



# PEPFAR

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

# Monitoring, Evaluation, and Reporting (MER) Guidance (v.2.6): Commodities and Supply Chain

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# Video Outline

- 1) **Section 1:** Overview of the technical area and related indicators
- 2) **Section 2:** Indicator changes in MER 2.6
- 3) **Section 3:** Review of numerator, denominator, and disaggregations.
  - What is the programmatic justification and intention for the data being collected?
  - How are program managers expected to use this data to make decisions that will improve PEPFAR programming?
  - How does it all come together? How should the data be visualized (e.g., cascades)? How do these indicators relate to other MER indicators?
- 4) **Section 4:** Overview of guiding narrative questions
- 5) **Section 5:** Data quality considerations for reporting and analysis
- 6) **Section 6:** Additional Resources and Acknowledgments

# Section 1: Overview of the technical area and related indicators

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# Overview of Technical Area and Indicators

- **The goal of any supply chain is to ensure product availability for clients.**
  - Metrics look at quantity dispensed to patients during the reporting period & on-the-shelf availability at the end of the reporting period.
  - These metrics may be used together and ought to be used:
    - In conjunction with TX\_CURR, TX\_CURR\_MMD;
    - To ensure NVP is out of the system, and
    - To determine if stock available at the time of reporting is sufficient for the site/SNU for the coming quarter, considering current consumption.
- **Both metrics should be reported by facility-based IPs.** However, OUs can work with their IPs to determine which IP is best placed to submit these data, based on known data accuracy, reliability, validity, and integrity.
- **The entity which procured the products reported on does not matter.** PEPFAR support and reporting to TX\_CURR is what determines which sites must report on the SC metrics.

Program Area	Indicator	Indicator Name	Reporting Frequency	Reporting Level
Health Systems	SC_ARVDISP	The number of adult and pediatric ARV bottles (units) dispensed by ARV drug category at the end of the reporting period	Semi-annual	Facility
Health Systems	SC_CURR	The current number of ARV drug units (bottles) at the end of the reporting period by ARV drug category	Semi-annual	Facility, Intermediate distribution point, and Central Medical Stores

# Overview of Technical Area and Indicators

- TX\_CURR\_MMD is disaggregated by ARV dispensed:
  - <3 months (F/M/unknown sex <15, 15+) [Not considered MMD]
  - 3-5 months (F/M/unknown sex <15, 15+)
  - 6 or more months (F/M/unknown sex <15, 15+)
  - The total of TX\_CURR\_MMD should be equal to the sum of all the above disaggregates.
    - $TX\_CURR = <3 \text{ months} + 3\text{-}5 \text{ months} + 6 \text{ or more months}$
- The percent of patients on MMD can be calculated by summing the "3-5 month" disaggregate with the "6 or more months" disaggregates and dividing the sum by TX\_CURR.

# Supply Chain Indicators

- Relationship between indicators:
- Quantity of stock on the shelf (SC\_CURR) can be compared to quantity of ARVs dispensed (SC\_ARVDISP) to determine if current stocks are sufficient for future demand, considering past performance, targets and anticipated future performance.
- Goal is to avoid stockout, overstocks, and (hopefully) rationing

SC\_CURR

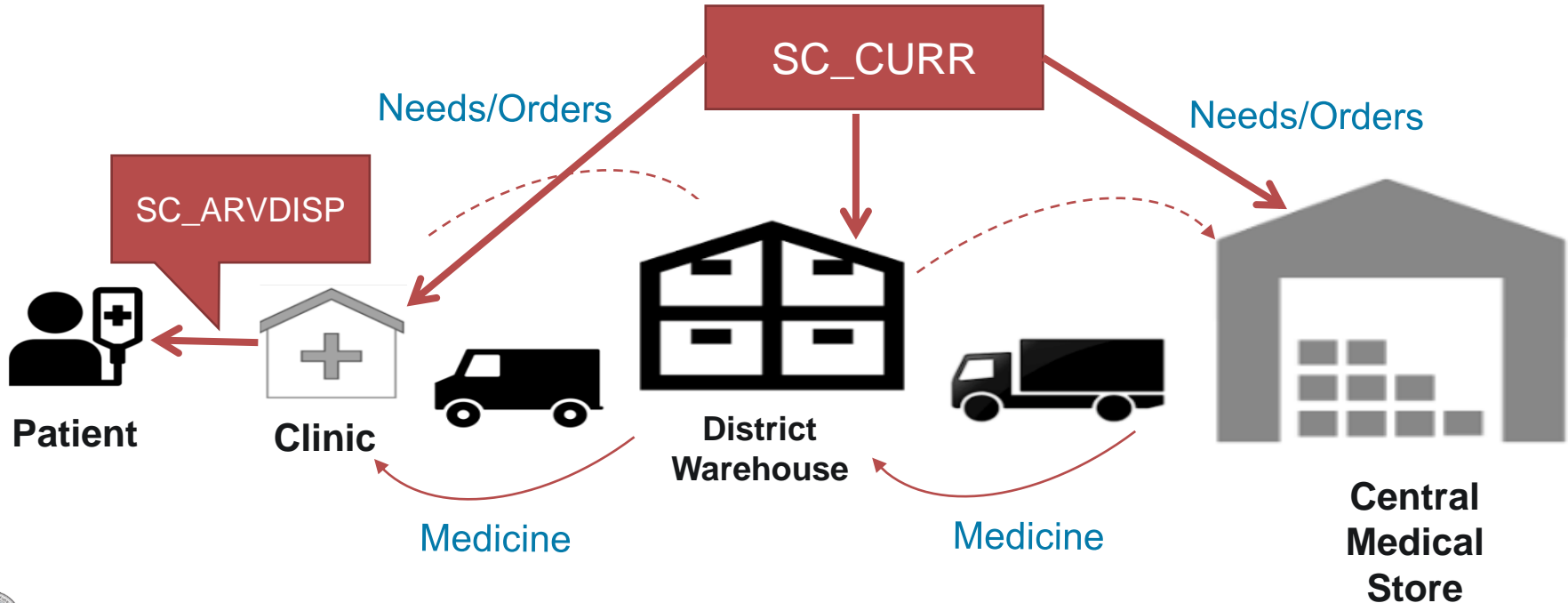


SC\_ARVDISP



# Supply Chain Indicators

Data for these metrics sits in the facility level but flows up in the form of orders and can be used, in conjunction, to determine if supplies are sufficient for reported patients, future needs and patient support validations.



# TX\_CURR\_MMD Indicator

- As TX\_CURR considers patients as a cohort, so too does TX\_CURR\_MMD.



According to my patient register, I gave out 3-month MMD to:

2 patients in Jan,

3 patients in Feb

+3 patients in March

Total 3-month TX\_CURR\_MMD for my site for Q2 is 8.

January



February



March





# Section 2: Indicator changes in MER 2.6



# What's Changed?

Indicator	Change	Programmatic Rationale
<b>SC_ARVDISP</b> and <b>SC_CURR</b>	<p>Added DTG 10 (90-count) and LPV/r 100/25 tabs (60 tabs/bottle) as regimen categories.</p> <p>Added clarifying language that the “Other” category should be used to report second- and third-line regimens only.</p>	<p>To align with COP guidance and reflect usage of all ARV regimens and monitor roll-out of optimized pediatric regimens</p> <p>To clarify use and interpretation of “Other” category</p>

# Section 3: Review of numerator, denominator, and disaggregates

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# SC\_ARVDISP

Indicator Definition: The number of adult and pediatric ARV bottles (units) dispensed by ARV drug category at the end of the reporting period.

**Numerator:** Number of ARV bottles (units) dispensed within the reporting period by ARV drug category

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**Denominator:** None

## Required Disaggregations:

TLD 30-count bottles

TLD 90-count bottles

TLD 180-count bottles

TLE/400 30-count bottles

TLE/400 90-count bottles

TLE 600/TEE bottles

LPV/r 40/10 (pediatric) bottles

LPV/r 100/25 bottles

DTG-10 90-count bottles

NVP (adult) bottles

NVP (pediatric), (not including NVP 10) bottles

Other (adult) bottles

Other (pediatric) bottles



Indicator Definition: The current number of bottles of ARV on-the-shelf at the end of the reporting period by ARV drug category.

**Numerator:** The number of bottles of ARVs on-the-shelf at the end of the reporting period by ARV drug category

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**Denominator:** None

**Required Disaggregations:**

TLD 30-count bottles

TLD 90-count bottles

TLD 180-count bottles

TLE/400 30-count bottles

TLE/400 90-count bottles

TLE 600/TEE bottles

LPV/r 40/10 (pediatric) bottles

LPV/r 100/25 bottles

DTG-10 90-count bottles

NVP (adult) bottles

NVP (pediatric), (not including NVP 10) bottles

Other (adult) bottles

Other (pediatric) bottles



# TX\_CURR\_MMD

## Indicator Definition:

**Numerator:** The number of patients who are participating in MMD

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**Denominator:** None

### Required Disaggregations:

- TX\_CURR\_MMD is calculated by summing the following TX\_CURR - ARV Dispensing Quantity disaggregations:
  - 3-5 months of ARVs dispensed to patient by: <15 F/M, 15+ F/M, Unknown Age F/M
  - 6 or more months of ARVs dispensed to patient by: <15 F/M, 15+ F/M, Unknown Age F/M
  - NOTE: <3 is not considered MMD, but is included to ensure that those who are not on MMD are still reported.

# Definitions of Disaggregates

- SC\_CURR and SC\_ARVDISP have the same disaggregates.
- All units reported for each disaggregate should be counted in bottles.
- For the purposes of data analysis, all ARV bottles listed in the disaggregations, other than TLD 90, TLD 180, and TLE400 90, are one month of treatment.
  - TLD 90 and TLE400 90 are three months of treatment.
  - TLD 180 is six months of treatment.

# Definitions of "Other" Category

Products included in the “Other” category consist of, first, commodities not listed in the product-specific disaggregates and, second, those which are used for **second- and third-line treatment only**. These are expected to be a much smaller proportion of the total than Dolutegravir-based regimens. Indicative products belonging in the “Other (adult)” and “Other (pediatric)” lists are below but are not exhaustive.

- Other (adult) bottles (Examples of adult bottles are below but are NOT EXHAUSTIVE.)
  - Atazanavir/Ritonavir 300/100
  - Lopinavir/Ritonavir 200/50 mg
- Other (pediatric) bottles (Examples of pediatric bottles are below but are NOT EXHAUSTIVE.)
  - Darunavir 75 mg
  - Raltegravir 100 mg (Granules for suspension)



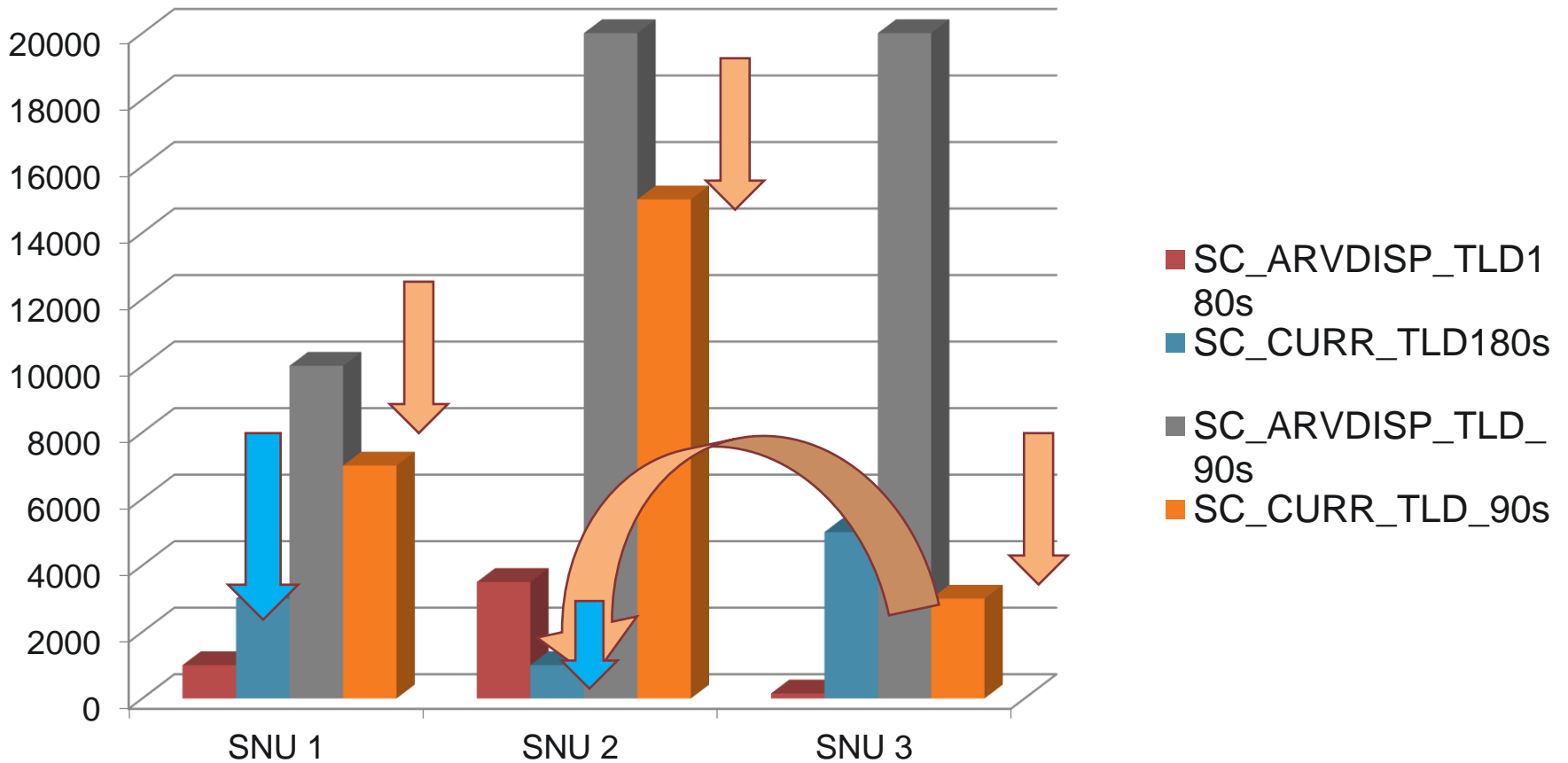
# How to Count SC\_ARVDISP

- **Data Sources:** Facility dispensing registers, reported at the facility level, based on data available to the facility-based implementing partner, Warehouse Management Information Systems (WMIS), and could include: host government-supported Logistics Management Information System (LMIS). Please ensure the data source used is complete, consistent, reliable, and of high quality.
- **Calculation Method:** Sum of bottles dispensed during the reporting period.
- **Key considerations for reporting:**
  - If data on ARV dispensation are not available, 'issues data' may be used for reporting.
    - 'Issues data' is defined as bottles of ARVs provided to facilities from a distribution center. If 'issues data' are used for reporting, include the following in the narrative section:
      - (1) an explanation for doing so and
      - (2) what steps will be taken to provide ARV dispensation data in the future.

# How to Count SC\_CURR

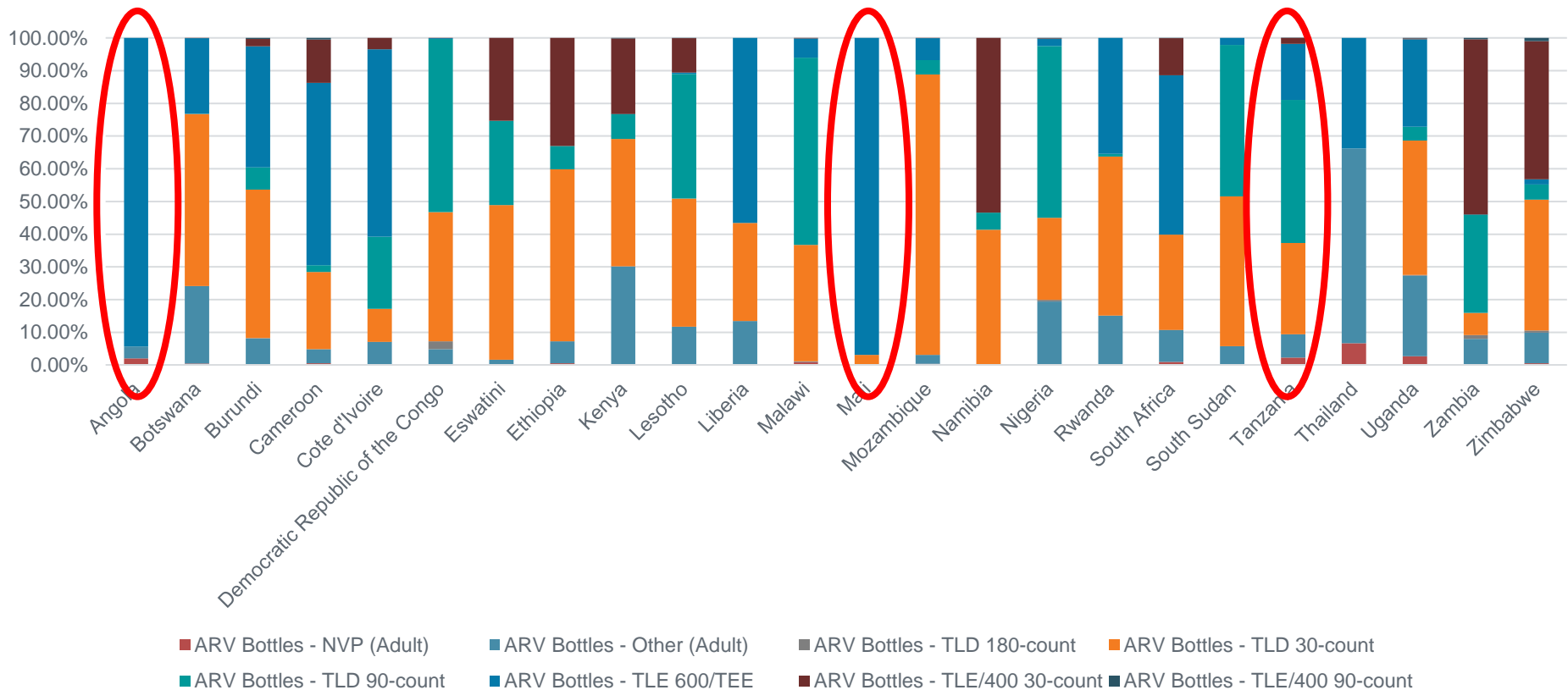
- **Data Sources:** Facility dispensing registers related stock cards, reported at the facility level, based on data available to the facility-based implementing partner, Warehouse Management Information Systems (WMIS), and could include: host government-supported Logistics Management Information System (LMIS). Please ensure the data source used is complete, consistent, reliable, and of high quality.
- **Calculation Method:** Count of bottles on-the-shelf at the end of the reporting period.

# Bringing it all Together Visually



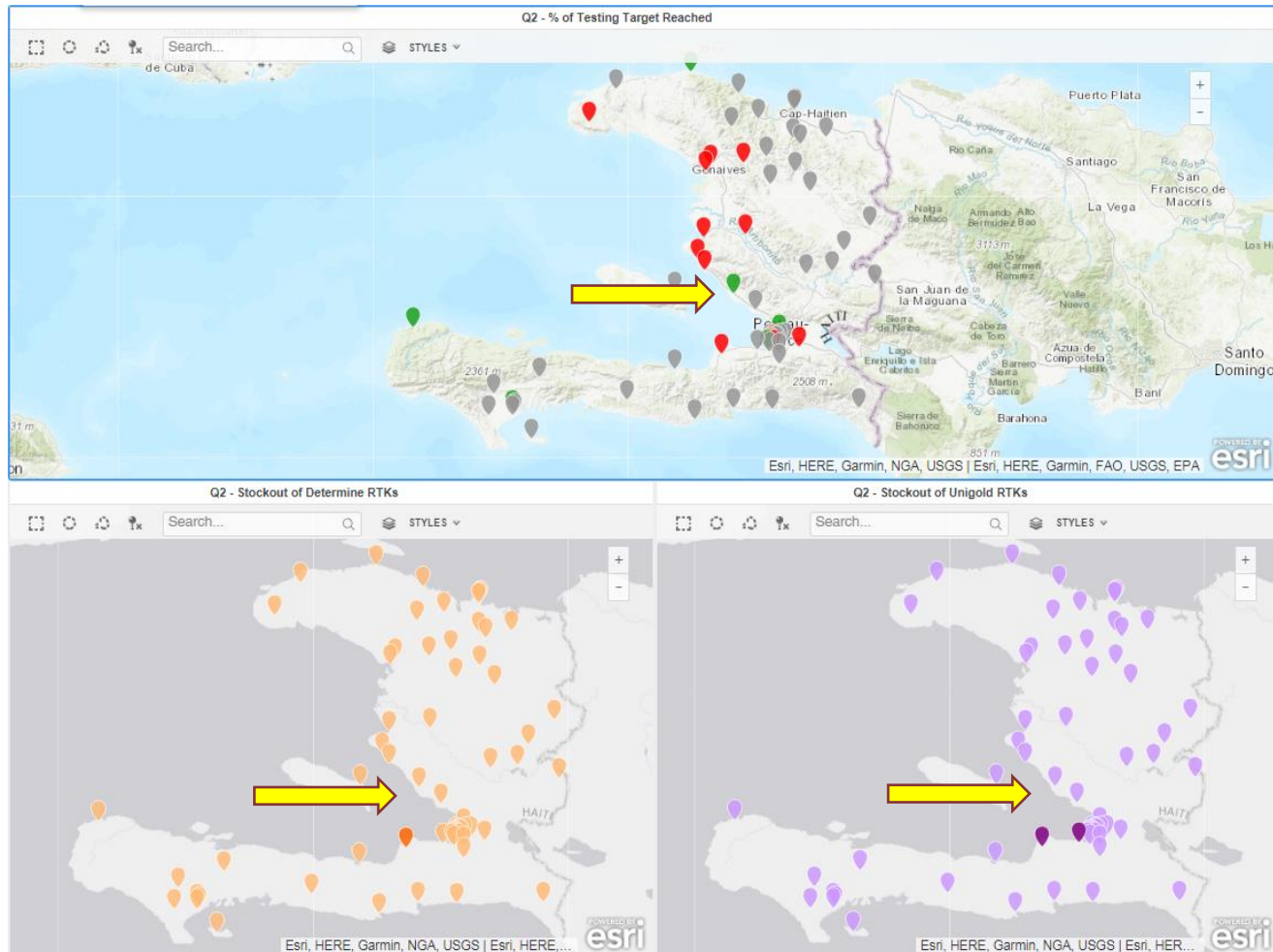
	SNU 1	SNU 2	SNU 3
SC_ARVDISP_TLD180s	1,000	3,500	150
SC_CURR_TLD180s	3,000	1,000	5,000
SC_ARVDISP_TLD_90s	10,000	20,000	20,000
SC_CURR_TLD_90s	7,000	15,000	3,000

# Bringing it all Together Visually



- SC\_ARVDISP for FY20 Q4, looking towards ARV Optimization and trying to determine which countries need additional assistance to adopt TLD.
  - This can be done by SNU, or within an SNU to identify SNUs or sites that are having difficulty optimizing and would benefit from
- Future applications – Pediatric ARV Optimization

# Bringing it all Together Visually



- SC\_CURR can be used to show stock availability.
  - Shown above is the RTK availability in Haiti, showing that one site during the period in question had stocked out of all RTKs.

# Section 4: Overview of guiding narrative questions



# Guiding Narrative Questions for SC\_ARVDISP

1. What data source(s) are used for this indicator? Specify whether the quantities reported are those which are dispensed to the patients (preferred) or issued to the facilities from a distribution center.
2. Describe how ARV dispensing data are reported through the system and how orders are calculated.
  - a) Is the system managed through an 'informed push'? Is it a pull system? Is ARV dispensing data reported actual or is it an average/calculated/estimated?
  - b) If an LMIS is available, how often do facilities report into the LMIS (e.g., monthly, quarterly)?
3. How does the SC\_ARVDISP data relate to HIV STGs? Are sites/SNUs dispensing as expected based on the HIV STGs? If not, why not?
4. If more frequent dispensation data are available (monthly or quarterly LMIS data, for example), especially data from LMIS or SC-FACT (as was recommended in the COP guidance), utilize that to further explain the data reported.

# Guiding Narrative Questions for SC\_CURR

1. What data source(s) are used to report on this indicator? Specify whether the data source is: the LMIS, Forecasting software or database, the central medical stores warehouse information system, the PPMR-HIV (Procurement Planning and Monitoring Report for HIV), and/or another source.
2. Report when the quantification was done and if the forecast or supply plan have been updated recently, if so, provide a date and whether or not the data from SC\_CURR informed that action.
3. Describe the drug distribution period (e.g., monthly, bi-monthly, etc.)?
4. If the SC\_CURR data plus an outside forecast or quantification demonstrates that a stock out will occur for any medication at the central or intermediate levels, please describe why and what is being done to mitigate that stock out or if it was planned, i.e., a product no longer recommended in the standard treatment guidelines.



# Guiding Narrative Questions for SC\_CURR

5. If the data shows waste, please describe why and what is being done to mitigate this event as well as any plans for environmentally safe destruction. Likewise, if funding is unavailable for destruction, please describe that.
6. Are stock-outs a problem at the time of report? Use the data to determine why the stock-out occurred. If data outside SC\_CURR and SC\_ARVDISP are used to determine why the stock-out occurred, please describe that analysis and actions taken to mitigate.
7. During the reporting period, have stock-outs been a problem?
8. Use the data to show any anticipated gaps, needed shipments, under- or overstocks, or stock appropriate situations based on current and expected consumption/dispensed to patients.

# Section 5: Data quality considerations for reporting and analysis

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# Data Quality Considerations for Reporting and Analysis: SC\_CURR and SC\_ARVDISP

- Check to ensure that the quantity dispensed and quantity on hand do not differ by a sizeable factor (if one is 10X greater than the other, that should be investigated.)
- As the metrics are utilized it is expected that some partners will need additional guidance to report on both to ensure uniformity of definitions and data sources.
- Data should come from facility partners when possible and if complete.
- If some required PEPFAR sites are missing it would be wise to determine why and facilitate data submission.

# Data Quality Considerations for Reporting and Analysis: TX\_CURR\_MMD

- Please ensure that TX\_CURR equals the total patients reported into all disaggregations for TX\_CURR\_MMD.
- Please ensure that any IP reporting TX\_CURR is also reporting on TX\_CURR\_MMD.
- Please ensure that the sum of patients reported into TX\_CURR\_MMD does not exceed TX\_CURR

# Section 6: Additional resources and acknowledgments

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# Acknowledgments

- Thank you to Pooja Vinayak and Telile Bayissa for their assistance coordinating MER updates
- Thank you also to the Continuity of Treatment COOP, the MMD ST3, the Pediatric ST3 and the Care and Treatment ST3 for their additions.



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# Thank you!