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Monitoring, Evaluation, and Reporting (MER) Guidance (v.2.7): TESTING FOR RECENT HIV-1 INFECTION

Recency Community of Practice & Data Use for Impact Team | GHSD-PEPFAR

December 2023

Training Outline

Section 1: Overview of Recency Surveillance/Testing & Summary of Indicator (HTS_RECENT)

Section 2: HTS_RECENT Changes in MER 2.7

Section 3: Overview of HTS_Recent

Section 4: Data Use

Section 5: Additional Resources and Acknowledgments

Section 1: Overview of Recency Testing & Summary of HTS_RECENT

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Background of Recency Surveillance

- As countries progress toward global targets, surveillance of newly diagnosed persons will ensure that interventions reach populations at highest risk of acquiring or transmitting HIV infection.
- One approach is to identify recent HIV infections, defined as those acquired within approximately the last one year.
- Use of rapid tests for recent HIV-1 infection (RTRI), in conjunction with viral load testing as indicated in the recent infection testing algorithm (RITA), will facilitate the establishment of a surveillance system to detect, monitor, and characterize recent infections among newly diagnosed HIV cases.
- Data from a recent infection surveillance system will contribute to data-driven approaches to fine-tune a country's programmatic response through prioritized programming and resource allocation.

Background and Summary of Indicators

- Rapid tests for recent infection (RTRI) 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 persons living with HIV who received testing for recent infection during the reporting period.

Program Area Group	Indicator	Indicator Description	Reporting Frequency	Reporting Level
Testing	**HTS_RECENT**	Number of newly diagnosed persons living with HIV, ≥15 years of age, who received testing for recent infection with a documented result during the reporting period	Quarterly	Facility & Community

Section 2: Indicator Changes in MER 2.7

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HTS_RECENT Changes in MER 2.7

Change	Programmatic Rationale
Added clarifying language throughout the reference sheet	Clarify reporting guidance and align with technical considerations
New HTS modality added to separate PMTCT Post ANC1 Pregnant/L&D/Breastfeeding modality into two modalities to better account for maternal retesting practices: • Post ANC1 Pregnant/L&D • Post ANC1 Breastfeeding	Align with HTS_TST indicator updates

Section 3: Overview of HTS_RECENT

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Indicator Definition: HTS_RECENT

Indicator Definition: Number of newly diagnosed persons living with HIV, ≥15 years of age, who received testing for recent infection with a documented result during the reporting period

Numerator: Number of newly diagnosed persons living with HIV who received a test for recent infection with a documented result

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Denominator: N/A

Numerator Description:
Number of newly diagnosed persons living with HIV ≥15 of age who received a test for recent infection with a documented result during the reporting period

HTS_RECENT should be reported alongside HTS_TST at facilities and communities where tests for recent infection have been incorporated as a supplemental surveillance test in addition to the country- approved HIV diagnostic testing algorithm

Numerator Disaggregates: HTS_RECENT

Disaggregate Groups	Disaggregates
Modality and RTRI result by age/sex (facility and community)	• RTRI recent or long term • Service delivery modality • Finer age bands (15-19 F/M to 50+ F/M, Unknown Age F/M)
Modality and RITA result by age/sex (facility and community) [required if doing RITA]	• RITA recent or long term through VL testing • Service delivery modality • Finer age bands (15-19 F/M to 50+ F/M, Unknown Age F/M)
RTRI result by KP type	• RTRI recent or long term • Key population type (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)
RITA result through VL testing by KP type [required if doing RITA and data available]	• RITA recent or long term through VL testing • Key population type (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)

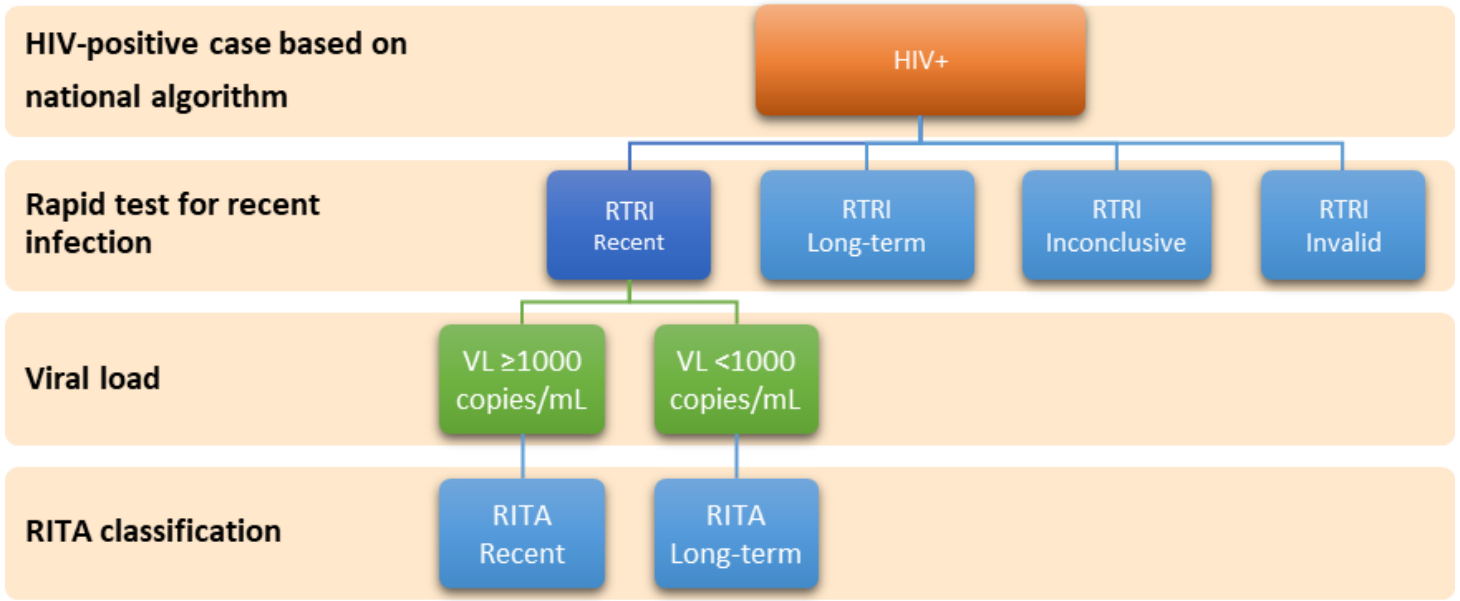
Definitions of Disaggregates: HTS_RECENT

Disaggregate Group	Disaggregates
Modality	• Service delivery modalities can reflect a reason for testing (e.g., index, STI), as well as the location/place of testing (e.g., inpatient ward, VCT drop-in center). This should match the modalities used for HTS_TST reporting. Please refer to the HTS_TST indicator reference sheet for descriptions of the modalities.
RTRI Result	• RTRI refers to the rapid test for recent infection. All results from the RTRI should be reported regardless of viral load testing to determine recency testing uptake. • Only RTRI results from individuals should be reported. No quality control (QC) or proficiency panel results should be reported as an RTRI result. • A recent result on the RTRI means that the person was likely infected within the last one year. Viral load testing should be used to improve accuracy of recency classification for RTRI recent results. • A long-term result on the RTRI means that the person was likely infected more than one year ago. This is the final result and does not require additional testing. • The RTRI may produce two other results: invalid and inconclusive. These results should not be reported for this indicator but should be captured in the country's recent infection surveillance database for monitoring purposes. If an invalid or inconclusive result, follow the country's established procedures for dealing with these results (e.g., retesting, reporting, quality control, etc.).

Definitions of Disaggregates: HTS_RECENT (cont.)

Disaggregate Group	Disaggregates
RITA Result	• Viral load testing, as part of a recent infection testing algorithm (RITA), is highly recommended. Persons who receive viral load testing should be reported as a subset of those reported under RTRI recent. • A RITA recent result refers to a person with an RTRI recent result and a viral load result of ≥1,000 copies/mL and therefore has a final classification of recent. • A RITA long-term result refers to a person with an RTRI recent result but a viral load result of <1,000 copies/mL and therefore has a final classification of long-term.

Recent Infection Testing Algorithm



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How to Use: HTS_RECENT

- **Surveillance**
  - Identify geographic areas and/or demographic groups that may benefit from intensified prevention and testing activities.
  - Monitor epidemic trends over time.
- **Public health response**
  - Identify areas and subpopulations with ongoing transmission to quickly target resources to increase case finding, intensify index testing services, and interrupt transmission.
  - Changes over time should be monitored to assess program impact.
- **Program implementation**
  - Monitor the rollout of testing for recent infection.
  - A crude estimate of Recency testing coverage may be calculated by dividing HTS_RECENT by HTS_TST_POS (applicable age/sex disaggregates).
  - As noted in Technical Considerations, recency results should not affect clinical management and PEPFAR does not recommend the return of results to individual patients

How to Collect: HTS_RECENT

- **Data sources:** Case-based surveillance systems, EMRs, registers, logbooks, report forms, lab information systems, and other data collection tools.
- **How to calculate annual totals:** Sum across quarters
- **Key considerations for reporting:**
  - Report at all facilities & communities that provide testing for recent infection.
  - If specimens are referred to a different lab or hub facility for testing for recent infection, report under the facility/community where the specimen was collected.
  - Because RITA results will take longer than RTRI, do not wait for RITA results to report the RTRI results. RITA results should be reported only during the same MER reporting period when the RTRI was conducted.
    - Any RITA results that are missing or delayed due to prolonged turnaround time of VL testing should be outlined in the narrative and any RITA results that come in after the reporting period close can be added during the data cleaning period.
  - Report recency test results only for newly diagnosed PLHIV. RTRI results obtained for other purposes, such as quality control testing or proficiency testing, are not reported under this indicator but should be captured in country-specific systems for monitoring purposes.

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																		

RITA result through VL testing	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

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

RITA result through VL testing	Key Population Type				
	PWID	MSM	TG	FSW	Prison
Recent					
Long-Term					

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How to Review for Data Quality: HTS_RECENT

- **HTS_TST_POS (≥15 years) ≥ 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 results) > HTS_RECENT (RITA results)**
  - The number of persons with a RTRI result should be greater than the number of persons with a RITA result through viral load testing.
  - RITA results should be a subset of RTRI recent results.
- **HTS_RECENT ≥ 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.

Guiding Narrative Questions: HTS_RECENT

1. As testing for recent infection is being scaled, please describe the stage/scope of implementation (SNUs, sites, populations, etc.). Please describe any interruptions to implementation in this quarter and how this might have affected HTS_RECENT results.
2. If viral load testing is being done to determine RITA classification, please explain if the total number of people who received VL testing does not equal the number reported under RTRI recent. Include the number of RITA results that are missing or unavailable. Note that due to turnaround time, viral load results may be delayed, and RTRI results should be reported regardless of whether viral load results are available.
3. If HTS_RECENT does not equal HTS_TST_POS (≥15 years) 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
4. Please investigate and explain how recency results from MER reporting compare to in-country recency data (from country dashboards where available).

Section 4: Data Use

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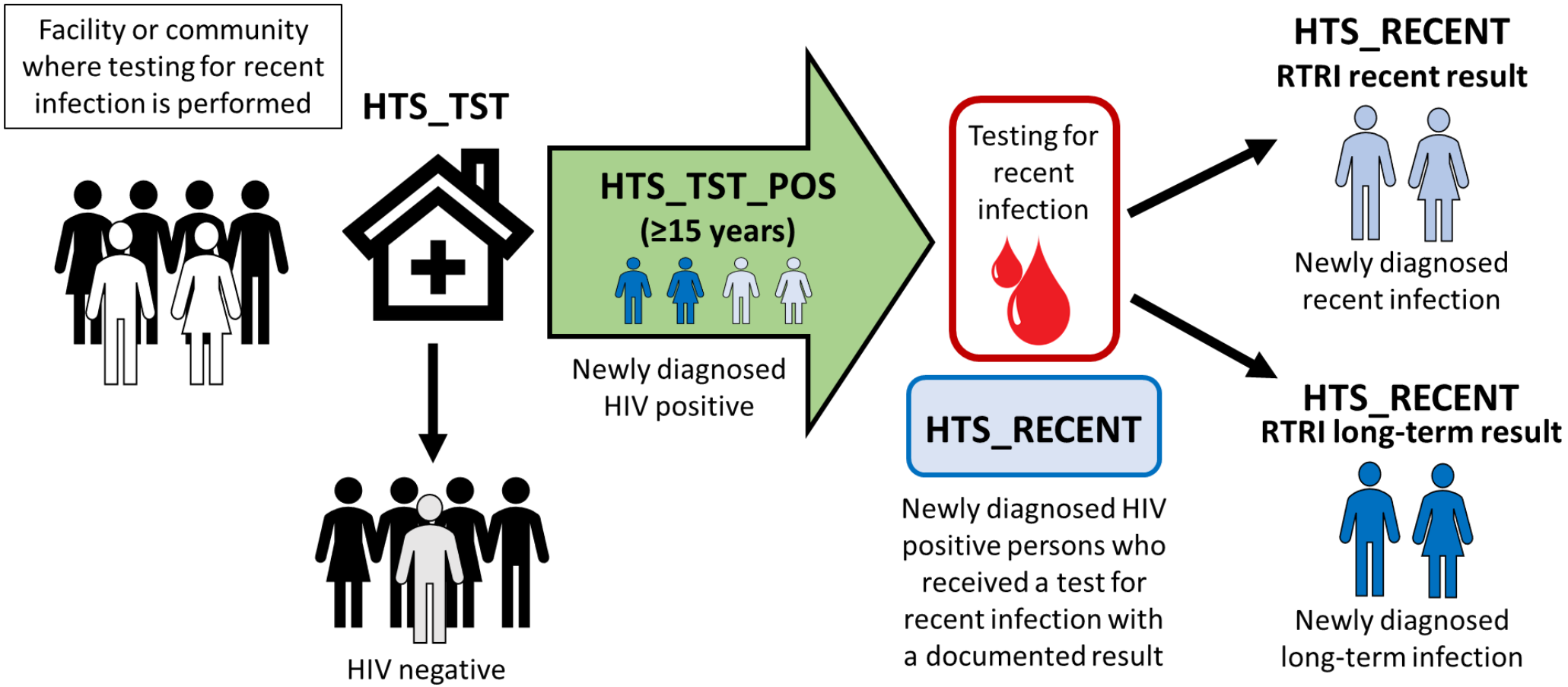
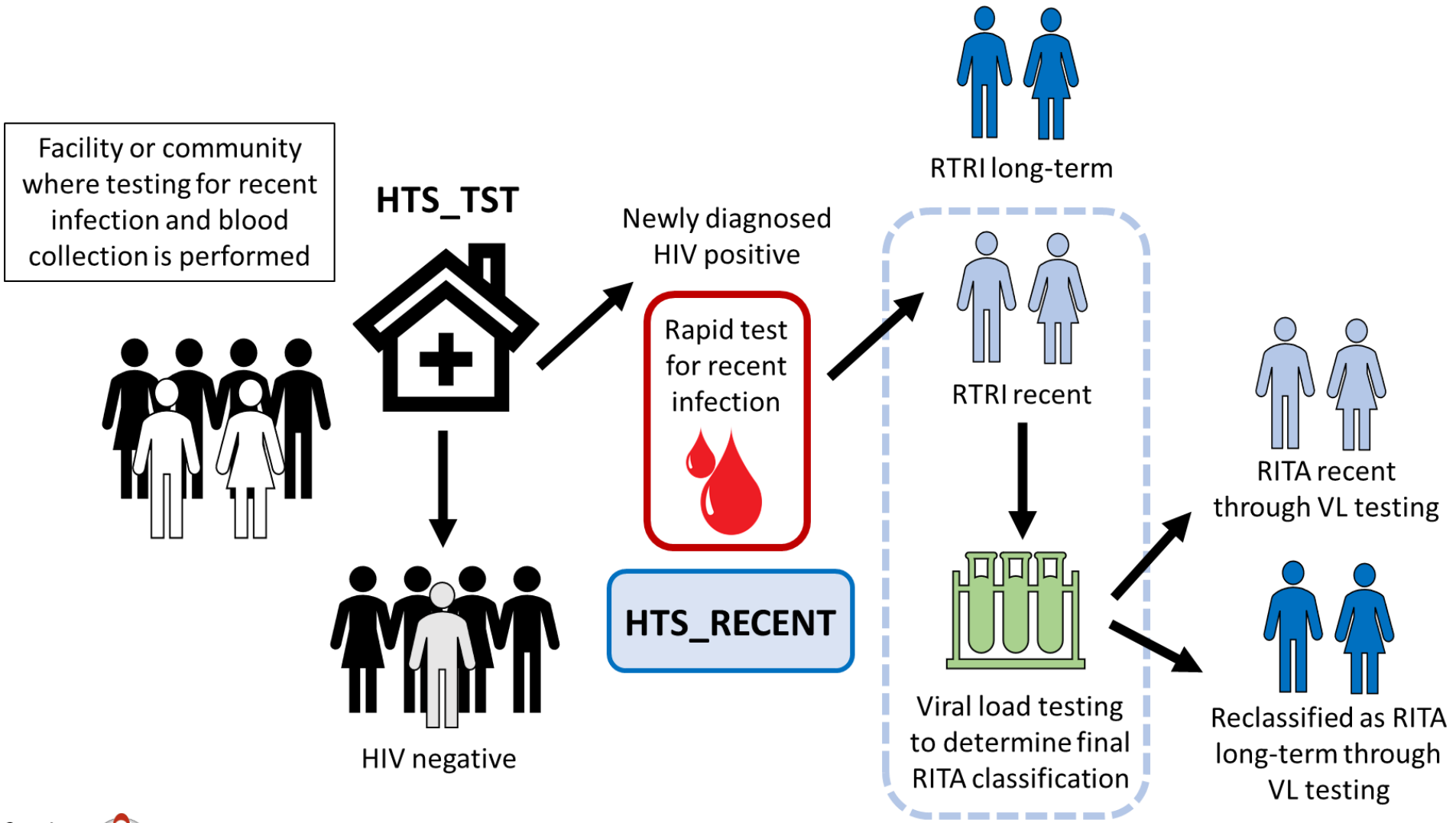
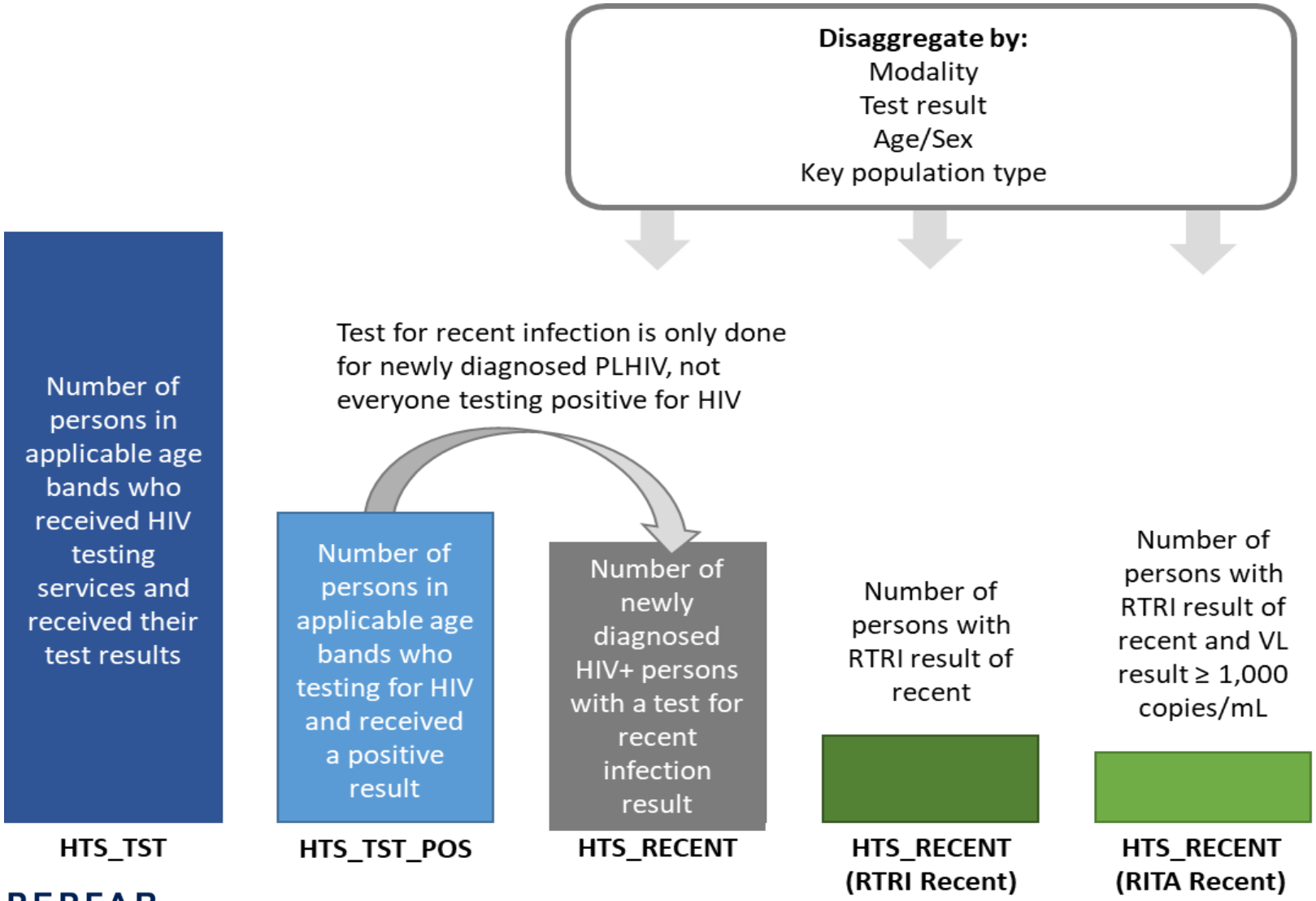
HTS_TST and HTS_RECENT Relationship



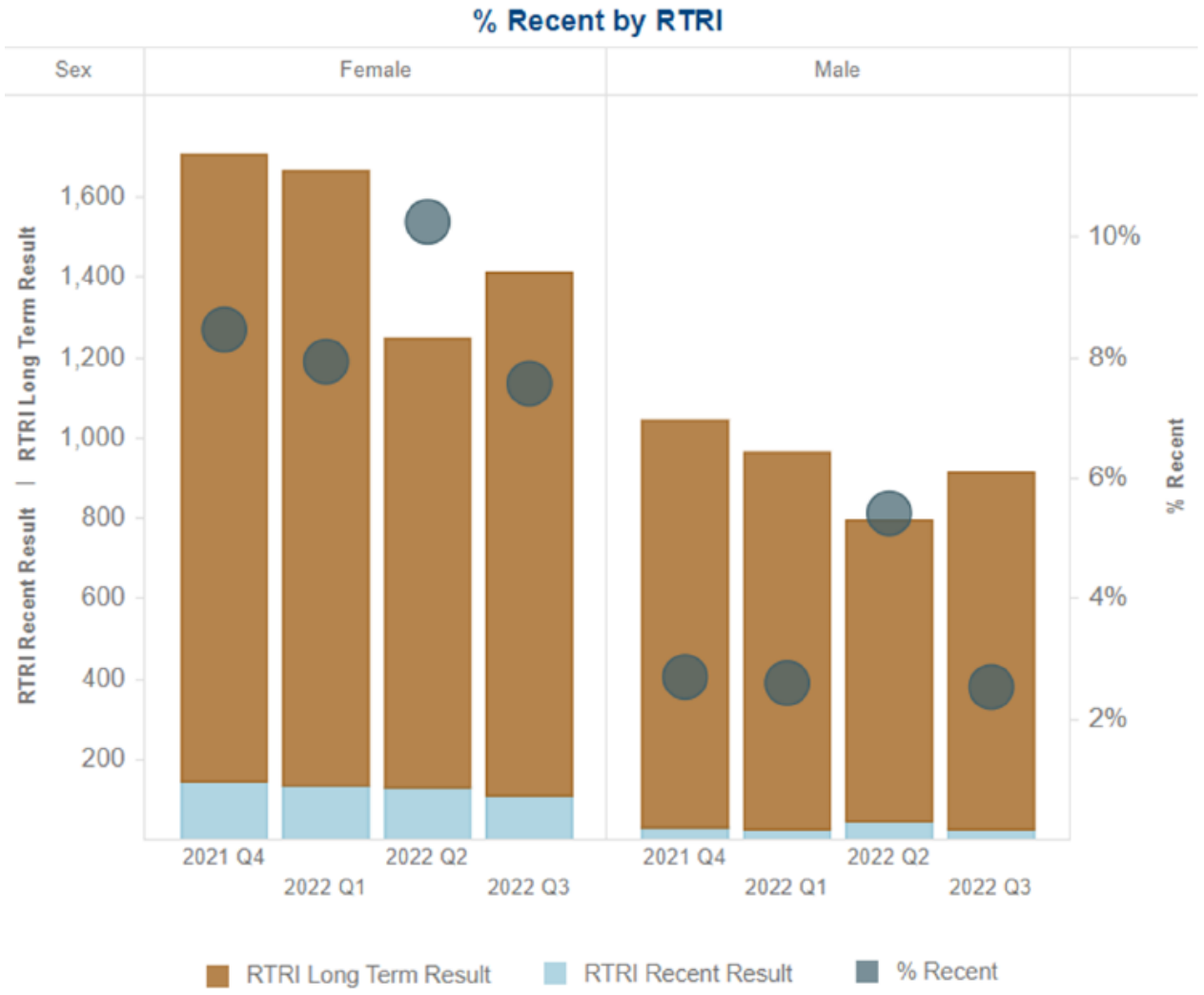
Recent Infection Testing Algorithm



Indicator Cascade



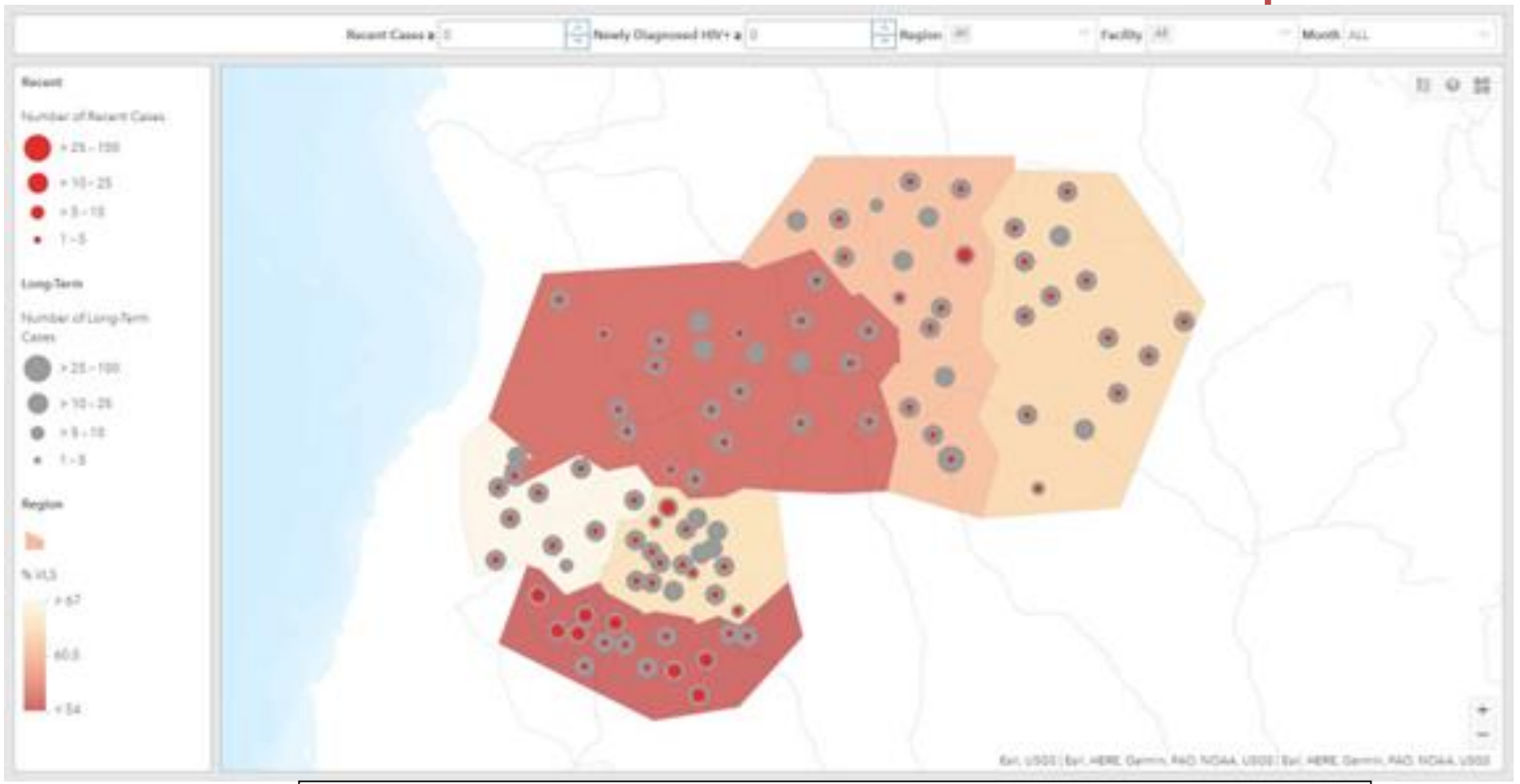
Data Visualization Use Examples



Source: PEPFAR Panorama: Recency Dossier: RTRI % Recent

Data Visualization Use Examples (cont.)

Recent Infection Surveillance Dashboard: RITA Result Map



Map of recent and long-term cases by geographic location

Section 5: Additional Resources and Acknowledgements

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Additional Resources & Acknowledgements

Additional resources can be found in the FY24 Technical Considerations document that was released for COP/ROP23, available at: https://www.state.gov/2023-country-and-regional-operational-plan-guidance-and-technical-considerations/

Please reach out to your agency Recency point of contact for additional resources.

Many thanks to the support and contributions of the PEPFAR Recency community of practice (COOP), country offices, and partners.

Thank you!

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