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

# Monitoring, Evaluation, and Reporting (MER) Guidance (v.2.4): TESTING FOR RECENT HIV-1 INFECTION

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# Video Outline

- 1) **Section 1:** Overview of the technical area and related indicators
- 2) **Section 2:** Indicator changes in MER 2.4
- 3) **Section 3:** Review of numerator, denominator, and disaggregations
- 4) **Section 4:** Overview of guiding narrative questions
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# Section 1: Overview of the technical area and related indicators

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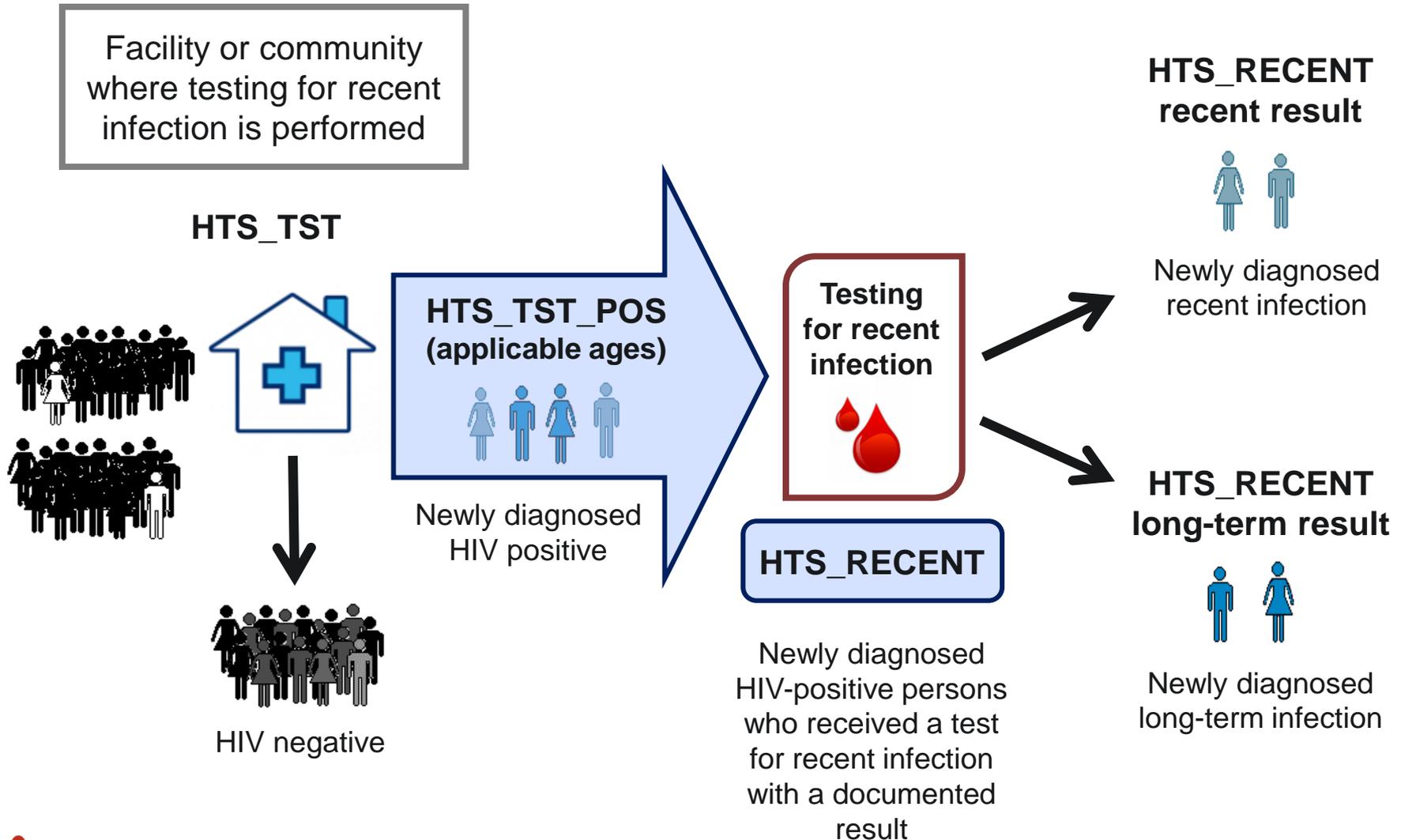


# Overview of Technical Area and Indicators

- Rapid tests for recent infection distinguish a recent HIV-1 infection from a long-term HIV-1 infection.
  - A recent infection is an infection that was acquired within approximately the last one year.
  - A long-term infection is an infection that was acquired approximately more than one year ago.
- The HTS\_RECENT indicator captures the number of newly diagnosed HIV-positive persons who received testing for recent infection during the reporting period.

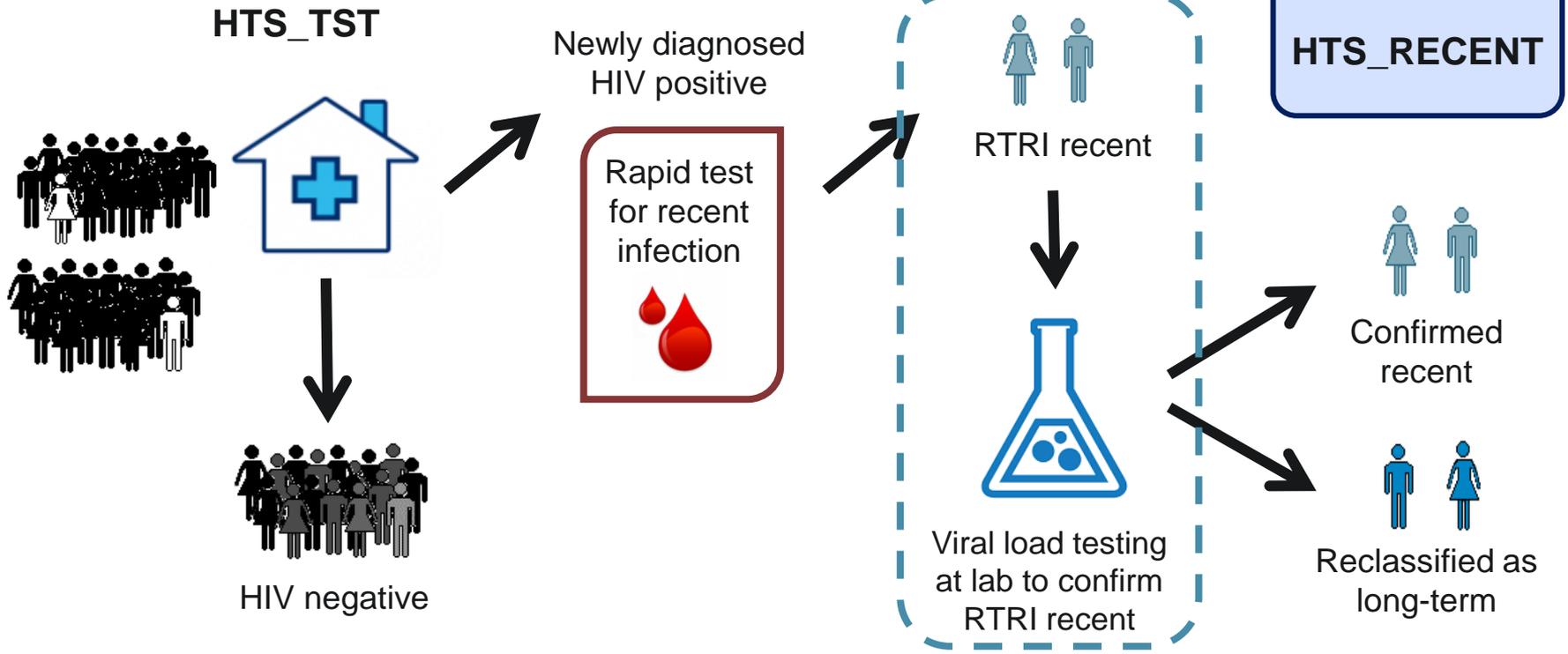
Program Area Group	Indicator Code	Indicator Name	Reporting Frequency	Reporting Level
Testing	HTS_RECENT	Number of newly diagnosed HIV-positive persons who received testing for recent infection with a documented result during the reporting period	Quarterly	Facility & Community

# Relationship with HTS\_TST

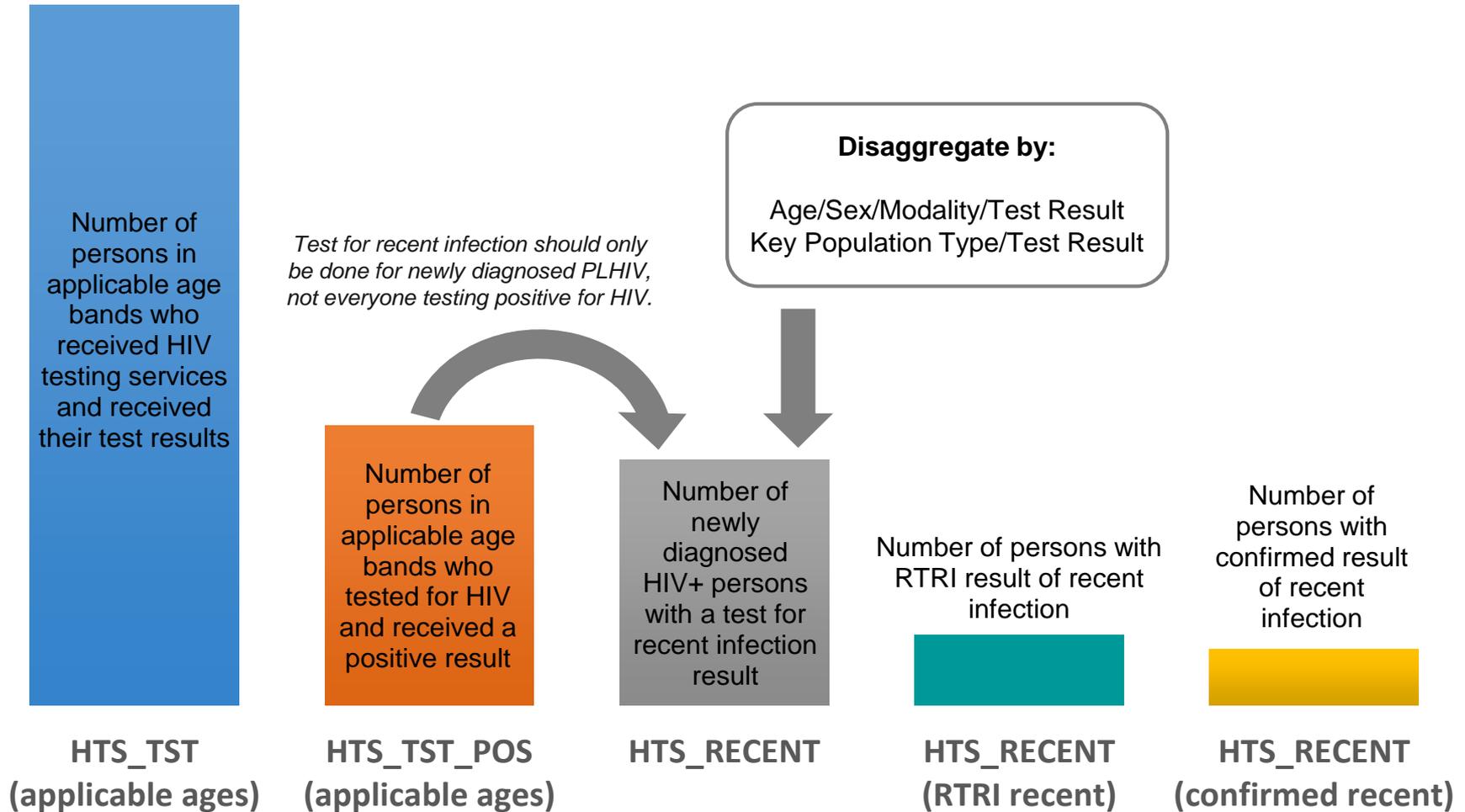


# Relationship with HTS\_TST

Facility or community where testing for recent infection and blood collection is performed



# Indicator Cascade



# Section 2: Indicator changes in MER 2.4



# What's Changed?

This was a new indicator in FY19 and has been revised for FY20 to align it with HTS\_TST and clarify data elements that posed challenges last year.

Change	Programmatic Rationale for Change
Numerator and denominator combined into a single numerator	Simplify reporting and interpretation
Modality and test result disaggregations added	Capture more information and align with HTS_TST
Pregnancy status disaggregation removed	Use modality information instead to reduce redundancy
Test indication disaggregation (assay, RITA, and not documented) renamed and redefined	Clarify reporting and align with testing algorithms: all assay results to be reported under rapid test for recent infection (RTRI) and confirmed results through viral load testing to be reported as a subset



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

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# HTS\_RECENT Description

**Numerator:** Number of newly diagnosed HIV-positive persons who received a test for recent infection with a documented result during the reporting period

**Denominator:** Not applicable

## Disaggregations

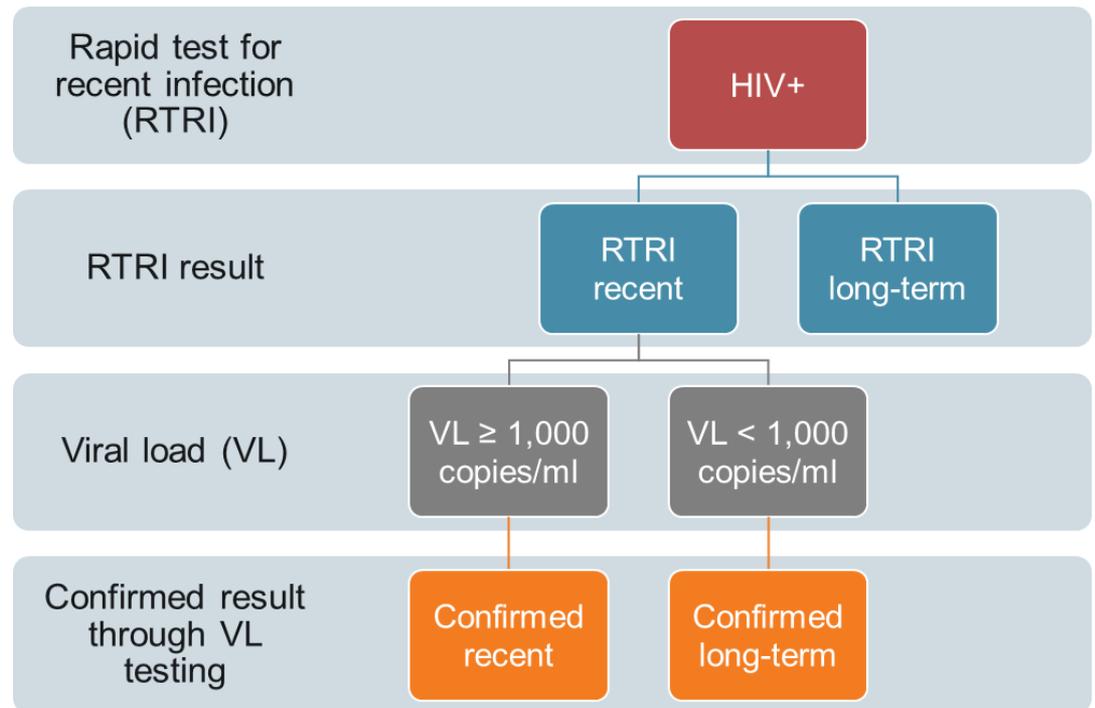
- Service delivery modality (facility and community)
  - See HTS\_TST for more information
  - Pediatric modalities do not apply
- Age and sex
- Rapid test for recent infection (RTRI) result
- Confirmed result through viral load testing (per country guidelines)
- Key population type
  - PWID, MSM, TG, FSW, and people in prison or other closed settings
  - See Appendix A: Key Population Classification Document

# RTRI Results

- All results from the RTRI should be reported regardless of viral load testing to confirm RTRI recent results.
- A recent result on the RTRI means that the person was likely infected with HIV within the last one year. The recent result may be confirmed with viral load (VL) testing.
- A long-term result on the RTRI means that the person was likely infected with HIV more than one year ago. This is the final result and does not warrant additional testing.
- The RTRI may produce two other results: invalid and HIV negative. These results should not be reported for this indicator but should be captured in country-specific recent infection surveillance systems for monitoring purposes. In the event of an invalid or HIV-negative result, please follow the country's established procedures for dealing with these results (e.g., retesting, reporting, quality control, etc.).

# Confirmed Result through VL Testing

- In some countries, VL testing is done to confirm RTRI recent results as part of a recent infection testing algorithm (RITA).
- Persons who receive VL testing should be reported as a subset of those reported under RTRI.
- A confirmed recent result refers to RTRI recent cases that have been confirmed by VL testing to be recent.
- A confirmed long-term result refers to RTRI recent cases that have been reclassified to long-term based on VL.



# Data Entry Example

## By modality

RTRI result	Unknown		15-19		20-24		25-29		30-34		35-39		40-44		45-49		50+	
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M
Recent																		
Long-term																		

## Not by modality

Confirmed result	Unknown		15-19		20-24		25-29		30-34		35-39		40-44		45-49		50+	
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M
Recent																		
Long-term																		

RTRI result	Key Population Type				
	PWID	MSM	TG	FSW	Prison
Recent					
Long-term					

Confirmed result	Key Population Type				
	PWID	MSM	TG	FSW	Prison
Recent					
Long-Term					

# How to Count HTS\_RECENT

- Data for this indicator should be reported at all facilities and communities that provide testing for recent infection.
- The indicator should be reported alongside HTS\_TST at facilities/communities where tests for recent infection have been incorporated as a supplemental test in addition to the country-approved HIV diagnostic testing algorithm.
- If facility or community-based providers refer specimens to a lab or hub facility for testing for recent infection, the indicator should be reported under the facility/community where the specimen was collected. The supporting clinical service partner (or equivalent) should do the reporting, but in some cases, reporting may need to be done by other partners supporting recent infection surveillance, such as surveillance or lab partners.
- Data for this indicator should be collected and reported regardless of whether test results are returned to clients.
- Data sources include case-based surveillance systems, EMRs, registers, logbooks, report forms, lab information systems, and other data collection tools.
- Annual totals are calculated by summing quarterly numbers.

# How to Use HTS\_RECENT

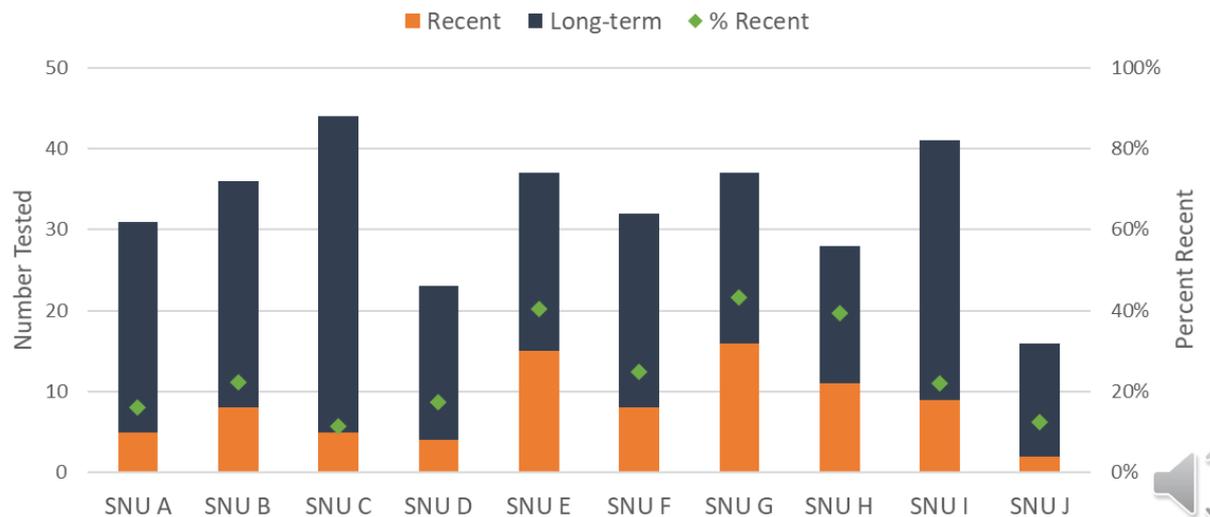
- Surveillance
  - Characterization of recent and long-term HIV infections will enable the identification of geographic areas and/or demographic groups that may benefit from intensified prevention and testing activities and can also be used to monitor epidemic trends over time.
- Public health response
  - Monitoring the number and percentage of recent infections can be used to identify areas and subpopulations with ongoing transmission to quickly target education, prevention, and testing resources to increase case finding, intensify index testing services, and subsequently interrupt transmission.
  - Changes over time should be monitored to assess program impact.
- Program implementation
  - The indicator may be used to monitor the rollout of testing for recent infection. A crude estimate of testing coverage may be calculated by dividing HTS\_RECENT by HTS\_TST\_POS (applicable age/sex disaggregates).

# Data Use Examples

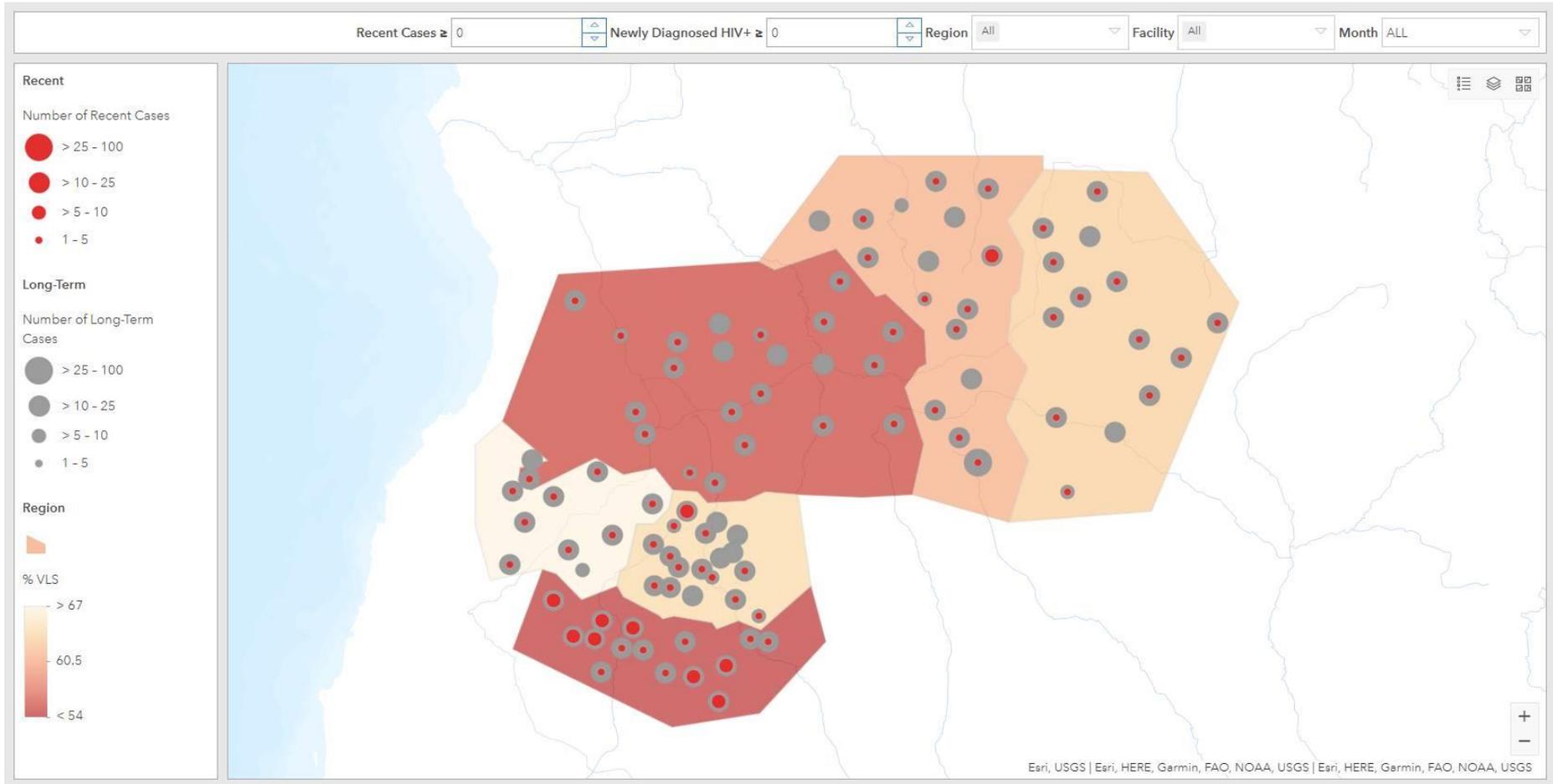
### Percent Recent Trend by Quarter



### Test for Recent Infection Results by SNU



# Data Use Examples



# Section 4: Overview of guiding narrative questions

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# Guiding Narrative Questions

- As testing for recent infection is being scaled, please describe the stage/scope of implementation (SNUs, sites, populations, etc.).
- If VL testing is being done to confirm recent status, please explain if the total number of people who received confirmatory testing does not equal the number reported under RTRI recent. Due to turnaround time, VL results may be delayed, and RTRI results should be reported regardless of whether confirmed results are available.
- If HTS\_RECENT  $\neq$  HTS\_TST\_POS (applicable ages) for the sites/populations doing testing for recent infection, please explain why. Note that newly diagnosed PLHIV infected with HIV-2 who are not co-infected with HIV-1 should not be tested for recent infection.
- Calculate percent recent by dividing the number of persons with a recent result by the total number of persons tested (recent + long-term). Please explain whether the percent recent is expect, and if not, what investigations are being done.

# Section 5: Data quality considerations for reporting and analysis

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# Data Quality Considerations

- $HTS\_TST\_POS$  (applicable ages)  $\geq$   $HTS\_RECENT$ 
  - The number of persons in applicable age bands who received HIV testing services and received a positive result should be greater than or equal to the number of persons who tested for recent infection.
- $HTS\_RECENT$  (RTRI)  $>$   $HTS\_RECENT$  (confirmatory testing)
  - The number of persons with a RTRI result should be greater than the number of persons with a confirmatory testing result.
  - Confirmed results should be a subset of RTRI recent results.
- $HTS\_RECENT \geq$  subtotal of key population disaggregates
  - The number of persons who tested for recent infection should be greater than or equal to the sum of the key population disaggregates.

# Section 6: Additional resources and acknowledgments

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# Additional Resources & Acknowledgements

Please check out the comprehensive set of resources for recent infection surveillance on the TRACE eLearning Hub: [trace-recency.org](https://trace-recency.org).

Many thanks to the support and contributions of the PEPFAR community of practice for recent infection surveillance, country offices, and partners.



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# Thank you!

