



# Delivering High-Quality DSD Services at Scale

## A CQUIN Learning Network Workshop

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# PEPFAR DSD Program Quality Approach

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HIV Learning Network  
The CQUIN Project for Differentiated Service Delivery



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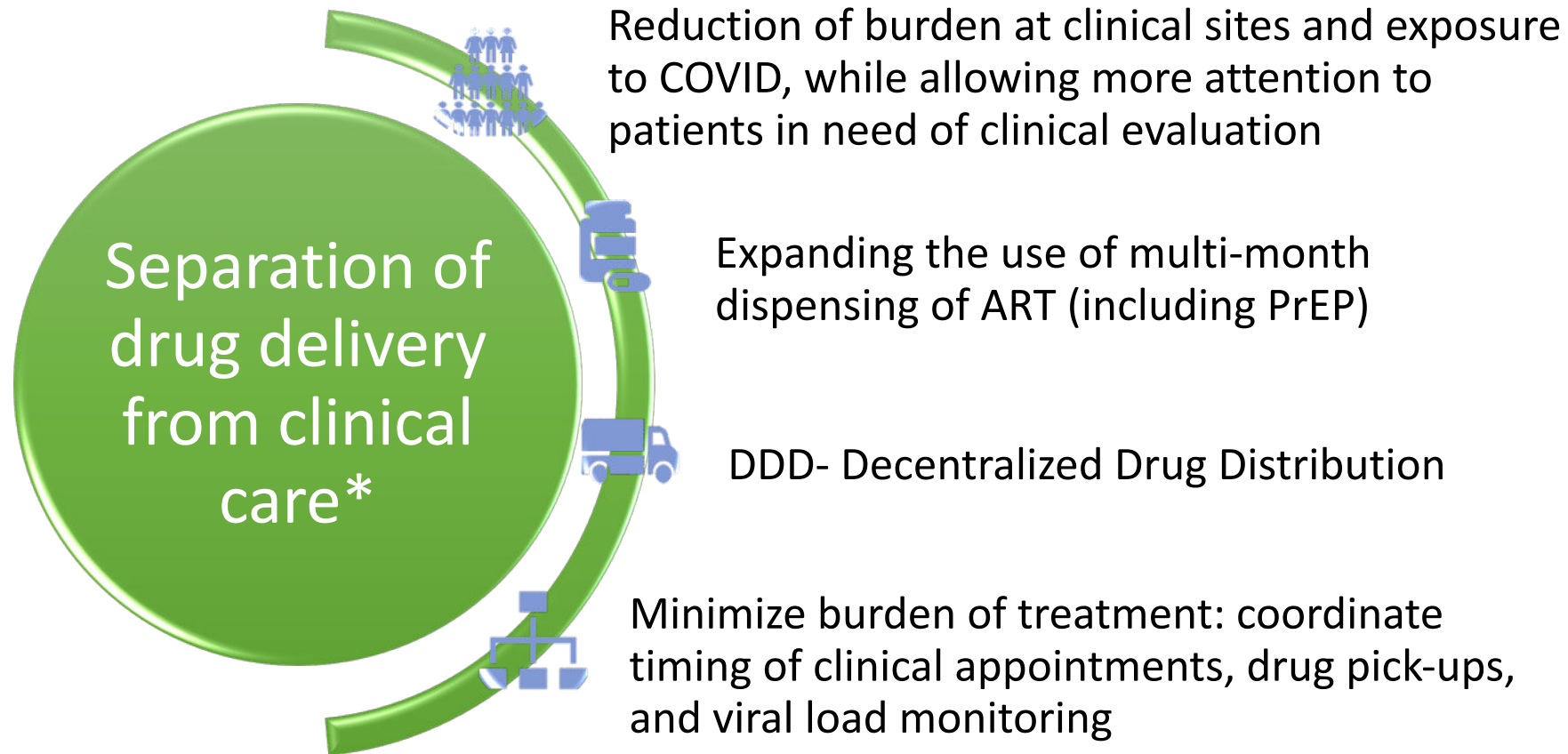
## **2. How PEPFAR monitors DSD implementation**

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# PEPFAR Adaptations to COVID-19



\* Clients should receive clinical care as frequently as their clinical condition requires it ( E.g., Management of an intercurrent acute problem)

# The WHO updated MMD eligibility criteria to be more inclusive



## Summary – change in eligibility

	2016	2021
<b>Term</b>	Stable	Established on ART
<b>Time on ART</b>	12 months on ART	6 month on ART
<b>Inclusion of pregnant women</b>	Pregnant women excluded	Pregnant women included
<b>Inclusion of children and adolescents</b>	Children and adolescents included	Children and adolescents included
<b>Regimen</b>	Second and third line not explicitly stated	Any ART line included
<b>Viral load / evidence of treatment success</b>	Two consecutive viral loads <1000 copies/ml	At least one viral load <1000 copies/ml in last 6 months

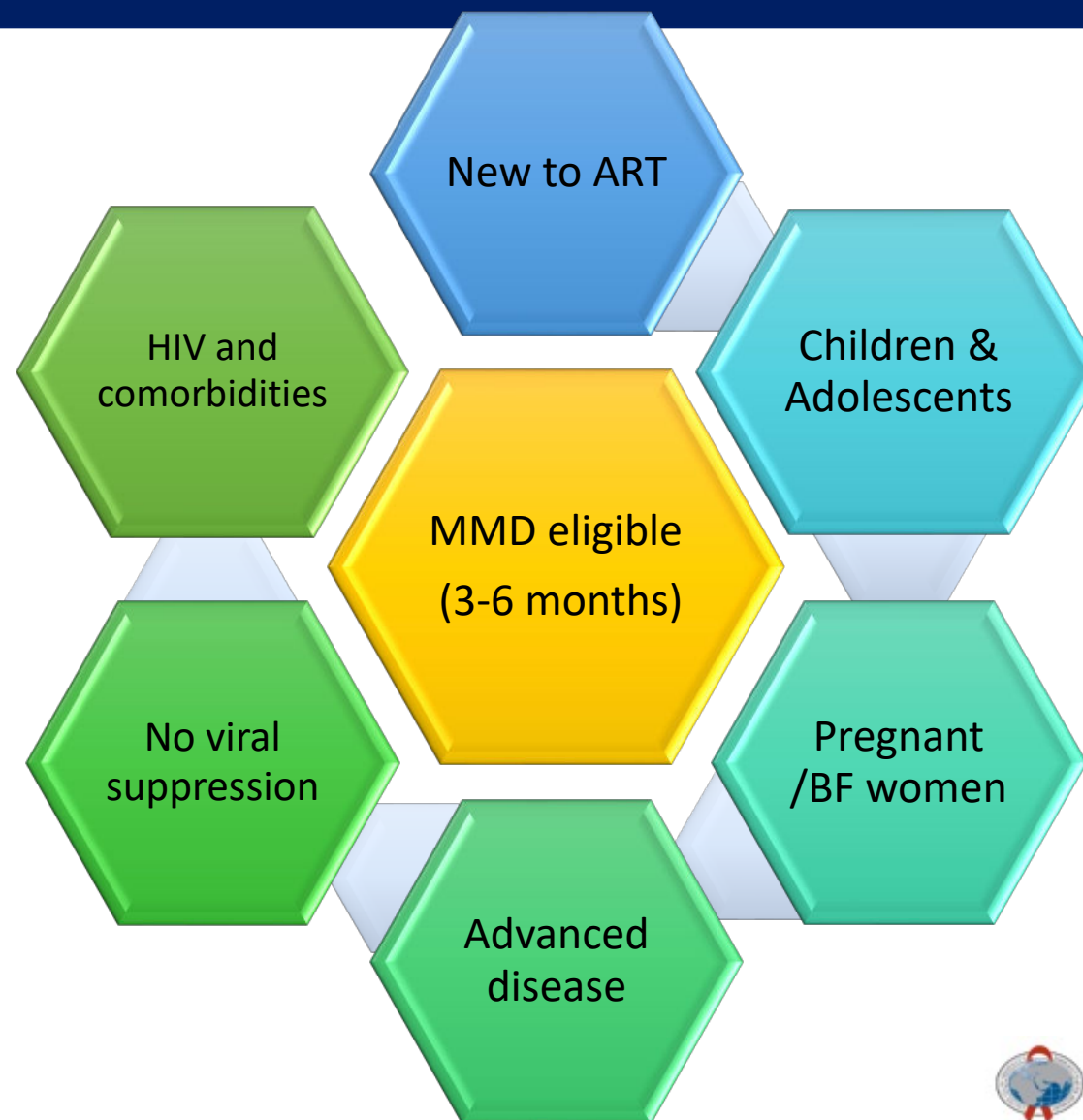
**⚠️ INCLUDES all populations established on ART:**

- Individuals receiving second- and third-line regimens
- PLHIV with controlled comorbidities
- Children and adolescents
- Pregnant and breastfeeding women
- Key populations

# PEPFAR Policy changes to expand eligibility for MMD

Expanded MMD eligibility to:

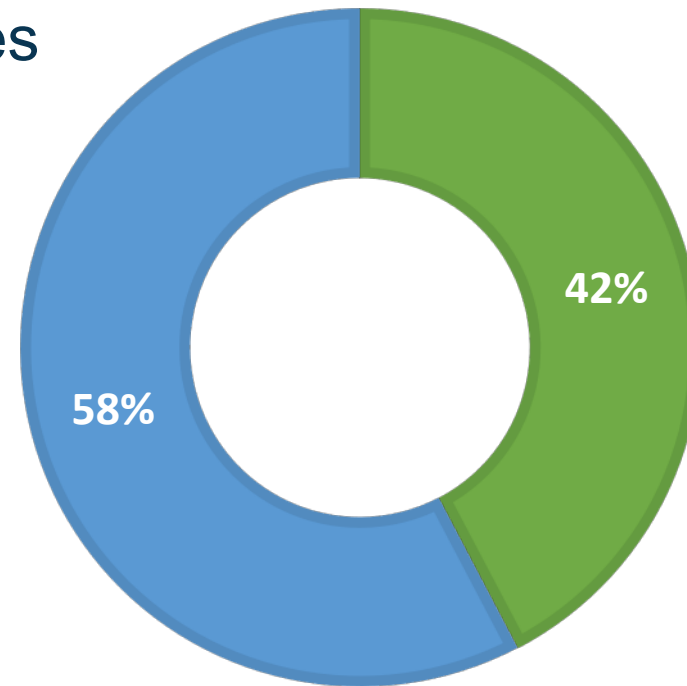
- Children and adolescents
- Pregnant and breastfeeding women
- Individuals with advanced disease
- Those who have not yet achieved viral suppression or whose viral suppression is yet undetermined
- People with co-morbidities along with HIV infection
- Individuals initiating therapy and those re-engaging in treatment



# PEPFAR MMD policy changes scale up

- PEPFAR Countries that changed MMD policy/implementation due to COVID-19 (since March 2020). N=52 countries

30 countries changed MMD guidelines



■ No record of changing MMD policy  
■ Changed policies and/or implementation..

# How does PEPFAR monitors DSD implementation?

1. MER indicators
2. SIMS (Site Improvement through Monitoring System)
3. Patient experience: SIMS Patient Experience Dossier

# PEPFAR (MER) INDICATORS measuring MMD

Indicator	Definition
<b>TX_CURR</b>	Number of adults and children currently receiving antiretroviral therapy (ART)
<i>Disaggregate MMD</i>	<ul style="list-style-type: none"> <li>• &lt;3 months of ARVs (not MMD)</li> <li>• 3-5 months of ARVs dispensed</li> <li>• 6 or more months of ARVs dispensed</li> </ul>
<b>TX_ML</b>	Number of ART patients (who were on ART at the beginning of the quarterly reporting period or initiated treatment during the reporting period) and then had no clinical contact since their last expected contact (>28d)
<i>Disaggregate</i>	<b>Interruption in treatment (IIT)</b> disaggregate to account for time on treatment when experienced IIT
<b>TX_RTT</b>	Number of ART patients who experienced IIT during any previous reporting period, who successfully restarted ARVs within the reporting period and remained on treatment until the end of the reporting period.
<b>TX_PVLS</b>	Percentage of ART patients with a suppressed viral load (VL) result (<1000 copies/ml) documented in the medical or laboratory records/laboratory information systems (LIS) within the past 12 months

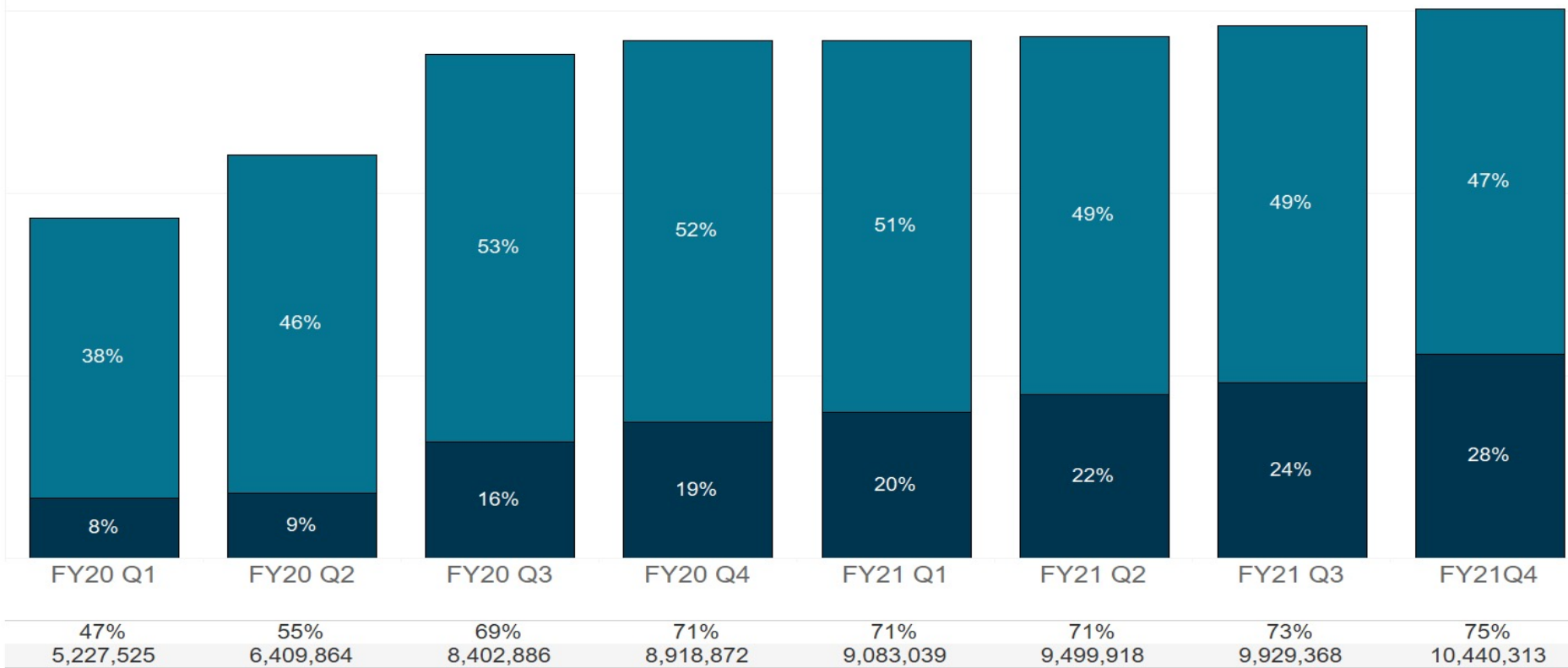
- MMD data collection began fiscal year 2020 (Oct 2019 – Sept 2020)
- Collected quarterly in 51 countries
- **Process indicator:** Number of clients receiving MMD / total number of clients on treatment



# We have doubled the number of clients receiving MMD in two years

## MMD Totals

TX\_CURR by MMD Level



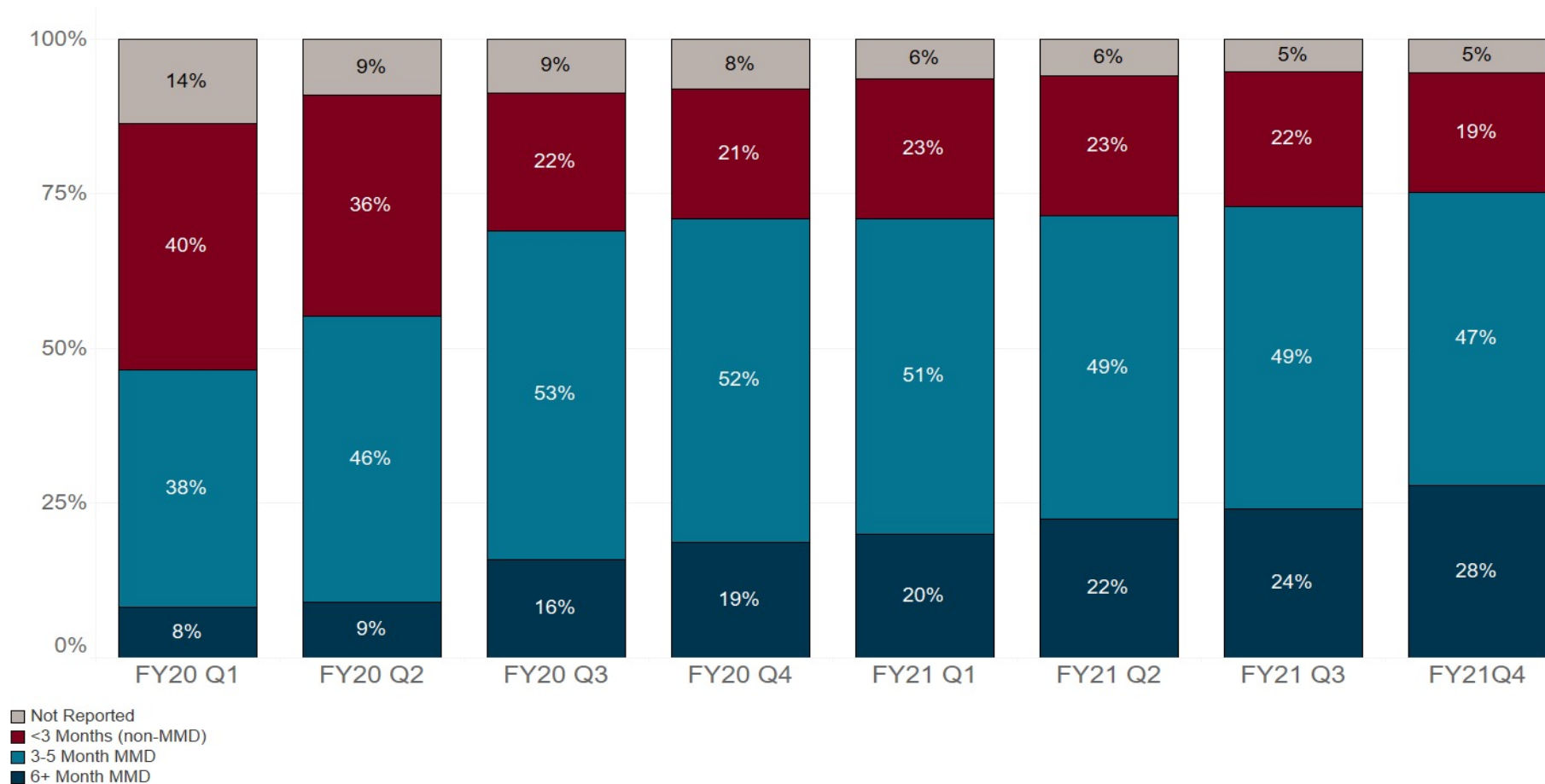
**10.4M** ART clients are receiving at least 3MMD, **DOUBLE** the number of clients receiving MMD in FY20 Q1.

■ 3-5 Month MMD  
■ 6+ Month MMD

# PEPFAR supported sites continues to increase the % of ART clients receiving MMD

## MMD Breakdown

TX\_CURR by MMD Duration



As of FY21 Q4,

- **75%** of all PEPFAR-supported ART clients are receiving at least 3 month dispensing of ARVs
- 3-5MMD coverage (47%) decreased in Q4 as more clients were transitioned to 6MMD (28%)
- Overall MMD growth slowed in FY21. We have reached saturation in some countries and face persistent barriers in others

# Patients can be safely transitioned to MMD without compromising longer term treatment continuity and viral load suppression outcomes

Contents lists available at ScienceDirect

**EclinicalMedicine**

journal homepage: <https://www.journals.elsevier.com/eclinicalmedicine>

Research paper

**Estimating the effect of increasing dispensing intervals on retention in care for people with HIV in Haiti**

Canada Parrish<sup>a,\*</sup>, Anirban Basu<sup>a</sup>, Paul Fishman<sup>a</sup>, Jean Baptiste Koama<sup>b</sup>, Ermane Robin<sup>c</sup>, Kesner Francois<sup>c</sup>, Jean Guy Honoré<sup>d</sup>, Joëlle Deas Van Onacker<sup>c</sup>, Nancy Puttkammer<sup>a</sup>

Journal of the International AIDS Society 23 (2024) e26147

**JIAS**  
JOURNAL OF THE INTERNATIONAL AIDS SOCIETY

**RESEARCH ARTICLE**

**Twenty-four-month outcomes from a cluster-randomized controlled trial of extending antiretroviral therapy refills in ART adherence clubs**

Tali Cassidy<sup>1,2,5\*</sup>, Anna Grimsrud<sup>3</sup>, Claire Keene<sup>1</sup>, Keitumetse Lebelo<sup>1</sup>, Helen Hayes<sup>1</sup>, Catherine Orrell<sup>5,6</sup>, Nompumelelo Zokufa<sup>1</sup>, Tabitha Mutseyekwa<sup>1</sup>, Jacqueline Voget<sup>4</sup>, Rodd Gerstenhaber<sup>1</sup> and Lynne Wilkinson<sup>3,7\*</sup>

A randomized study from Zimbabwe evaluated 6-monthly dispensing in community ART refill groups (adherence clubs) and found retention was non-inferior to 3m community ART refill and 3 m facility-based dispensing

Study in Haiti that provides a causal estimate of the effect of extending ART dispensing intervals increased the probability of retention in care at 12 months after ART initiation, with up to a 24% increase in the likelihood of retention

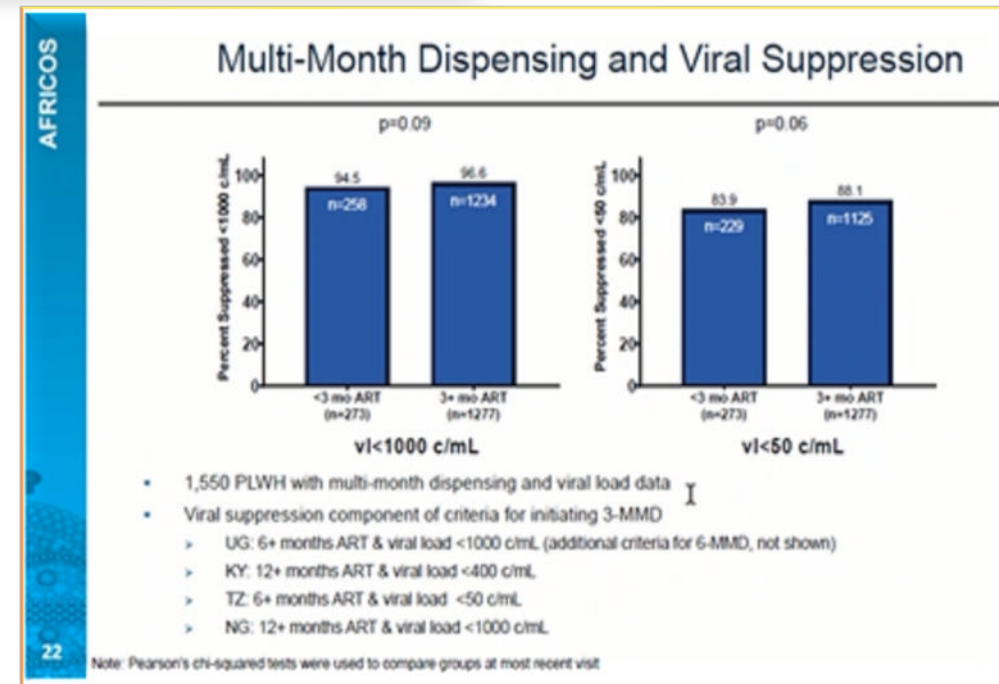
**THE LANCET**  
Global Health

**Multimonth dispensing of up to 6 months of antiretroviral therapy in Malawi and Zambia (INTERVAL): a cluster-randomised, non-blinded, non-inferiority trial**

Risa M Hoffman, Crispin Moyo, Kelvin T Balakasi, Zombe Siwale, Julie Hubbard, Ashley Bardon, Matthew P Fox, Gift Kakwesa, Thokozani Kalua, Mwiza Nyasa-Haambakoma, Kathryn Dovei, Paula M Campbell, Chi-Hong Tseng, Pedro T Pisa, Refloee Cele, Sundeeep Gupta, Mariet Benade, Lawrence Long, Thembi Xulu, Ian Sanne, Sydney Rosen

A randomized study of facility-based 6-monthly dispensing demonstrated to be a highly feasible and cost-effective model of dispensing for large-scale implementation in resource-limited settings

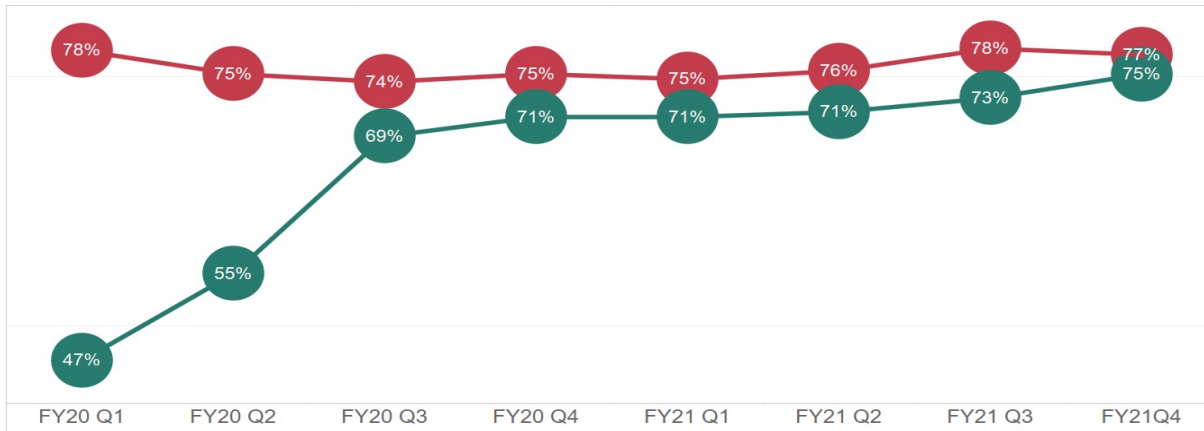
The AFRICOS, long term-cohort study in multiple African countries provides access to multi-month dispensing (MMD) of antiretroviral therapy (ART). Results support treatment continuity and viral load suppression for people living with HIV (PLHIV) and reduced burden on health facilities



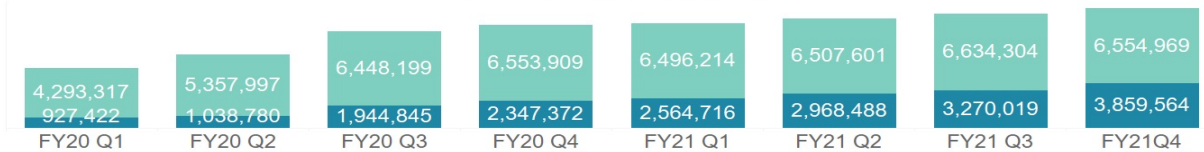
# MMD Effect on VL Coverage and VL Suppression Rates

As PEPFAR has increased MMD coverage across the program, we have not seen any subsequent drop-off in VL coverage and VL suppression rates

Trends in **MMD** and **Viral Load Coverage**



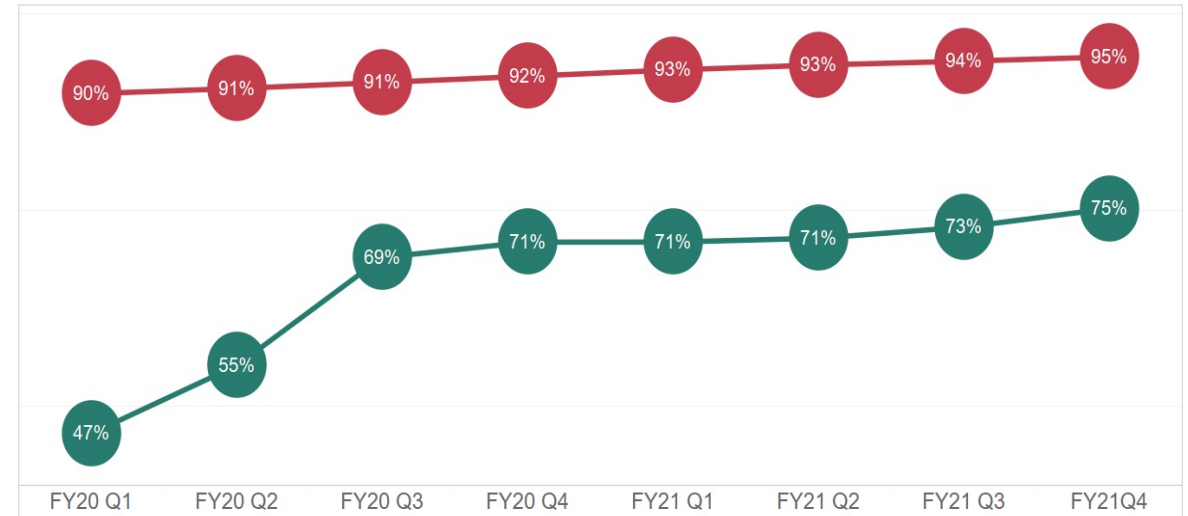
MMD Breakdown - 3 and 6 months



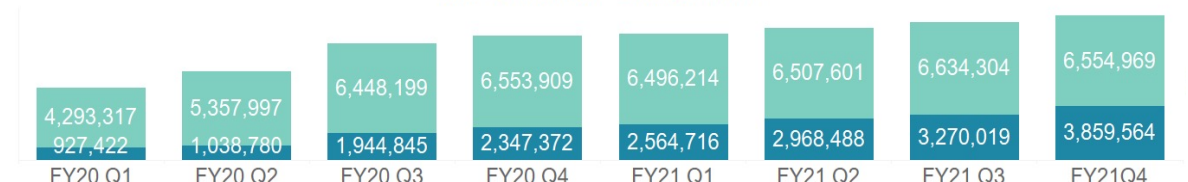
Note: South Africa data excluded

Confounding factors: COVID's negative impact on VL testing in many OUs

Trends in **MMD** and **Viral Load Suppression**



MMD Breakdown - 3 and 6 months



Note: South Africa data excluded

# Site Improvement Through Monitoring System (SIMS)

- SIMS is a standardized approach to evaluate program quality at PEPFAR supported sites that guide and support service delivery and non-service delivery functions
- Analyzing SIMS data, with triangulated MER and epidemiological data, can provide insight into the root causes of programmatic gaps and challenges. A main goal of SIMS assessments is to **stimulate quality improvement activities**



SITE IMPROVEMENT THROUGH  
MONITORING SYSTEM (SIMS)

## Description of Final CEE Scores

COLOR (# score)	DESCRIPTION
G: Green (3)	Meets standard
Y: Yellow (2)	Needs improvement
R: Red (1)	Needs urgent remediation
Gray (0)	Not Applicable selected

## Core Essential Elements (CEE) Structure Used within this Tool



# SIMS Tool: CEE Appointment Spacing and MMD

**CEE #: S\_04\_05 Appointment Spacing and Multi-Month Drug Dispensing [C&T PMTCT] (DUP)**

**CEE #: S\_03\_13 Appointment Spacing and Multi-Month Drug Dispensing [C&T KP] (DUP)**

**CEE #: S\_02\_24 Appointment Spacing and Multi-Month Drug Dispensing [C&T PEDS] (DUP)**

**CEE #: S\_02\_06 Appointment Spacing and Multi-Month Drug Dispensing [C&T GEN POP] (DUP)**

**STANDARD:** Each site offers differentiated models of service delivery for adolescent and adult patients ≥15 years old (e.g., appointment spacing, multi-month drug dispensing, and community dispensation) to meet the needs of stable ART patients and triage or fast-track of appointments for unstable ART patients and those with advanced HIV infection.

**Instructions:** Are differentiated models of service delivery (e.g., appointment spacing, multi-month dispensing) currently allowed in national guidelines?

If NO, check NA, and SKIP CEE:  NA

Comment:

	Question	Response	Scoring
Q1	Does this site distinguish between stable and unstable patients, and have a standard definition of a 'stable ART patient' for adolescent and adult patients?	Y N	If N=Red
	<b>If Y, then Q2</b>		
Q2	<p>Does the site use or provide the following for adolescent and adult patients?</p> <p><i>Tick all that apply:</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> 1) 3-6 month routine follow-up visits for stable ART patients</li> <li><input type="checkbox"/> 2) Multi-month (≥3 months) ARV prescribing for stable patients</li> <li><input type="checkbox"/> 3) Multi-month ARV dispensing (≥3 month supply) for stable ART patients</li> <li><input type="checkbox"/> 4) Fast-track pharmacy pick-up of ARVs for stable ART patients</li> <li><input type="checkbox"/> 5) Community service delivery models (e.g., community ART groups or distribution points like home distribution)</li> </ul>	# Ticked	If 0-2=Yellow If 3-5=Green
	<b>SCORE</b>		

Appointment Spacing and Multi-month Drug dispensing is being assessed and disaggregated for four population types:

**CEE #: S\_02\_06** Appointment Spacing and Multi-Month Drug Dispensing **[C&T GEN POP]**

**CEE #: S\_02\_24** Appointment Spacing and Multi-Month Drug Dispensing **[C&T PEDS]**

**CEE #: S\_03\_13** Appointment Spacing and Multi-Month Drug Dispensing **[C&T KP]**

**CEE #: S\_04\_05** Appointment Spacing and Multi-Month Drug Dispensing **[C&T PMTCT]**

# SIMS DSD CEE is expanding its scope in SIMS 4.2v

SIMS 4.1 v

SIMS 4.2 v (Oct 2022)


**CEE #: S\_02\_06 Appointment Spacing and Multi-Month Drug Dispensing [C&T GEN POP] (DUP)**

**STANDARD:** Each site offers differentiated models of service delivery for adolescent and adult patients ≥15 years old (e.g., appointment spacing, multi-month drug dispensing, and community dispensation) to meet the needs of stable ART patients and triage or fast-track of appointments for unstable ART patients and those with advanced HIV infection.

*Instructions: Are differentiated models of service delivery (e.g., appointment spacing, multi-month dispensing) currently allowed in national guidelines?*

If NO, check NA, and SKIP CEE: NA

Comment:

	Question	Response	Scoring
Q1	Does this site distinguish between stable and unstable patients, and have a standard definition of a 'stable ART patient' for adolescent and adult patients?	Y N	If N=Red
<b>If Y, then Q2</b>			
	<p>Q2</p> <p>Does the site use or provide the following for adolescent and adult patients?</p> <p><i>Tick all that apply:</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> 1) 3-6 month routine follow-up visits for stable ART patients</li> <li><input type="checkbox"/> 2) Multi-month (≥3 months) ARV prescribing for stable patients</li> <li><input type="checkbox"/> 3) Multi-month ARV dispensing (≥3 month supply) for stable ART patients</li> <li><input type="checkbox"/> 4) Fast-track pharmacy pick-up of ARVs for stable ART patients</li> <li><input type="checkbox"/> 5) Community service delivery models (e.g., community ART groups or distribution points like home distribution)</li> </ul>	# Ticked _____	If 0-2=Yellow If 3-5= Green
<b>SCORE</b>			

## SIMS 4.2 expands DSD assessment to include:



- Initiating ART MMD for 3-5 m
- Initiating ART MMD for >6m
- DSD appointment spacing with VL monitoring
- MMD of ARV, in conjunction with TB, TPT, FP and NCDs


**CEE #: S\_02\_06 Provision of Differentiated Service Delivery (DSD) Models [C&T GEN POP] (DUP)**

**STANDARD:** Each site offers differentiated service delivery (DSD) models for adolescent and adult clients ≥15 years old (e.g. multi-month drug dispensing, community dispensation) to meet the needs of ART clients.

*Instructions: Are differentiated models of service delivery (e.g. multi-month dispensing) currently allowed in national guidelines?*

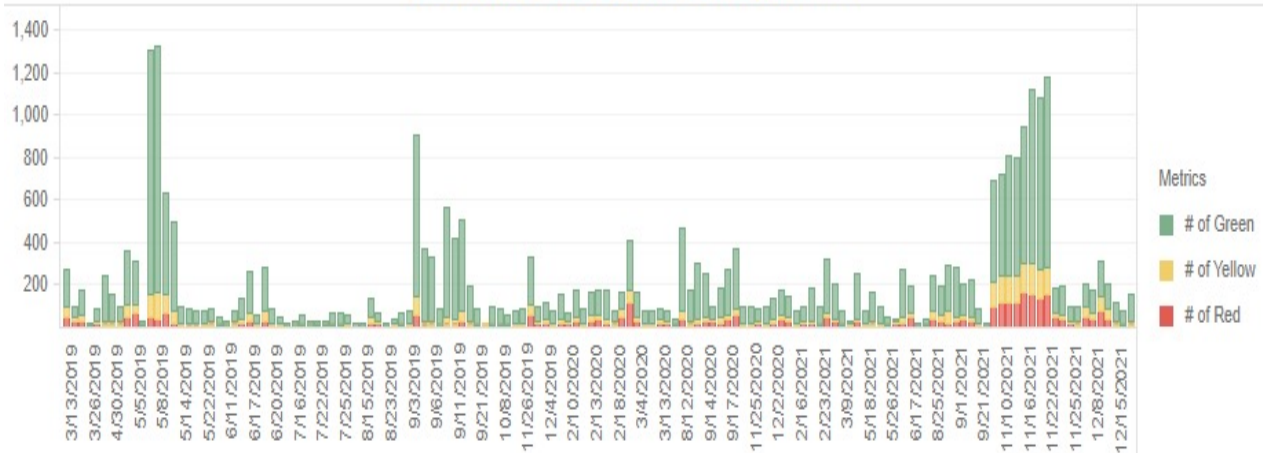
If NO, check NA, and SKIP CEE: NA

Comment:

	Question	Response	Scoring
Q1	Does the site utilize specific eligibility criteria for provision of DSD?	Y N	If N=Red
<b>If Y, then Q2</b>			
	<p>Q2</p> <p>Does the site use or provide the following for adolescent and adult clients?</p> <p><i>Tick all that apply:</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> 1) 3-5 month ARV dispensing for eligible clients receiving ARV refills</li> <li><input type="checkbox"/> 2) 3-5 month ARV dispensing for eligible clients initiating ART</li> <li><input type="checkbox"/> 3) 6+ month supply of ARV dispensing for eligible clients receiving ARV refills</li> <li><input type="checkbox"/> 4) 6+ month supply of ARV dispensing for eligible clients initiating ART</li> <li><input type="checkbox"/> 5) Fast-track pharmacy pick-up of ARVs for all eligible ART clients</li> <li><input type="checkbox"/> 6) Community service delivery models (e.g., community ART groups, family care, or distribution points like home distribution)</li> <li><input type="checkbox"/> 7) DSD appointment spacing aligned with frequency of viral load monitoring</li> <li><input type="checkbox"/> 8) MMD of ARV in conjunction with services for TB prevention, TB treatment, family planning, and/or NCDs (diabetes, hypertension)</li> </ul>	# Ticked _____	If 0-6=Yellow If 7-8= Green
<b>SCORE</b>			

# SIMS Performance Trends

CEE Score Counts by Assessments Over Time



**SIMS data analysis provide insights into programmatic gaps and challenges. Analysis done by tool and type, reasons for prioritization for SIMS visit, CEE scores, performance evaluation**

Analysis of trends for **S\_02\_06. Spacing appointments and MMD in adults**, in a sample OU in the last two years (FY19 Q2-FY22 Q1)

Site Assessments

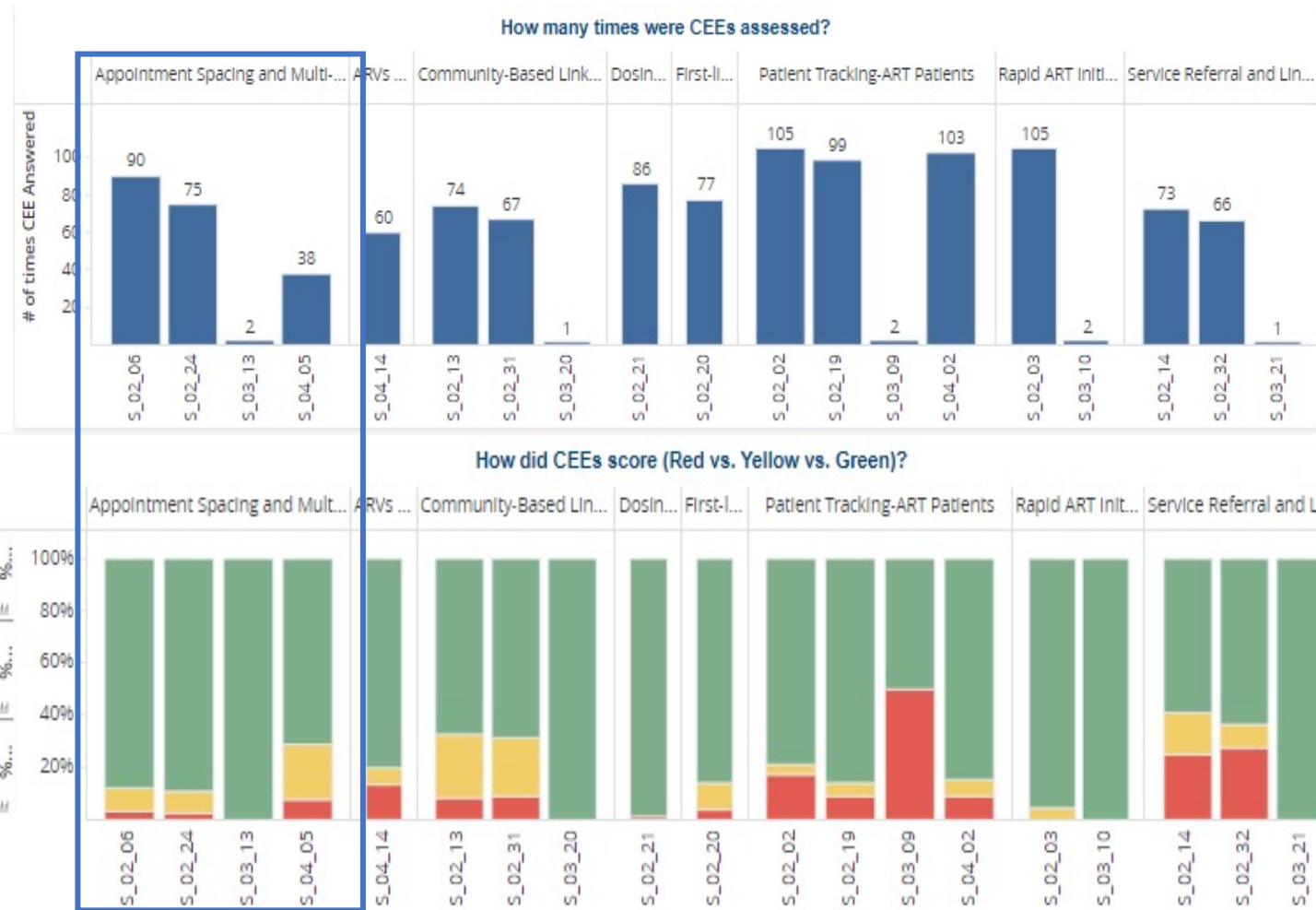
Organisation Site	Assessment Date	Assessment Type	# of Red Scores	# of Yellow Scores	# of Green Scores
Chemuswo Dispensary	11/27/2020	Comprehensive	0	0	1
Chepkemel Health Centre (Mosop)	12/2/2020	Comprehensive	1	0	0
	5/18/2021	Comprehensive	0	0	1
Chepkumia Dispensary	3/14/2019	Comprehensive	0	1	0
	8/16/2019	Comprehensive	0	0	1
Chepkunyuk Dispensary	11/28/2019	Comprehensive	1	0	0
	2/16/2021	Comprehensive	1	0	0
	6/15/2021	Follow up	0	0	1

**CEE Score Counts by Assessment Over Time.** Number and scores of SIMS country assessments for S\_02\_06 CEE per assessment date

**Site assessments:** Multiple assessments conducted for the S\_02\_06 showcase the score improvement or lack thereof in each site assessed



# Person Centered Care: MMD



MMD dispensing is analyzed in the context of other relevant CEEs that pertain to the person centered ARV treatment and care

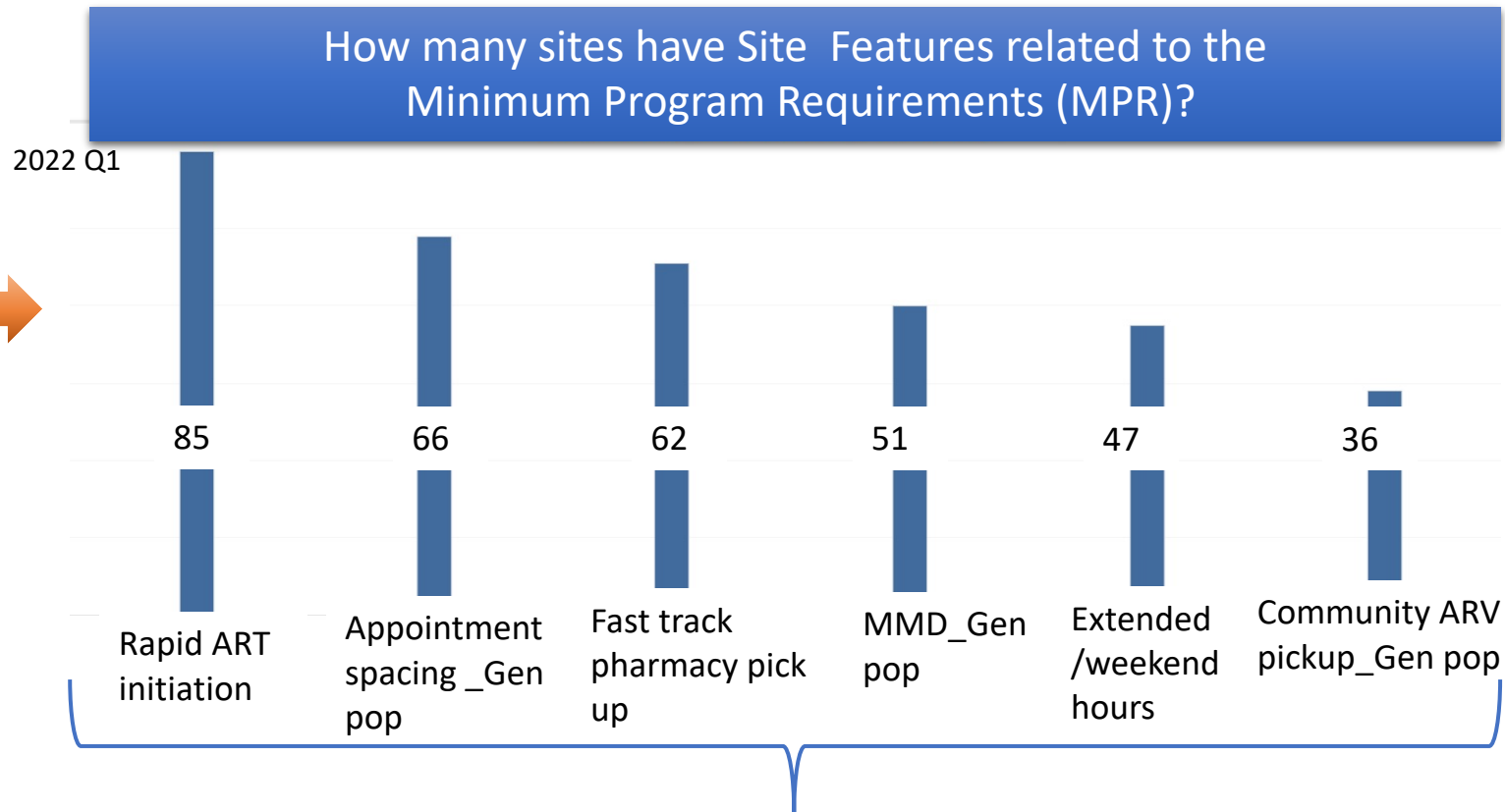
- Appointment Spacing and Multi-Month Drug Dispensing
- ARVs at Labor and Delivery
- Community-Based Linkage and Retention Support Services
- Dosing of Pediatric and Adolescent ARVs
- First-line ART Regimen for Young Children
- Patient Tracking-ART Patients
- Rapid ART Initiation
- Service Referral and Linkage System

# Person Centered Care: SIMS Patient Experience Dossier

Understanding people's experience of accessing and utilizing HIV services provided at sites is critical to addressing the barriers and enablers to quality of services

Sites are assessed on key features that promote patient treatment adherence and viral suppression:

- **Convenient**
- **Hospitable/friendly**
- **Supportive/responsive**
- **Peds specific**
- **KP specific**

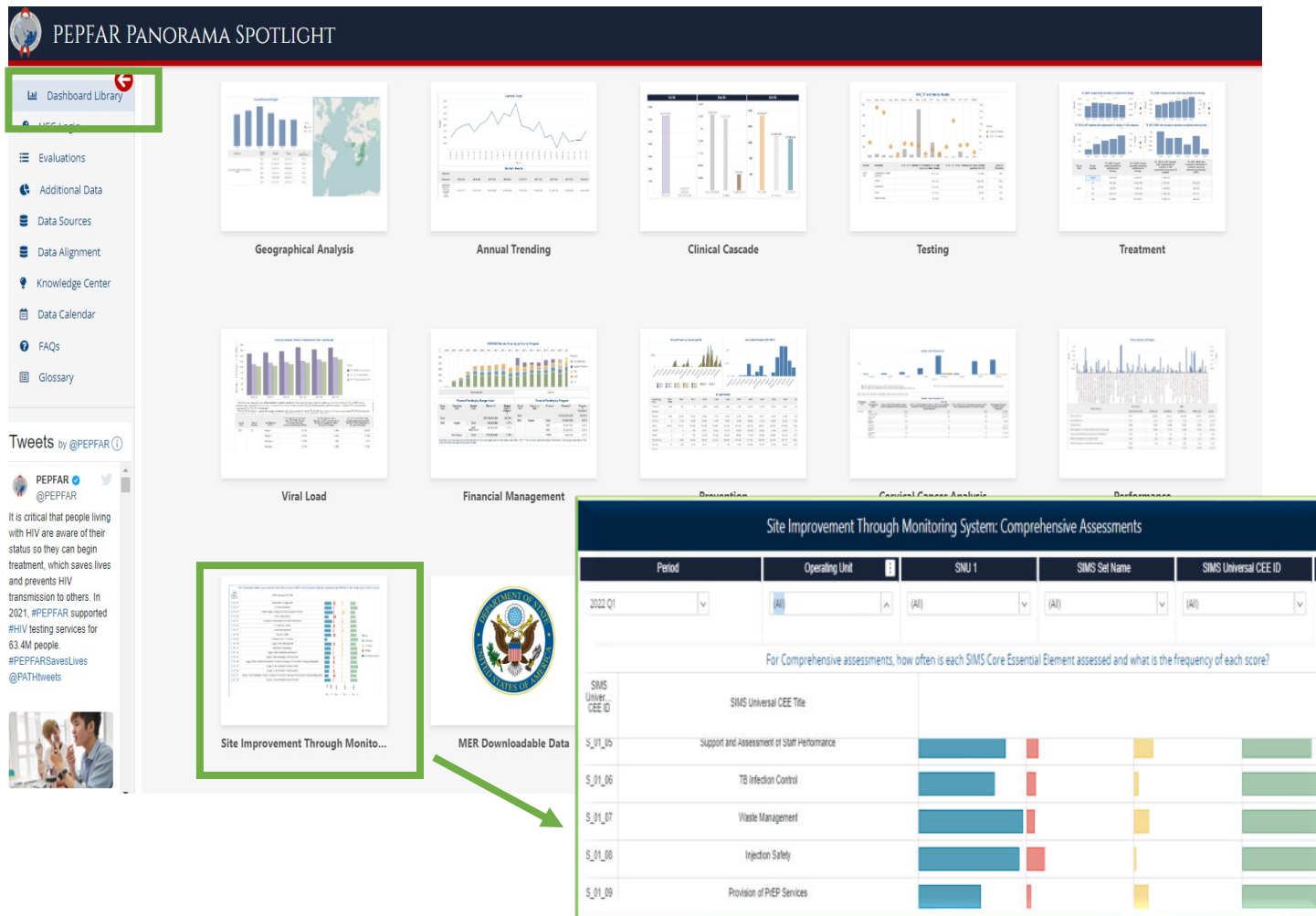


## Convenient Key Site Features

[Patient Experience > Overview > Sites with MPR features](#)

Delivering High-Quality DSD Services at Scale, April 26-29, 2022

# SIMS open for public access: PEPFAR Panorama Spotlight



SIMS assessments results are used to strengthen alignment with global and national standards to facilitate program improvement

## Resources available for public access:

- [PEPFAR Panorama Spotlight](https://data.pepfar.gov/library) dashboard:

<https://data.pepfar.gov/library>

- [SIMS assessments tools](https://datim.zendesk.com/hc/en-us/sections/200929305-SIMS) available at:

<https://datim.zendesk.com/hc/en-us/sections/200929305-SIMS>

- [PEPFAR Virtual Academy](https://learn.pepfar.net/courses/course-v1:learn-pepfar-net+PROG108SIMS100+2019_indefinite/about): Two SIMS e-learning courses:

[https://learn.pepfar.net/courses/course-v1:learn-pepfar-net+PROG108SIMS100+2019\\_indefinite/about](https://learn.pepfar.net/courses/course-v1:learn-pepfar-net+PROG108SIMS100+2019_indefinite/about)

- SIMS Downloadable datasets from all OUs and Data Dictionary since January 2019 onwards

# Key takeaways

- **Ensure MMD is meeting client needs**
  - Patient preference for dispensing interval
  - Enhanced case management/virtual support
- **Optimizing services**
  - Aligning MMD schedules/ART pickups across family members
  - Batching MMD/ART pickups with VL testing (at the facility and community level)
  - MDD of ARV in conjunction with services for TB prevention, TB treatment, family planning, and/or NCDs (diabetes, hypertension)
- **Implementation research**
  - Ensuring that MMD is associated with viral suppression