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Monitoring, Evaluation, and Reporting (MER) Guidance (v.2.7): Viral Load

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October 2023

Training Outline

Section 1: Overview of the Technical Area

Section 2: Indicator Changes in MER 2.7

Section 3: Overview of Indicators

Section 4: Data Use

Section 5: Additional Resources and Acknowledgments

Section 1: Overview of Viral Load

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Background: HIV Viral Load

- HIV viral suppression is an essential tool for monitoring an individual's response to HIV treatment, preventing sexual transmission, and reducing mother to child transmission.
- The TX_PVLS indicator, reported quarterly by age, sex, pregnant or breastfeeding status, and key population type, provides a snapshot of viral load program implementation.

# Patients with a VL result	# Patients with a suppressed VL result	Viral Load Coverage	Viral Suppression
Number of patients with a documented VL in the past 12 months	Number of patients with a documented suppressed (<1000 copies/ml) VL in the past 12 months	% of patients on ART with a documented viral load in the past 12 months	% of virally suppressed patients with a documented viral load in the past 12 months

Section 2: Indicator Changes in MER 2.7

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Indicator Changes in MER 2.7

Indicator	Change	Programmatic Rationale
TX_PVLS	• Removed the routine vs. targeted testing indicator disaggregate	• A majority of reported TX_PVLS results (99% over the past six reporting periods) are routine. • Removing the testing indication disaggregate reduced reporting burden and simplified the TX_PVLS data structure.

Section 3: Overview of Indicators

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Summary of Viral Load-Related MER Indicators

Indicator	Indicator Description	Reporting Frequency	Reporting Level
TX_PVLS	Percentage of ART patients with a suppressed viral load (VL) result (<1,000 copies/ml) documented in the medical or laboratory records/laboratory information systems (LIS) within the past 12 months	Quarterly snapshot indicator (results are cumulative at each reporting period), includes pediatric and adolescent fine age bands	Facility
TX_CURR	Number of adults and children currently receiving antiretroviral therapy (ART)	Quarterly snapshot indicator includes pediatric and adolescent fine age bands. MMD disagg includes coarse age.	Facility
PMTCT_ART	Percentage of HIV-positive pregnant women who received ART to reduce the risk of mother-to-child transmission (MTCT) during pregnancy	Quarterly indicator collected as part of PMTCT_STAT (calculated indicator in DATIM) includes maternal regimen type and age bands	Facility

TX_PVLS

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Indicator Definition: TX_PVLS

Indicator Definition: 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

Numerator: Number of ART patients with suppressed VL results (<1,000 copies/ml) documented in the medical or laboratory records/LIS within the past 12 months

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Denominator: Number of ART patients with a VL result documented in the medical or laboratory records/LIS within the past 12 months.

Numerator & Denominator Disaggregates: TX_PVLS

Disaggregate Groups	Disaggregates
Age/Sex [Required]	• <1 F/M, 1-4 F/M, 5-9 F/M, 10-14 F/M, 15-19F/M, 20-24 F/M, 25-29 F/M, 30-34 F/M, 35-39 F/M, 40-44 F/M, 45-49 F/M, 50-54 F/M, 55-59 F/M, 60-64 F/M,65+ F/M, Unknown Age F/M
Pregnant/Breastfeeding [Required]	• Pregnant • Breastfeeding
Key Population Type [Required]	• People who inject drugs (PWID) • Men who have sex with men (MSM) • Transgender people (TG) • Female sex workers (FSW) • People in prison and other closed settings

How to Collect: TX_PVLS (cont.)

- **Key Considerations for Reporting (FAQs):**
  - Reporting period covers a 12-month period and will include data from the previous fiscal year (*see visual below*) .
  - VL results should be reported for patients who have been on ART for at least 3 months (*or according to national guidelines*).
  - Only VL tests with recorded results and VL results that are linked back to patients should be included in the numerator and denominator.
  - **Where more than one result is available for the reporting period, the most recent result should be reported**. Programs should describe the method(s) of data collection and the results de-duplication methodology utilized in their narratives.

TX_PVLS Reporting Timeframe	FY23			FY24			
	FY23Q2	FY23Q3	FY23Q4	FY24Q1	FY24Q2	FY24Q3	FY24Q4
	Jan Feb Mar	Apr May June	July Aug Sep	Oct Nov Dec	Jan Feb Mar	Apr May June	July Aug Sep
FY24Q1 Reporting	FY24Q1: 12 Months Reporting						
FY24Q2 Reporting		FY24Q2: 12 Months Reporting					
FY24Q3 Reporting			FY24Q3: 12 Months Reporting				
FY24Q4 Reporting				FY24Q4: 12 Months Reporting			

How to Review for Data Quality: TX_PVLS

How to Review for Data Quality:

- Denominator ≥ Numerator: The number of VL results from adults and children on ART must be greater than or equal to the number of VL results from adult and pediatric ART patients with a VL <1,000 copies/ml.
- Numerator = sum of the Age/Sex numerator disaggregate: The total number of VL results from adult and pediatric ART patients with a VL <1,000 copies/ml.
- TX_CURR ≥ TX_PVLS (D): TX_CURR should be greater than or equal to the number of adults and children on ART with VL results

How to Calculate Annual Total:

This is a snapshot indicator. Results are cumulative at each reporting period. (FY23 Q4=Annual Total)

How to Use: TX_PVLS Results for Program Oversight and Improvement

Viral Load Suppression Outcomes

- Number of patients with suppressed VL
- Viral load suppression rates
- Number of patients with an unsuppressed VL

Viral Load Testing Coverage

- Number of patients eligible for VL
- Number of patients with documented VL
- Viral load coverage rates
- Viral load testing demand and gaps

- Analyzing both VL testing coverage and suppression rates by geography, sub-population, and implementing mechanisms is essential for program management and quality of care.
- Real-time review of VL results should trigger an immediate response to follow-up on patients who are not suppressed (i.e., VL ≥1000 copies/mL).

How to Use: TX_PVLS (cont.)

Pregnant Women Viral Load Testing Coverage Considerations:

- VL testing coverage for pregnant women can be estimated by comparing the TX_PVLS denominator "Pregnant" disaggregate to the sum of the last 4 quarters of PMTCT_ART "Already on ART" disaggregate. This coverage calculation may underestimate the number of pregnant women that need a viral load test as it does not include pregnant women newly initiating ART.

- When country level guidance indicates a viral load test for pregnant women newly initiating ART, the coverage denominator should include both PMTCT_ART "New on ART" and PMTCT_ART "Already on ART."

Key Populations (KPs) considerations:

The first priority of data collection and reporting of treatment among key populations must be to **do no harm**. These data must be managed confidentially to ensure the identities of individuals are protected and to prevent further stigma and discrimination of key populations.

Guiding Narrative Questions: TX_PVLS

1. Briefly describe the VL testing algorithm used in country. Please ensure that the description includes any differences in the VL monitoring algorithm for different sub-populations (e.g., pregnant women, breastfeeding women, children etc.).

2. Specify and briefly describe the data sources used to report on this indicator (e.g., EMR, LIS, DHIS 2 etc.). If the LIS is used, please explain why clinical sources could not be used to report on this indicator.

3. What efforts are made to ensure individuals, not tests are being reported (e.g., processes of de-duplicating data to reflect unique individuals being tested and outcomes). Please describe the de-duplication methodology used, if applicable.

4. Briefly provide explanation for low VL coverage at the OU-level, regional, by age/sex, or sub-population (pregnant and breastfeeding women, or key population).

5. Describe any association of ART regimen type with TX_PVLS.

Section 4: Data Use

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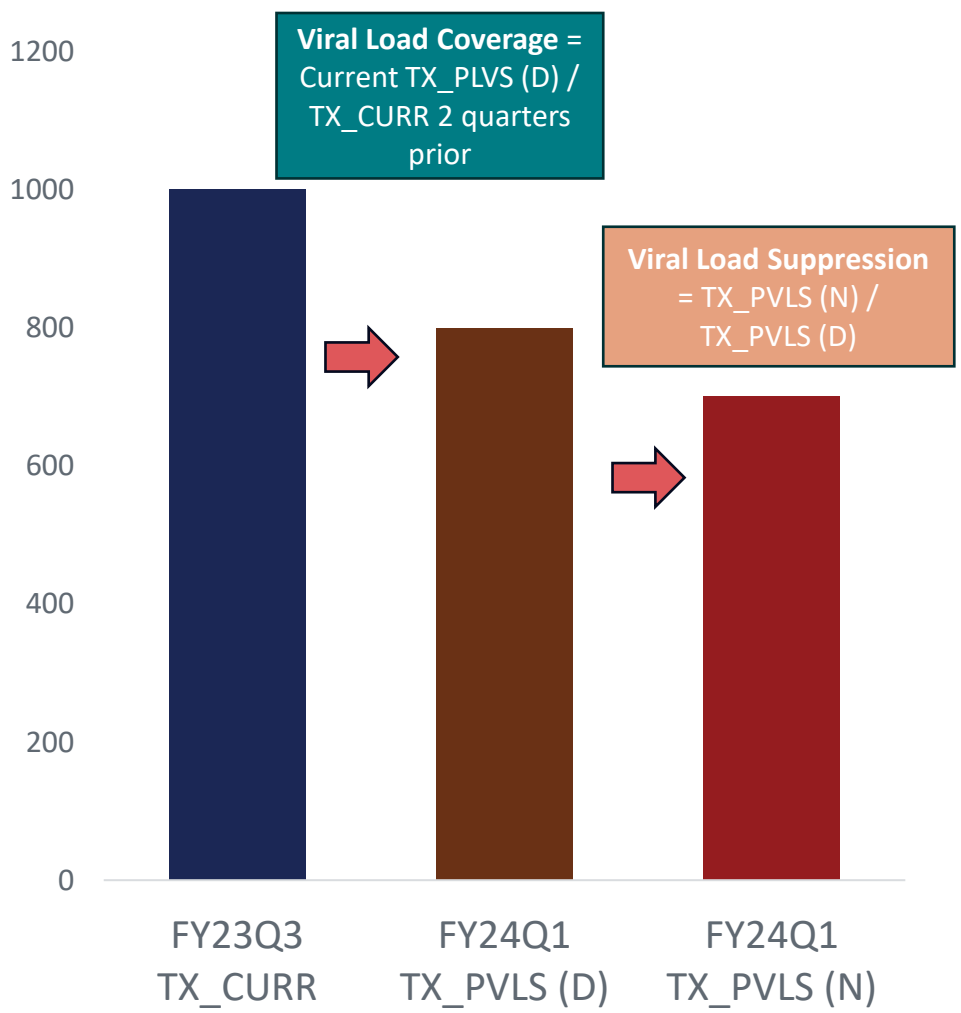
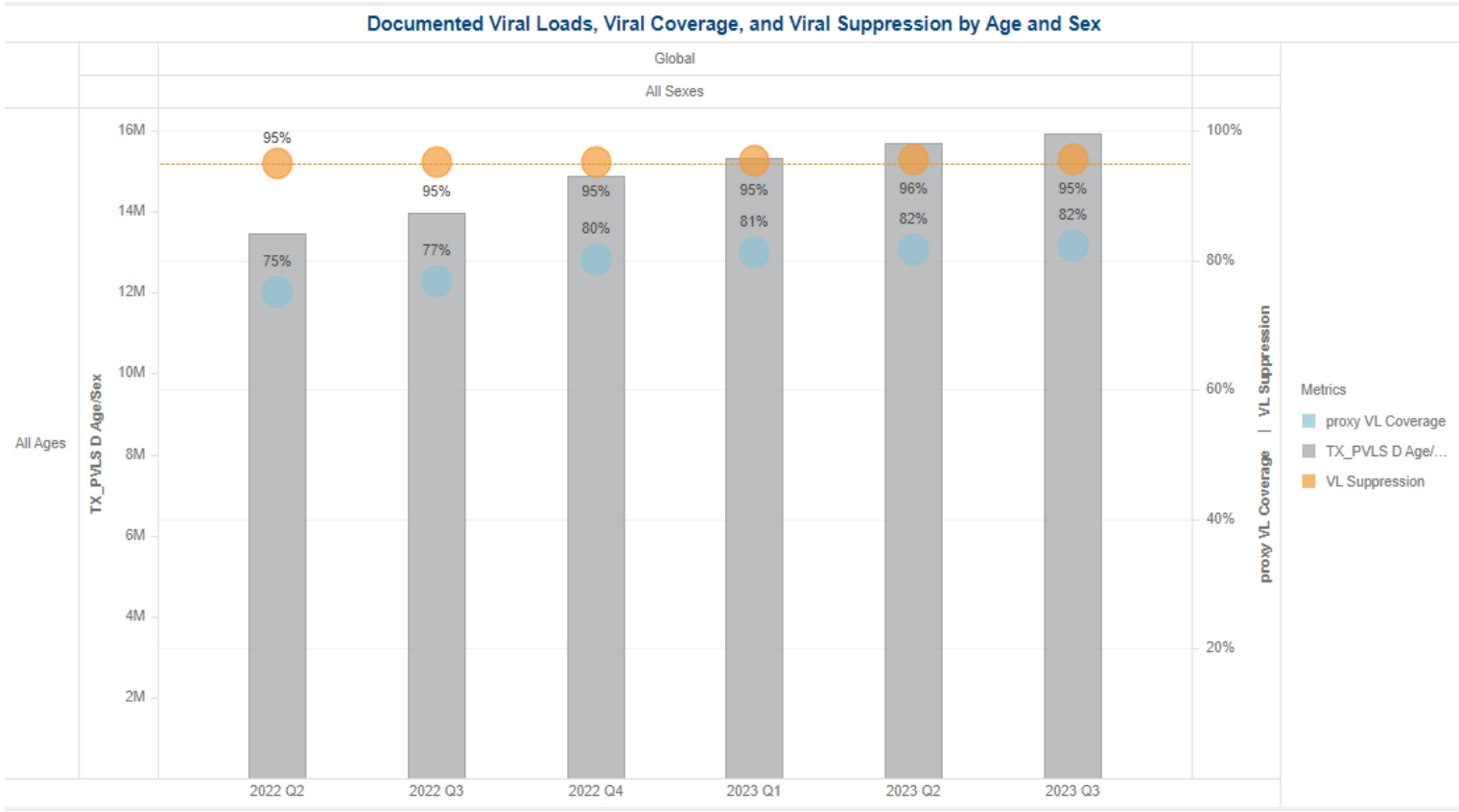
Data Visualization and Use Examples: TX_PLVS





TX_PVLS(D), VLC, and VLS trends over time.
Source: *Panorama -> Viral Load: Global -> All population -> VLC & VLS + TX_PVLS (D)*

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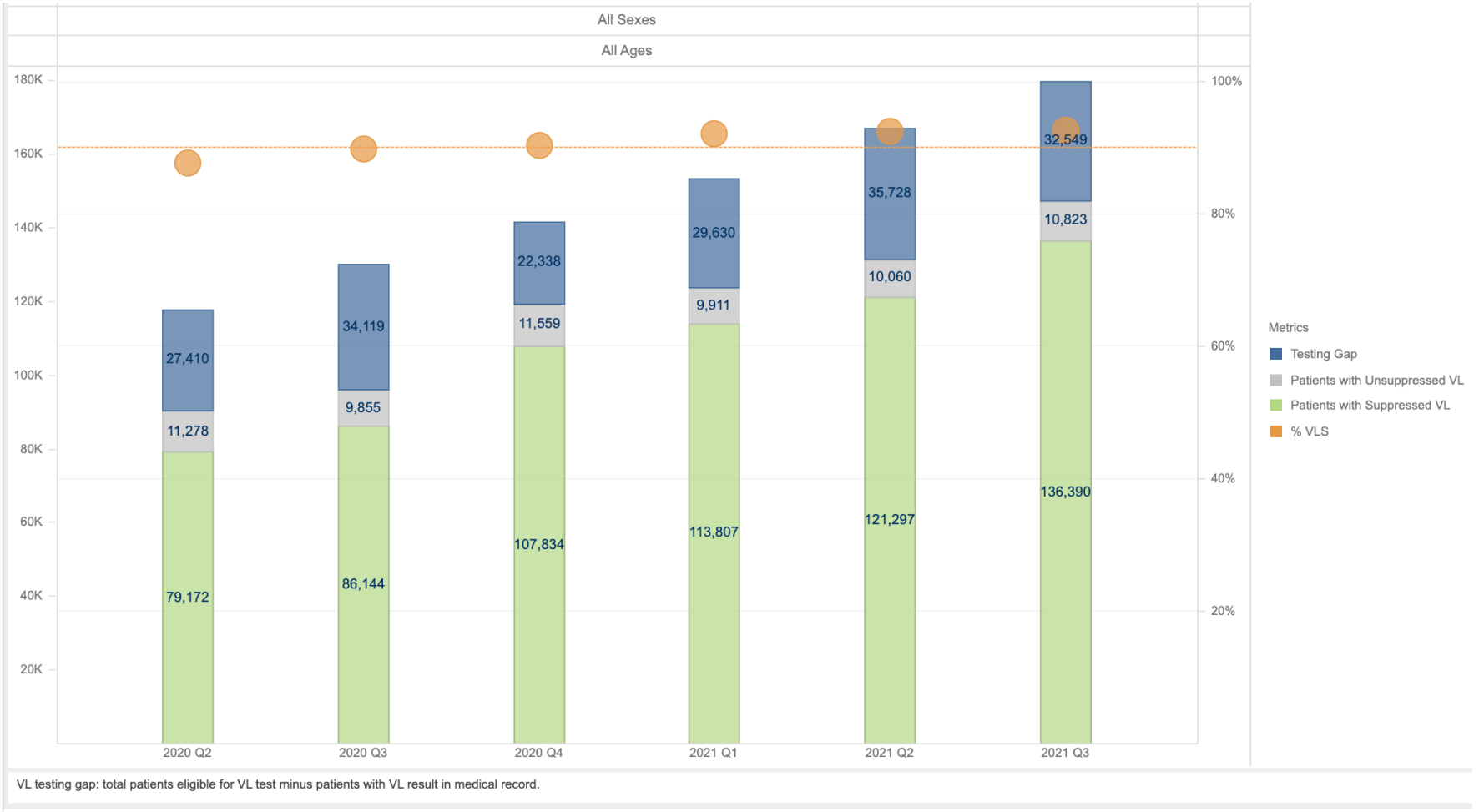
Viral Load Outcomes

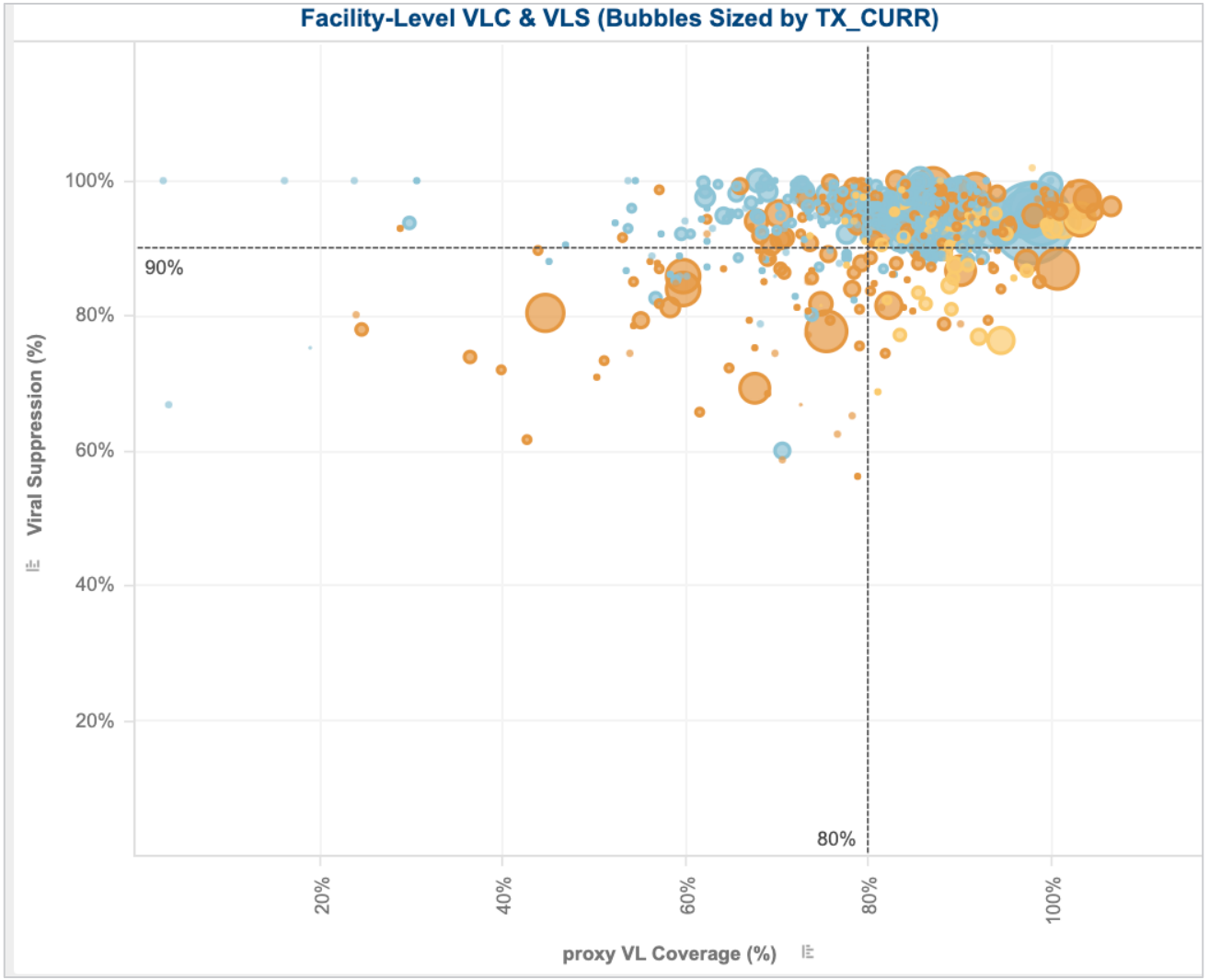
Viral Load (VL) Testing Gap, Suppressed and Unsuppressed Patients

VL Testing Gap is defined by the total number patients eligible for a VL test (TX_CURR 2 quarters prior) minus the number of patients with a VL result in medical record (TX_PVLS_D current quarter)



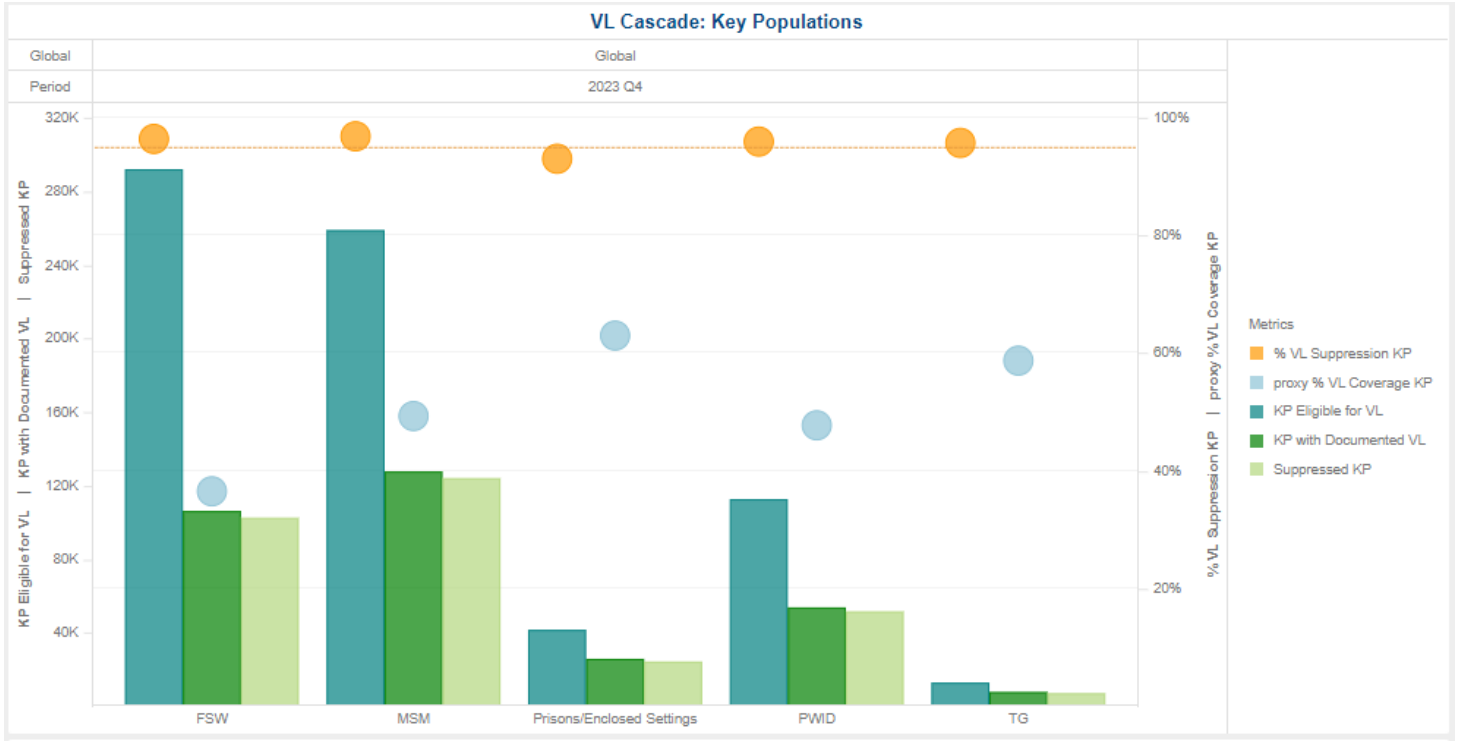
***Source**: Panorama -> Single OU: Viral Load Dossier > All Populations Chapter > VL Outcomes*

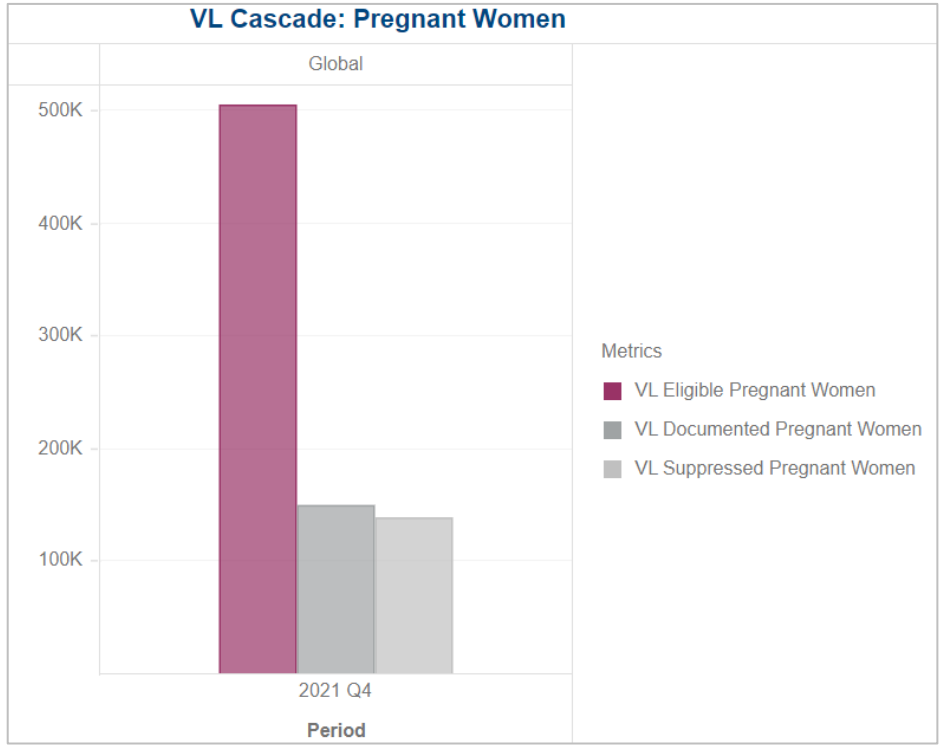
Facility-Level Viral Load Coverage (VLC) & Suppression (VLS) by SNU



***Source**: Panorama -> Single OU: Viral Load Dossier > Facility: All Pop Chapter > Facility – VLC and VLS*

Viral Load Key Population and Pregnant Women (PGW) Cascade





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***Source**: Panorama -> Global Dossier: Key Populations and PGW Cascade pages*

Section 5: Additional Resources and Acknowledgements

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Additional Resources and Acknowledgements

Additional Resources:

- WHO Updated recommendations on the role of HIV viral suppression in improving individual health and reducing transmission

- Please refer to the COP/ROP 23 Guidance for additional information on viral load testing and suppression: 2023 Country and Regional Operational Plan Guidance and Technical Considerations - United States Department of State

Acknowledgements: Thank you to the following contributors:

Mackenzie Cox, CDC; Erin Rottinghaus Romano, CDC; George Alemnji; DOS; Liz Sharp, DOS; Matias Grande, DOS

Thank you!

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