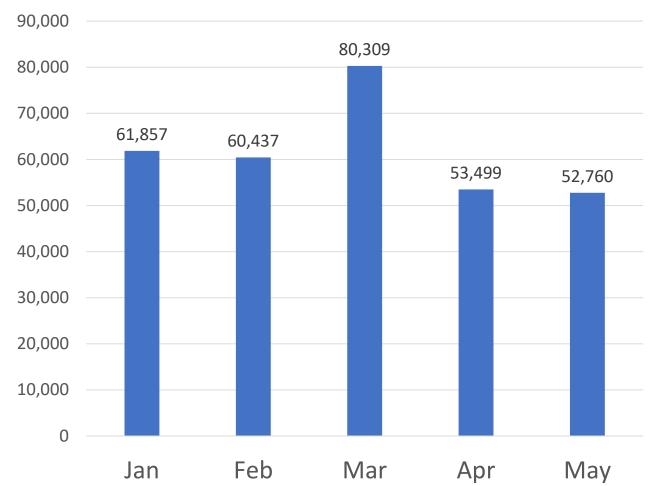
Early Impact of COVID-19: TX_NEW and TX_CURR



Early Retention Maintained at AJUDA Sites (n=628)

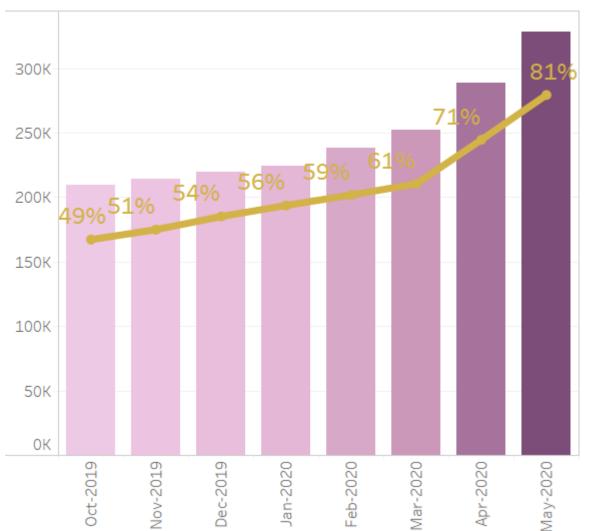


COVID-19 Impact: Decreased Viral Load (VL) Testing



HIV VL Testing Trend, DISA 2020

³MDD Rapidly Expands Following COVID-related Change in Eligibility Criteria



3MDD: # and % Coverage of Eligble TX_CURR

- PEPFAR Mozambique uses an OpenMRS query to estimate coverage of eligible TX_CURR (available as of October 2019)
- 3MDD eligibility criteria for non-pregnant adults made more permissive in April due to COVID-19 (EPTS query not yet changed)

6MDD Update

- Implementation at 11 sites in two provinces (9,162 patients as of May 2020)
- MISAU assessed 6MDD readiness in all provinces at the beginning of Q2 FY20
- 6MDD expansion suspended due to COVID-19

COVID-19 Impact on C&T Programming

Thematic Area	Pre-COVID	Post-COVID	
MDD Eligibility Criteria	Patients are eligible for a DSD model after six months, proven retention, and VL suppression	Patients eligible for a DSD model after three months; No previous retention criteria	
Defaulter Tracing	Implemented through phone calls and home visits	Suspended home visits. Defaulter tracing only through phone calls*	
Psychosocial Support	Consultation every 3 months	For patients with more than 3 months of ARV treatment, psycho-social support (PSS) should happen semi-annually. In sites with phones, counselors can provide PSS through phone calls every 3 months.	
TB policy changes	Monthly dispensing of INH	Launch of INH 3MDD. Adherence and adverse events monitoring through phone calls.	
Community ARV distribution	Only through mobile brigades (Cabo Delgado Province)	Cabo Delgado continued implementation, based on MoH recomendation. Delayed start for other provinces	
Clinical laboratory interface Division of Global HIV & TB	Frequent specimen collection with both road and air delivery to central labs	Fewer viral load collection kits available due to supply chain limitations. Limited air transport available. Patients avoiding health facilities and missing VL due date	

Mitigating Impact in the TB Program

Mitigation measures Impact **Challenges due to COVID-19 TPT Expansion Case Identification TB** Treatment • 3MDD INH approval Reinforce clinician-based Community-based Less intensive clinical follow-up of TB index screening for all patients expedited assessment during TB case contacts (therefore induction and • 3-HP pilot to begin (July) • Rely on APEs for decreases in new TB maintenance community case Inter-agency clinical cases identified) • Clinical algorithm to identification partner TPT forum to Fewer clinical distinguish between exchange best practices consultations means COVID-19 and TB/other Increased facility cough

officer coverage through

community wokers to

etiquette and ask about

rep-purposed

reinforce cough

TPT completion

TPT Focal Point

• IPs required to have

"Site-level TPT Action

Plan" and designated

respiratory disease

Division of Global HIV & TB

fewer new TB cases

identified through health

facility-based screening

49

Technical Area Considerations Maternal and Child Health

COVID-19 Impact on PMTCT Programming

Before COVID-19 During COVID-19 Response April 1st – STATE OF EMERGENCY Monthly ANC appointments Quarterly ANC appointments ٠ No block appointments Implement and scale block spacing of appointments ۲ Implement 3MDD for all PW and for women 3 mo • 3MDD for PLW only after 9 months postpartum ۲ postpartum Ensure VL for PLW, aligned with quarterly ANC ٠ Ensure the implementation of VL for PLW ۲ appointments Continue to prioritize EID services **Prioritized EID Services** ٠ Facility and community-based Mentor Mothers (MM) Facility based MM and remote community support ٠

• MM groups meeting within facility and community

 Suspend MM groups and in-person community-based activities

(telephone and text) platforms wherever possible.

support.

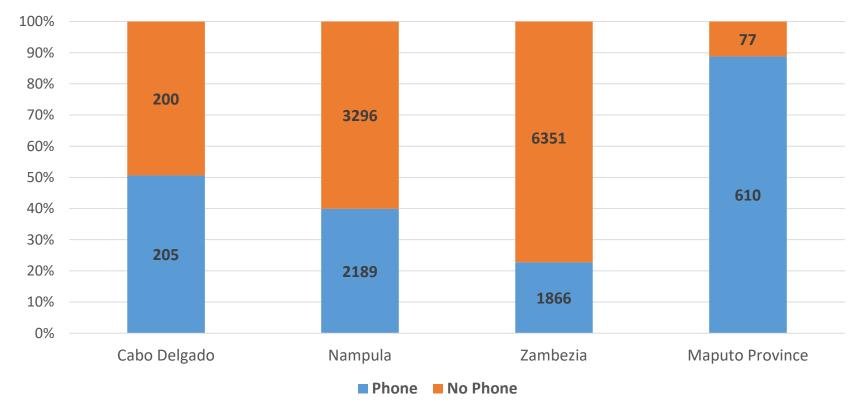


Guia de implementação de Serviços Virtuais no seguimento virtual de Mulheres Grávidas, Lactantes e Crianças menores de 5 anos HIV+ em TARV para resposta ao COVID-19

Mitigating Impact on PMTCT: Mentor Mother Support in the Setting of COVID-19 Replaced community and group support by >3000 mentor mothers with phone calls/text based contact after March 27 MISAU COVID-19 guidance paused community-based activities

Well Designed Calling Tools for Mentor Mothers; Massive Service Coverage Gap*

Phone Access Among PLW Enrolled in M2M Supported MM Program Across 24 Large Volume Health Facilities in Four Provinces



*Presently negotiating resumption of select community based activities by MM and other lay healthworkers with COVID-19 precautions in place

COVID-19 Impact on Pediatric Programming

Before COVID-19

Frequent small shipments of PEDs ARVs formulations, particularly LPV/r

Occasional shortages at central and site level, esp. stocks of LPV/r formulations

MMD approved for clinically stable children > 2 yo, but implemented only for those >30kg on TLD

Phase II of peds ART optimization planned for February 2020

LPV/r formulations exclusively used for treatment of HIV and Hep $\ensuremath{\mathsf{B}}$

Facility and community-based Mentor Mothers (MM) support CLHIV <5

After COVID-19 Outbreack

April 1st – STATE OF EMERGENCY

Disruption in global supply chain for pediatric ARVs

Severe shortages of central and site level stocks of LPV/r formulations (now resolved)

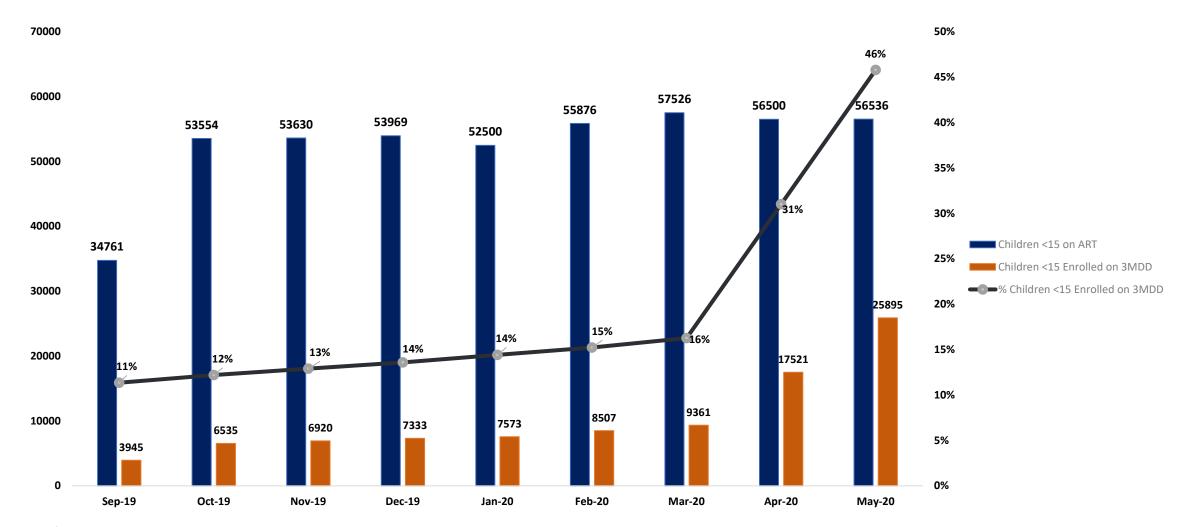
MMD for CLHIV now implemented for children > 2 year for pts on all regimens except LPV/r

Phase II optimization plan postponed

Facility based MM and remote community support (telephone and text) platforms wherever possible.

LPV/r initially proposed for tx COVID patients, now removed from the MOH guidelines; diversion risk remains

MMD Accelerating for Children in Setting of COVID Pandemic (AJUDA Sites Only)*

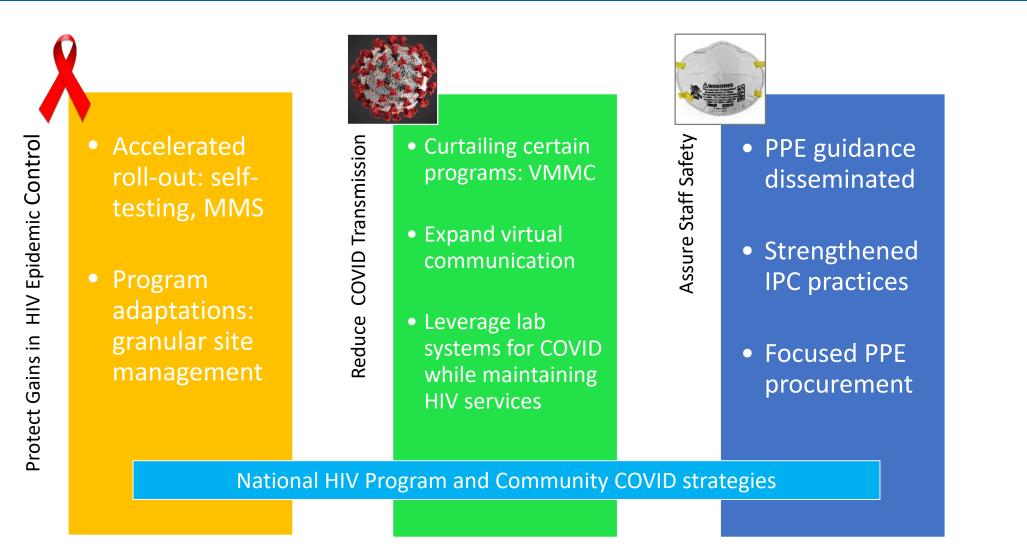


*Denominator in estimate of % coverage includes certain ineligible children, e.g. children on LPV/r formulations

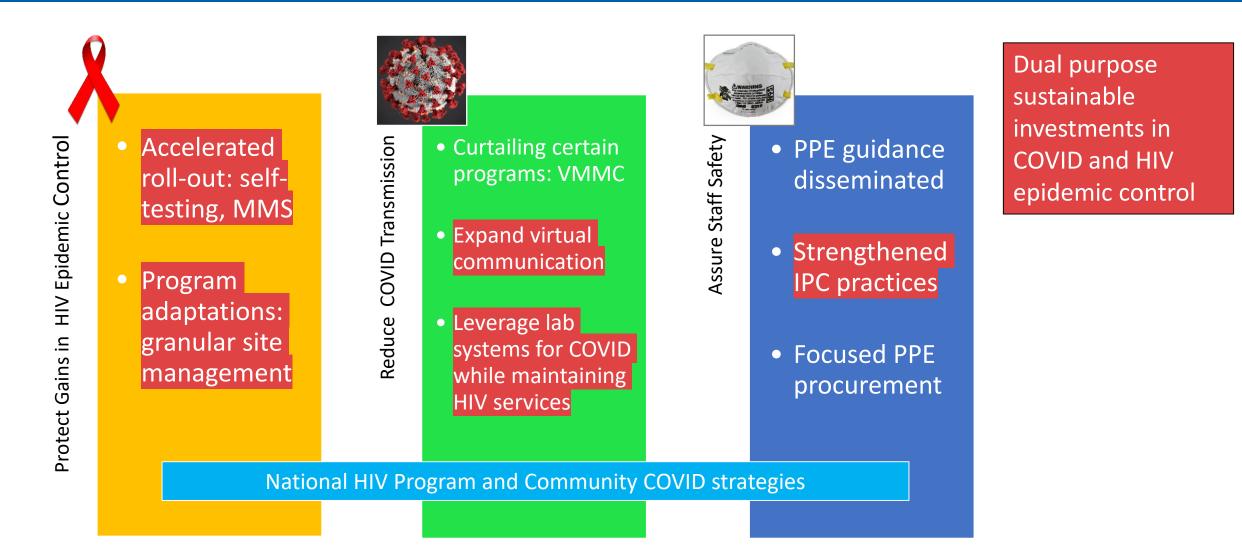


Conclusions

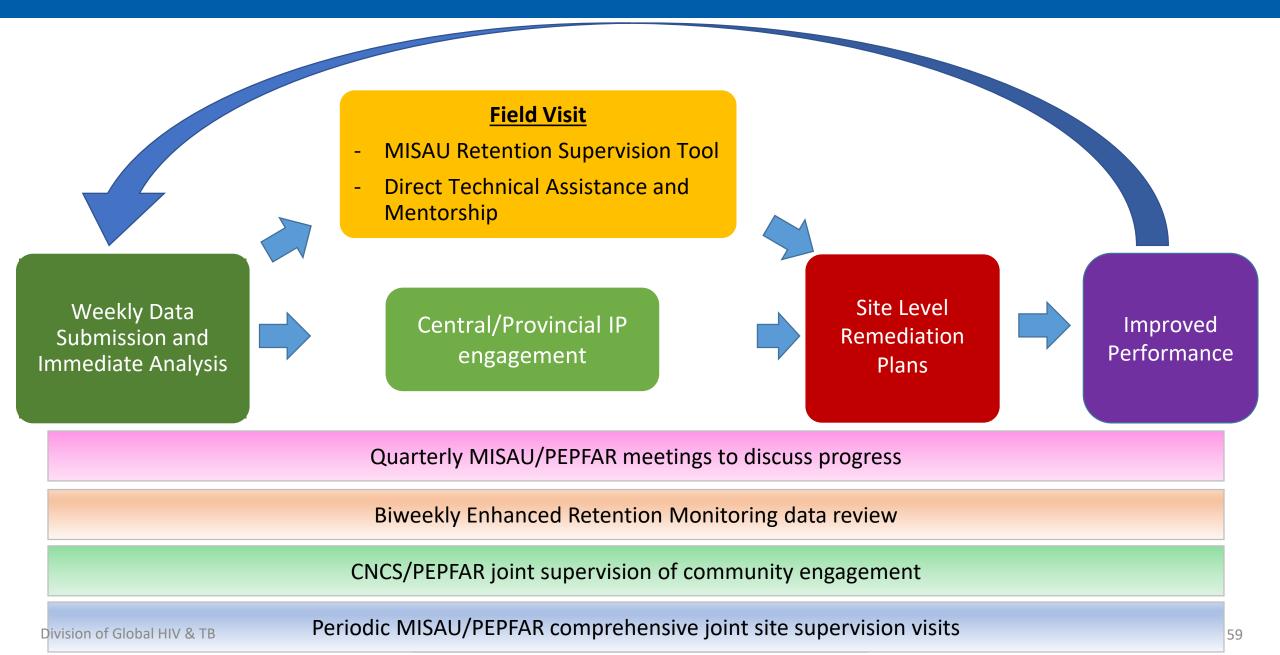
Moving Forward Despite COVID



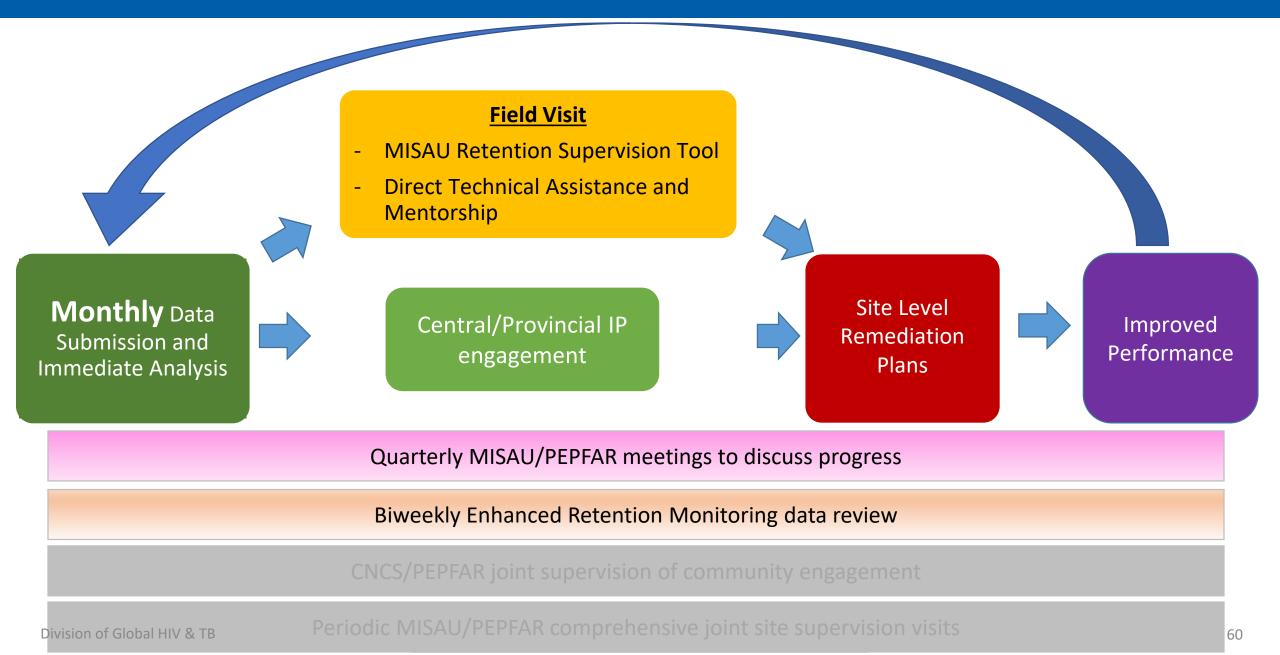
Moving Forward Despite COVID



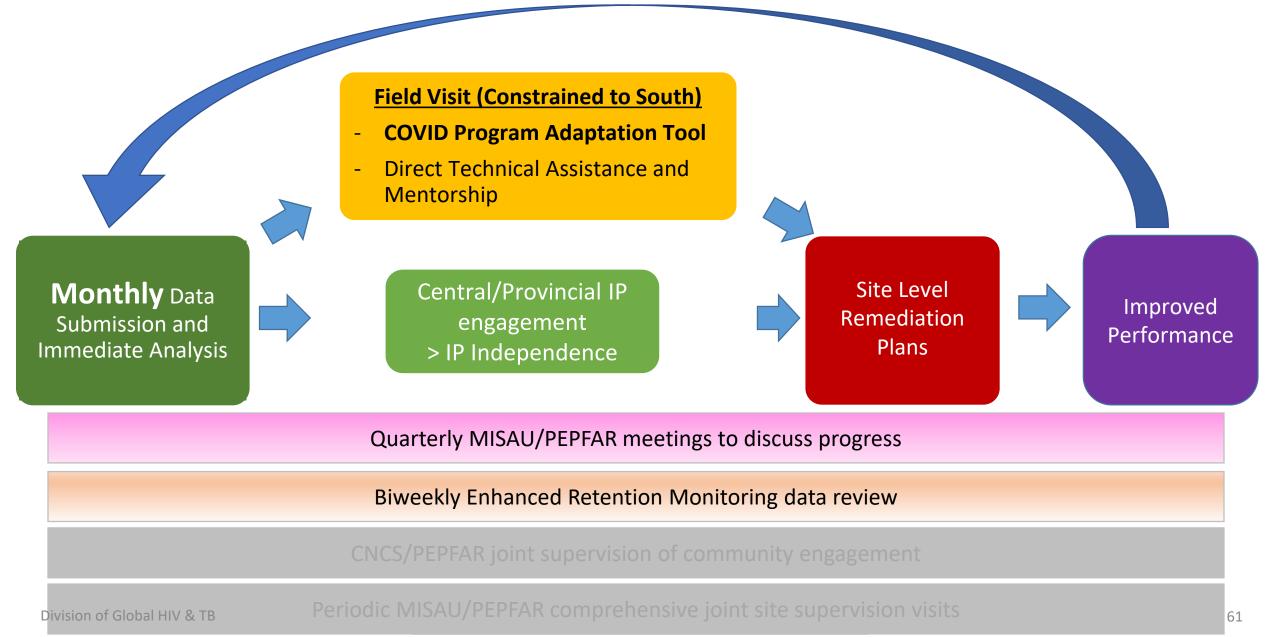
Granular Site Management in Mozambique – AJUDA Strategy



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Granular Site Management in Mozambique – AJUDA Strategy



Broad COVID Program Adaptation Tool Will Guide CQI



REPÚBLICA DE MOÇAMBIQUE

MINISTÉRIO DA SAÚDE

SERVIÇO NACIONAL DE SAÚDE

LISTA DE VERIFICAÇÃO PARA AVALIAÇÃO DE IMPLEMENTAÇÃO DO PACOTE DE SERVIÇOS ESSÊNCIAIS NAS

UNIDADES SANITÁRIAS- CSP NO ÂMBITO DA COVID-19

Província:	Supervisores			
Distrito:				
Unidade Sanitária	1.			
Unidade de Referencia para o COVID? Sim Nao				
Data:	2.			
	3.			
Ponto focal de COVID na Unidade Sanitária/ Director Clínico:				

Section	# Items	% items PEPFAR related
Infection Prevention and Control	16	100%
WASH	7	100%
COVID Case Management	4	100%
COVID Screening	12	100%
Hypertension	12	0%
Malaria	12	0%
HIV	12	100%
ТВ	12	100%
Pharmacy	12	58%
МСН	55	100%
SAAJ	2	100%
GBV	4	100%
Human Resources	4	100%
Referral to COVID Treatment Centers	3	100%
Trauma	2	0%
Leprosy	3	33%
Neglected Tropical Diseases	3	0%
Total	163	87%

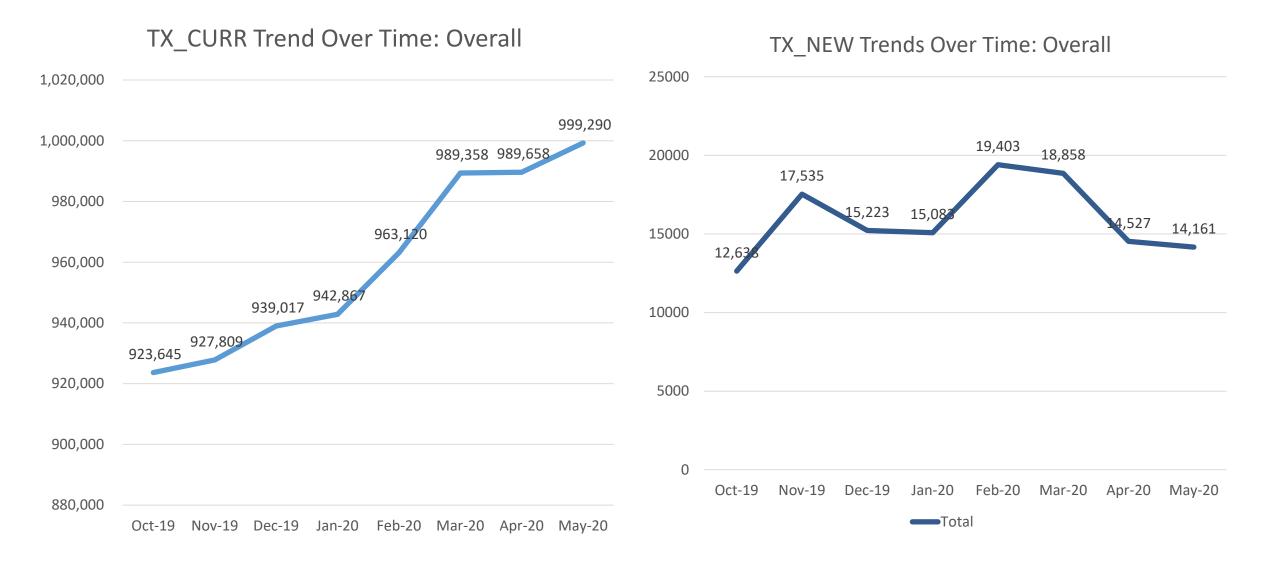
Challenges

- Cessation of community testing undermines ability to reach TX_CURR targets
- Poor documentation of cell phone number in EPTS impairs outreach by phone
 - Niassa (49%); Manica (54%); Sofala (58%); Tete (62%); Gaza (68%); Inhambane (64%); Zambezia (9%)
- Mozambique international travel completely shut down; domestic travel limited
- Supply chain constraints have multiple impacts: PPE, COVID testing, pediatric ARV optimization
- Balancing concerns about staff safety/limiting COVID transmission against programmatic effectiveness
 - To date PPE shortage has been a limiting factor for safe operations

Lessons Learned

- Don't let the current crisis make us forget long-term goals
- Effective coordination between donor organizations and government essential to success
- COVID collaborations offer opportunities to build G2G relationships
- PEPFAR investments to date (mentorship structures, M&E systems, community cadres) support COVID response
- In responding to COVID, we can also make sustainable investments in HIV programming

Early Evidence Hopeful: Post-COVID Increases in TX_CURR Continuing but Slowed



Obrigado



The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.