

Mapping Differentiated Service Delivery Scale Up in PEPFAR-Supported Countries



Isaac Zulu, MD/MPH – February, 2018

PEPFAR Currently Supports 35 National and Regional ART Programs Worldwide

The American people, through the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), support the global HIV/AIDS response through bilateral and regional programs in 65 countries. As a result of this commitment, the U.S. supported life-saving treatment for 9.5 million men, women and children worldwide. In addition, the United States is the largest donor to the Global Fund to Fight AIDS, Tuberculosis and Malaria.

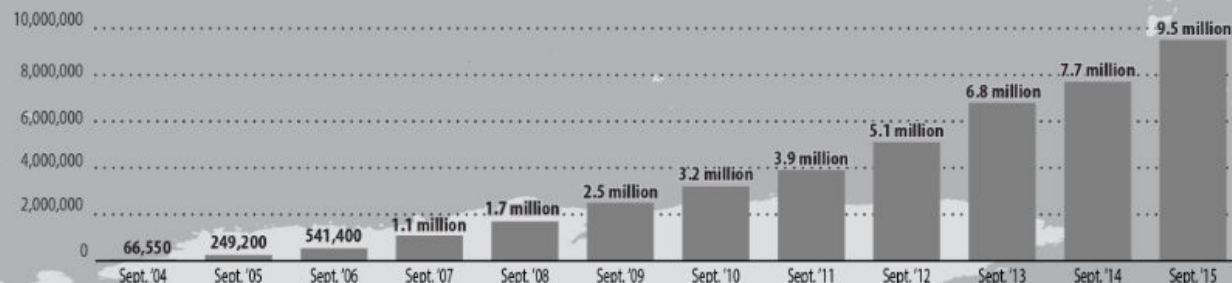


* Included in regional operational plan

PEPFAR countries

- Country operational plans
- Regional operational plans
- Other PEPFAR country programs

Number of adults and children with advanced HIV infection receiving antiretroviral therapy with PEPFAR support



Activities to Track DSD

- PEPFAR keeps tracks of implementation and outcomes of DSD in PEPFAR supported countries
- Monthly DSD calls since July 2015 with 12-18 countries participating at each call
- In-Country Technical Assistance on DSD
- South to South knowledge exchange; e.g. the DSD learning tour to Zambia with participation of CDC-staff from Kenya, Cote d'Ivoire, and Nigeria in September 2017
- Simple Surveys for updates on DSD implementation
- Technical support for development and implementation of DSD evaluations in Namibia, Kenya and Zambia

DSD Tracking Tool in PEPFAR Supported Countries

Summary of Progress in Test and Start and Differentiated Models of Care in 30 PEPFAR-Supported Countries with CDC provides Care and Treatment Assistance, as of April 2017

	Test and Start policy adopted	Test and Start policy being implemented nationally	Facility-based service delivery models				Community-based service delivery models		
			Multi-month script	Spaced clinical visits	Fast track drug refills	Facility adherence clubs	Community Adherence club	Community ART Distribution points	Community ART Groups
Angola	No	Pilot/phased							
Botswana	x	x	x	x					
Burundi	x	x							
Burma	x	No							
Cameroon	x	x						x	
Cambodia	x	x							
Cote d'Ivoire	x	x	x	x	x				
Democratic Republic of Congo	x	x	x	x	x		x	x	x
Dominican Republic	No	No	Phased?	Phased?					
Ethiopia	x	x	x	x	x				
Ghana	x	x							
Haiti	x	x	x	x	x				
India	x	No							
Kenya	x	x	x	x	x				
Lesotho	x	x	x	x	x			x	x
Malawi	x	x	x		x	x	x	x	x
Mozambique	x	x	x	x					x
Namibia	x	Pilot/Phased	x	x	x	x	x	x	x
Nigeria	x	Pilot/Phased						x	
PNG	x	Starting							
Rwanda	x	x	x	x	x				
Swaziland	x	x	x	x	x	x	x	x	x
South Africa	x	x	x	x	x		x	x	
South Sudan	x	x	x	x					
Tanzania	x	x	x	x					

Uganda	x	Starting	x	x	x			x	x
Ukraine	x	Starting							
Vietnam	x	x	??	x					
Zambia	x	x	x	x	x	x	x	x	x
Zimbabwe	x	yes, phased	x	x	x	x			x

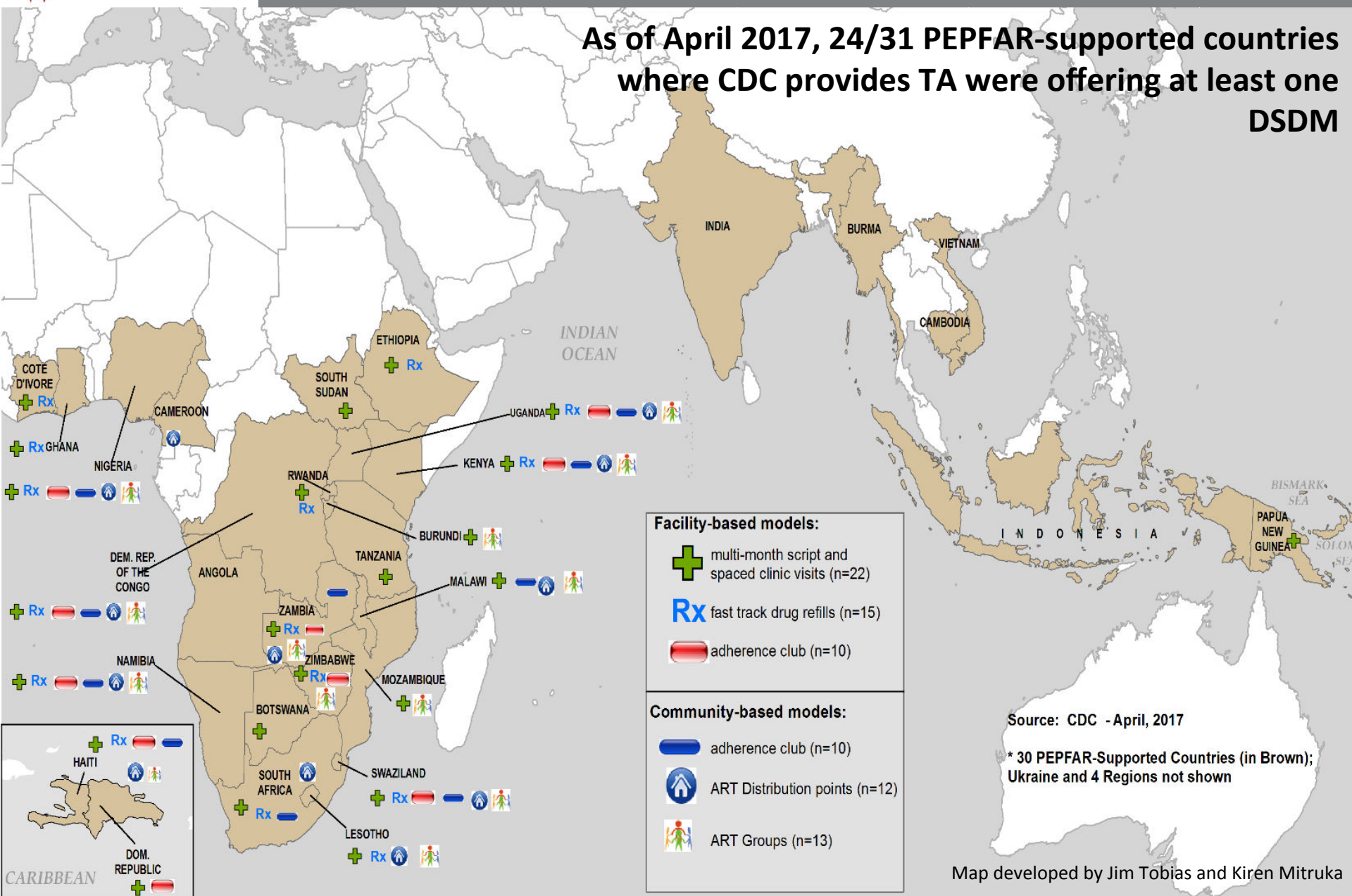


PEPFAR

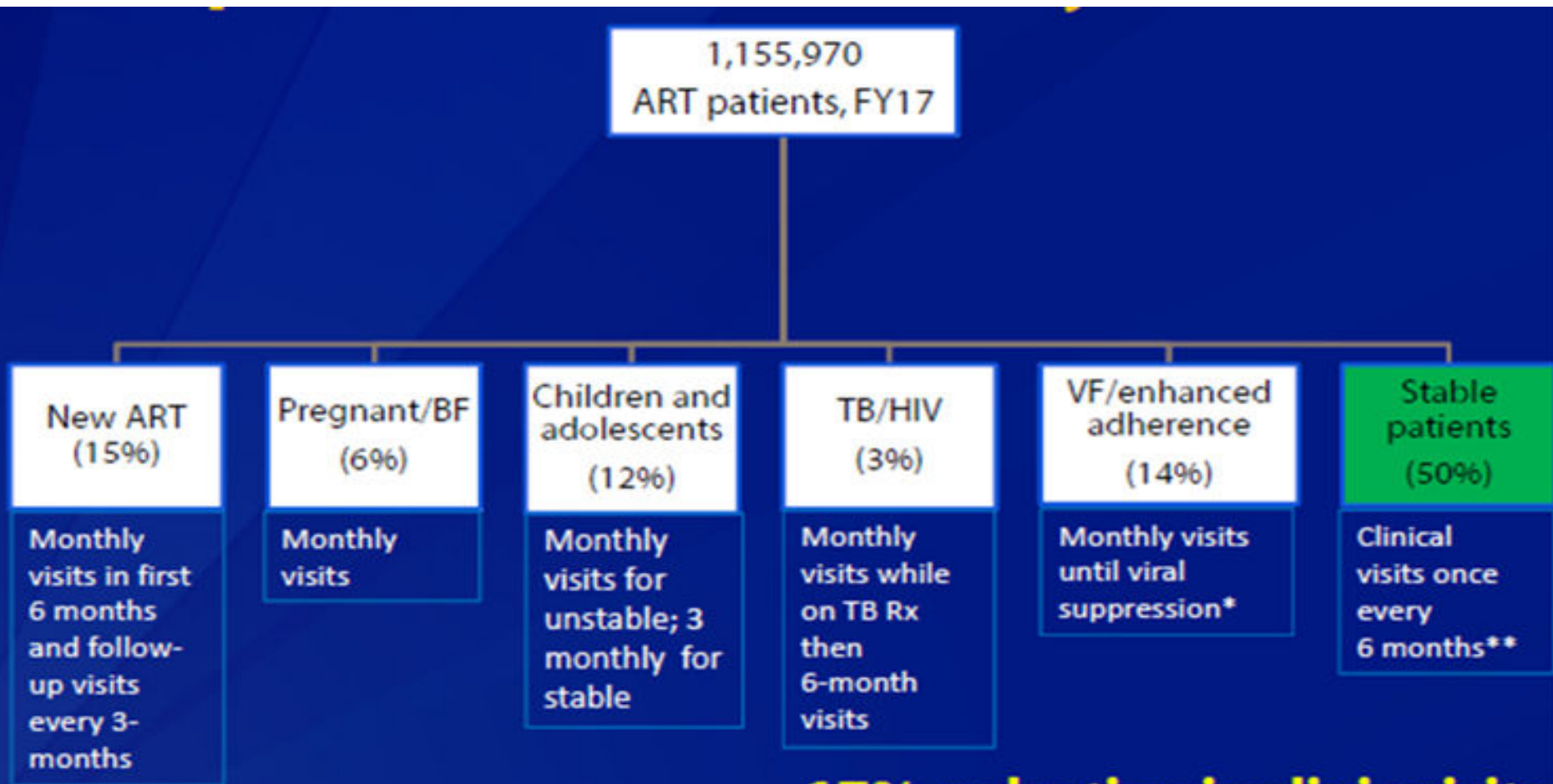
U.S. President's Emergency Plan for AIDS Relief

Differentiated Models of Care in PEPFAR-Supported Countries *

As of April 2017, 24/31 PEPFAR-supported countries where CDC provides TA were offering at least one DSDM



Example: Multi-Month Prescription Schedules for Optimal Outcomes in Kenya in FY17



17% reduction in clinic visits

*67% of non-suppressors, achieve VL<1000 after 3 months support

** Viral load and patient willingness & adherence, considerations. ARV pick up every 3-months- community or facility

Example: Improved Retention with Longer Follow-up Intervals for Stable Patients in Zambia

- Retrospective analysis of stable PLHIV (N=217,448, >1 million visits from 2013-2015) seen at 65 ART sites
 - Stable: ART>180 days, CD4>200 x 6 months, no TB diagnosis in 6 months
- Extending clinic intervals at least up to 6 months was associated with improved retention in care
 - 70% received pharmacy refills every 3 months, ~9% every 6 months

Effect of Return Interval on Subsequent Retention									
	Missed Visit			Gaps in Medication			LTFU		
	aOR	95% CI	p-value	aOR	95% CI	p-value	aOR	95% CI	p-value
Appointment Interval:									
<3 weeks	1.88	1.83-1.94	<0.001	1.52	1.47-1.57	<0.001	1.28	1.21-1.36	<0.001
1 month	1.0	(reference)		1.0	(reference)		1.0	(reference)	
2 months	0.83	0.82-0.84	<0.001	0.92	0.90-0.93	<0.001	0.95	0.92-0.97	<0.001
3 months	0.53	0.52-0.54	<0.001	0.68	0.67-0.69	<0.001	0.92	0.90-0.95	<0.001
4-5 months	0.39	0.36-0.43	<0.001	0.62	0.57-0.68	<0.001	0.64	0.55-0.74	<0.001
6 months	0.23	0.21-0.26	<0.001	0.50	0.43-0.57	<0.001	0.48	0.40-0.59	<0.001

Example: Community Drug Distribution Points in Uganda

Uganda Model (Oct-Dec 2017 Update)	
Context	Rural and urban
Target group	Stable adult ART patients, excludes pregnant women, children and adolescents
ART Refill	2 monthly, piloting 3 monthly
Clinical assessment for patient	6 monthly
Referral mechanism back to clinic	Self, by CASA's, and TASO service providers
Number of patients	~80 000 patients as of September 2017 in 20 districts supported by TASO
Patient uptake	About two thirds of patients supported by TASO
Retention in care	98%
Extended functions	Psychosocial support by Community ART Support Agents, community sensitization
Resource needs	Linkage to nearby health facilities, M&E tools



Community Based Models of ART Delivery

Health talk at a CDDP

Source: TASO Uganda

Example: Community –based ART in Namibia

Okongo-Eenhana Model

Context	Rural
Target group	Rural settings, no consideration for CD4, viral load or duration on ART
ART Refill	3 monthly
Clinical assessment for patient	3 monthly
Referral mechanism back to clinic	Self, by Nurse providers, Community Health Assistants and Health Extension Workers
Number of patients	1505 out of 9271 (2794 Okongo; 6477 Eenhana) ART patients
Patient uptake	About 16% of patients seen at Okongo and Eenhana Districts
Retention in care	Ranges from 86 -100%
Viral load suppression	84-100 % with most sites in the 90s
Extended functions	Psychosocial support by peers; motivation; Community ART Support Agents, community sensitization
Resource needs	Improved shelter for consultation; Linkage to nearby health facilities, M&E tools

Example: Community-Based ART Delivery in Okongo District, Namibia

~20 KM
unpaved road
to ART center

Basic structure built by the
community in 2007 and improved
at their own expense over time



Example: Community-Based ART Delivery in Okongo District, Namibia

- Typical outreach day:



Examples of Community-based ART Models in Zambia

- CIDRZ is implementing 3 models of Differentiated Care alongside routine care
- Community-based ART distribution and Community Adherence Groups (CAGs)
 - CAGs for stable clients
 - CAGs for unstable clients
 - CAGs for adolescents
- Facility based Urban Adherence Groups (UAGs)
- ART dispensation through Health Posts

Example: Community –based ART in Zambia

CAGS for Stable Clients Model	
Context	Rural and Urban
Target group	Stable patients on ART
ART Refill	3 monthly
Clinical assessment for patient	6 monthly
Referral mechanism back to clinic	Self, by Nurse providers, Community Health Assistants
Number of patients	Implemented in 14 sites: 1,043 groups with 5,980 patients
Patient uptake	18% of stable patients in sites of implementation
Retention in care	99.6%
Viral load suppression	
Extended functions	Psychosocial support by Community ART Support Agents, community sensitization
Resource needs	Linkage to nearby health facilities, M&E tools



DSD Monitoring and Evaluation

Tools being developed at CDC HQ with considerations for enhanced monitoring:

- Provides generic considerations for enhanced monitoring of Test and Start and differentiated service delivery
- Can be used to frame discussions regarding decisions for Enhanced Monitoring
- Includes a set of indicators that can be modified to suit the context

CONSIDERATIONS FOR ENHANCED MONITORING OF TEST AND START AND DIFFERENTIATED SERVICE DELIVERY

Guidance for CDC country teams

October 2017

Key Areas for Monitoring

- ❑ Commodity availability
- ❑ Retention/adherence
- ❑ Quality assurance of rapid HIV testing and laboratory services
- ❑ Client satisfaction
- ❑ Impact on health system efficiency

Example: DSD M&E in Rwanda

Indicator	Numerator	Denominator	Frequency	Data source
ROUTINE				
# stable patients on treatment in reporting period	# stable patients on ART in reporting period	# all PLHIV enrolled on ART in reporting period	Monthly	ART Register; EMR, Lab Register, NRL results
Rate of virologic suppression	# patients on ART in reporting period with VL<1,000 by treatment line/stability status	Total time of follow-up of patients by treatment line and stability status	Quarterly	Lab Register and VL failure monitoring register
Rate of drug resistance of patients on 2 nd line treatment	# patients on 2 nd line with genotypic drug resistance	Total time of follow-up of patients on 2 nd line treatment by stability status/duration on ART	Quarterly	Lab Register and VL failure monitoring register
ENHANCED				
1. Clinical indicators				
% stable patients enrolled in Stable group.	# stable enrolled in stable group	# eligible patients for stable group.	Quarterly	ART Register; EMR
% ART patients retained in stable group after 6, 12, 18 and 24 months	# ART patients retained in stable group at 6, 12, 18 and 24 months	# ART patients enrolled in stable group at 6, 12, 18, or 24 months prior (i.e. at beginning cohort)	Quarterly	ART Register; EMR,
% ART patients enrolled in stable group who experienced treatment failure (VL >1000 copies /ml)*	# ART patients enrolled in stable group who experienced treatment failure	# ART patients enrolled in stable group with VL test results reported in the reporting period	Annual	ART Register; EMR, Lab Register, NRL results
%f ART patients enrolled in stable group who are adherent over 3, 6, 9 and 12 months	# of ART patients enrolled in stable group who are adherent over 3, 6, 9 and 12 months	# ART patients enrolled in stable group at the start of the reporting period (i.e. beginning cohort)	Quarterly	ART Register; EMR,

Indicators	Numerator	Denominator	Frequency	Data source
2. Commodities				
% facilities experiencing ARV stock out at any point in the reporting period	# facilities experiencing ARV stock out at any point in the reporting period	# of ARV facilities supported in the reporting period	Monthly	eLMIS Pharmacy stock cards
# facilities reporting expiration of any of the HIV core commodities in the reporting period	# facilities reporting expiration of any of HIV core commodities in reporting period. Disaggregate by type: medicines, lab reagents, HIV test kits	# of facilities providing HIV Clinical services in the reporting period	Monthly	Pharmacy stock cards
Order delivery lead time which is a time between placing of an order of commodity and when its available for use at the health facility	# of commodity units ordered and/or delivered: 1) day an order was placed; 2) day ordered commodity (commodity type) was delivered on time.	Health Center – 2 weeks District Pharmacy – 3 weeks	Quarterly	Pharmacy Stock Card
Lead time (Turnaround time): MPPD to DPs, DPs to Health Facility	# days taken	# days recommended by MOH	Quarterly	ARTs/OIs HF's Report/Req form
Stock out rate	# products in stock out during the reporting period	# needed products in health facility in a reporting period	Quarterly	eLMIS, Stock Card
Order – fill:	# products ordered and received	# products ordered	Quarterly	ARTs/OIs HF's Report/Req form
Inventory accuracy rate	% stock out reported in the reporting period	% stock out verified in the reporting period.	Quarterly	

Indicators	Numerator	Denominator	Frequency	Data source
3. Costing indicators				
Case load per health staff	# clinic visits/drug pickups/initiations/ tests	# days the facility is open for each consultation/ service during 3 months & # health staff involved in each category	Quarterly	Self-report
Average time spent per health staff per day	Recorded time spent on each task for the same cadre of staff	# staff in that cadre	Weekly	Self-report
Total time spent per facility per cadre per day	Total time spent on each task per day	# staff in each cadre	Weekly	Self-report

Experiences with Mapping DSD in PEPFAR-Supported Countries

- Country Teams are usually responsive to providing information as requested
- Still have limited country-based formal evaluations results for ART outcomes in sites where DSD is being implemented
- Due to multiplicity of implementing partners, difficult to collect granular data such as number of sites providing DSD at country level and type of model implemented at each site
- Will need to revise DSD tracking tool in order to collect granular site level data.

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