



PEPFAR

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

Monitoring, Evaluation, and Reporting (MER) Guidance (v.2.6): TESTING FOR RECENT HIV-1 INFECTION

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Video Outline

- 1) **Section 1:** Overview of the prevention technical area and related indicators
- 2) **Section 2:** Indicator changes in MER 2.6
- 3) **Section 3:** Review of numerator, denominator, and disaggregates.
 - 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



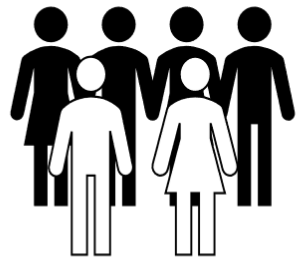
Overview of Technical Area and Indicators

- 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.

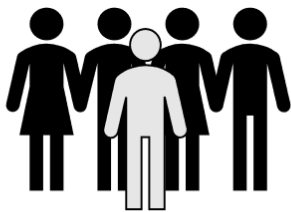
Program Area Group	Indicator Code	Indicator Name	Reporting Frequency	Reporting Level
Testing	HTS_RECENT	Number of newly diagnosed HIV-positive persons who received testing for recent infection with a documented result during the reporting period	Quarterly	Facility & Community

Relationship with HTS_TST

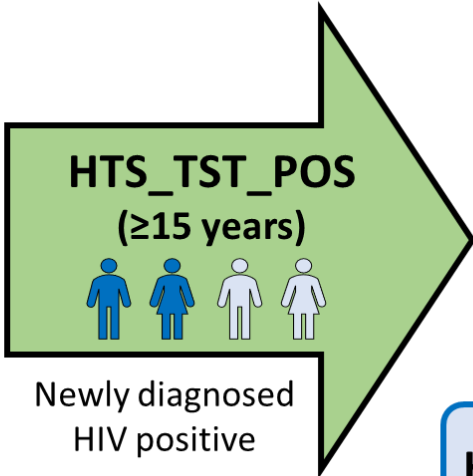
Facility or community where testing for recent infection is performed



HTS_TST

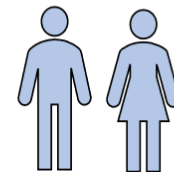


HIV negative



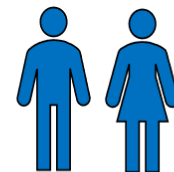
Newly diagnosed HIV positive persons who received a test for recent infection with a documented result

HTS_RECENT
RTRI recent result



Newly diagnosed recent infection

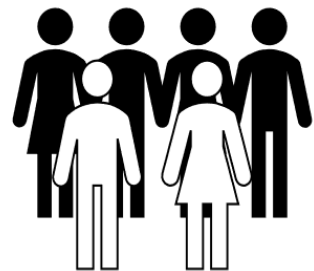
HTS_RECENT
RTRI long-term result



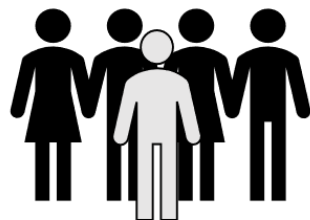
Newly diagnosed long-term infection

Relationship with HTS_TST

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



HTS_TST

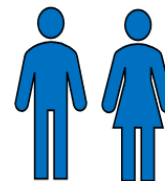


HIV negative

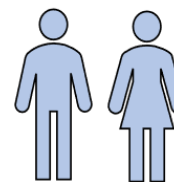
Newly diagnosed HIV positive



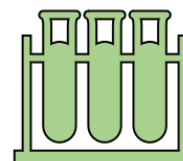
HTS_RECENT



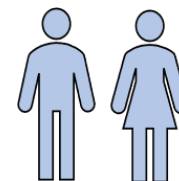
RTRI long-term



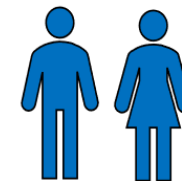
RTRI recent



Viral load testing to determine final RITA classification

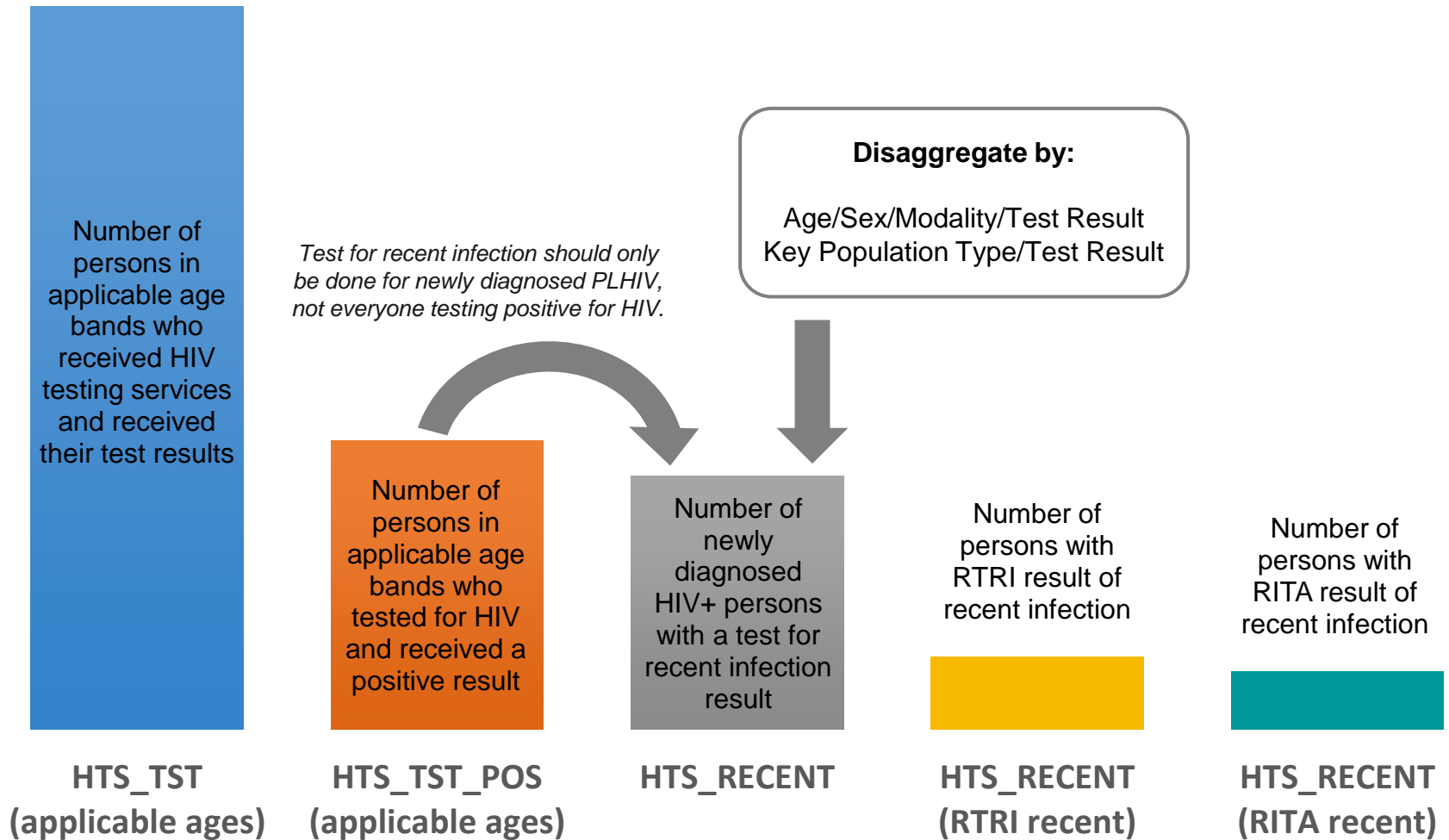


RITA recent through VL testing



Reclassified as RITA long-term through VL testing

Indicator Cascade



Section 2: Indicator changes in MER 2.6



What's Changed?

Change	Programmatic Rationale for Change
Disaggregate RITA results by testing modality	<ul style="list-style-type: none">• Understand proportion of patients who are reclassified as RITA long-term across modalities
Added Social Network Strategies (SNS) testing as new testing modality	<ul style="list-style-type: none">• Align with updates to HTS_TST
Updated language of confirmatory result to RITA result through VL testing	<ul style="list-style-type: none">• Align with standard recency protocol and function of VL testing

Section 3: Review of numerator, denominator, and disaggregates

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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

Disaggregate Groups	Disaggregates
Modality and RTRI result by age/sex (facility and community)	<ul style="list-style-type: none"> • 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]	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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]	<ul style="list-style-type: none"> • 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)

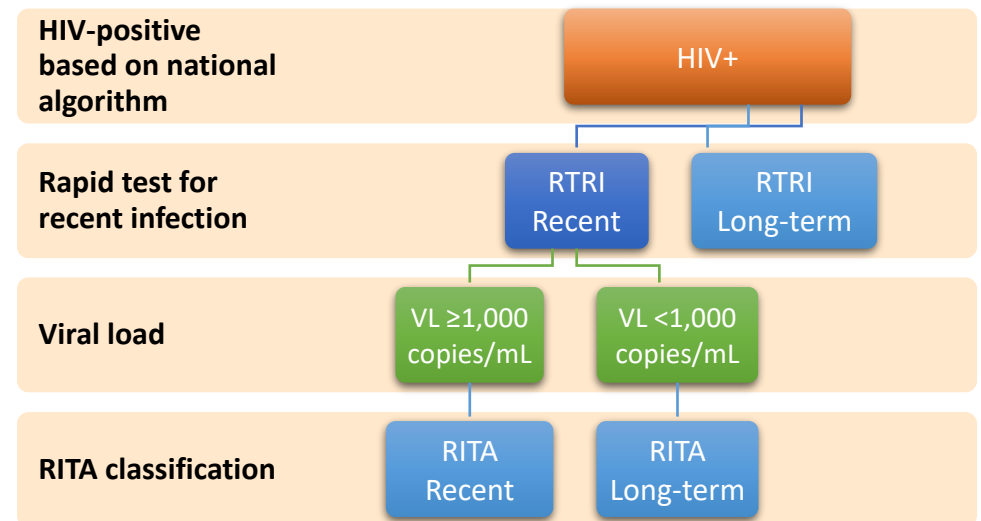
Denominator: N/A

RTRI Results

- **All results** from the RTRI should be reported regardless of viral load testing to determine RITA classification.
- **A recent result** on the RTRI means that the person was likely infected with HIV within the last one year. Viral load testing may be used to reduce misclassification of RTRI recent results.
- **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 inconclusive.** 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 inconclusive result, please follow the country's established procedures for dealing with these results (e.g., retesting, reporting, quality control, etc.).

RITA Result through VL Testing

- **VL testing is done to determine recent infection testing algorithm (RITA) classification** for RTRI recent results.
- Persons who receive VL testing should be reported as a subset of those reported under RTRI recent.
- A **RITA recent result** refers to RTRI recent cases that have a viral load result of $\geq 1,000$ copies/mL and have a final classification of RITA recent.
- A **RITA long-term result** refers to RTRI recent cases that have been reclassified as RITA long-term based on viral load testing with result of $< 1,000$ copies/mL.



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					

How to Count 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.
 - RITA results should align with RTRI results and are included only during the same reporting period when the RTRI was conducted.
 - Report recency test results 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.

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**

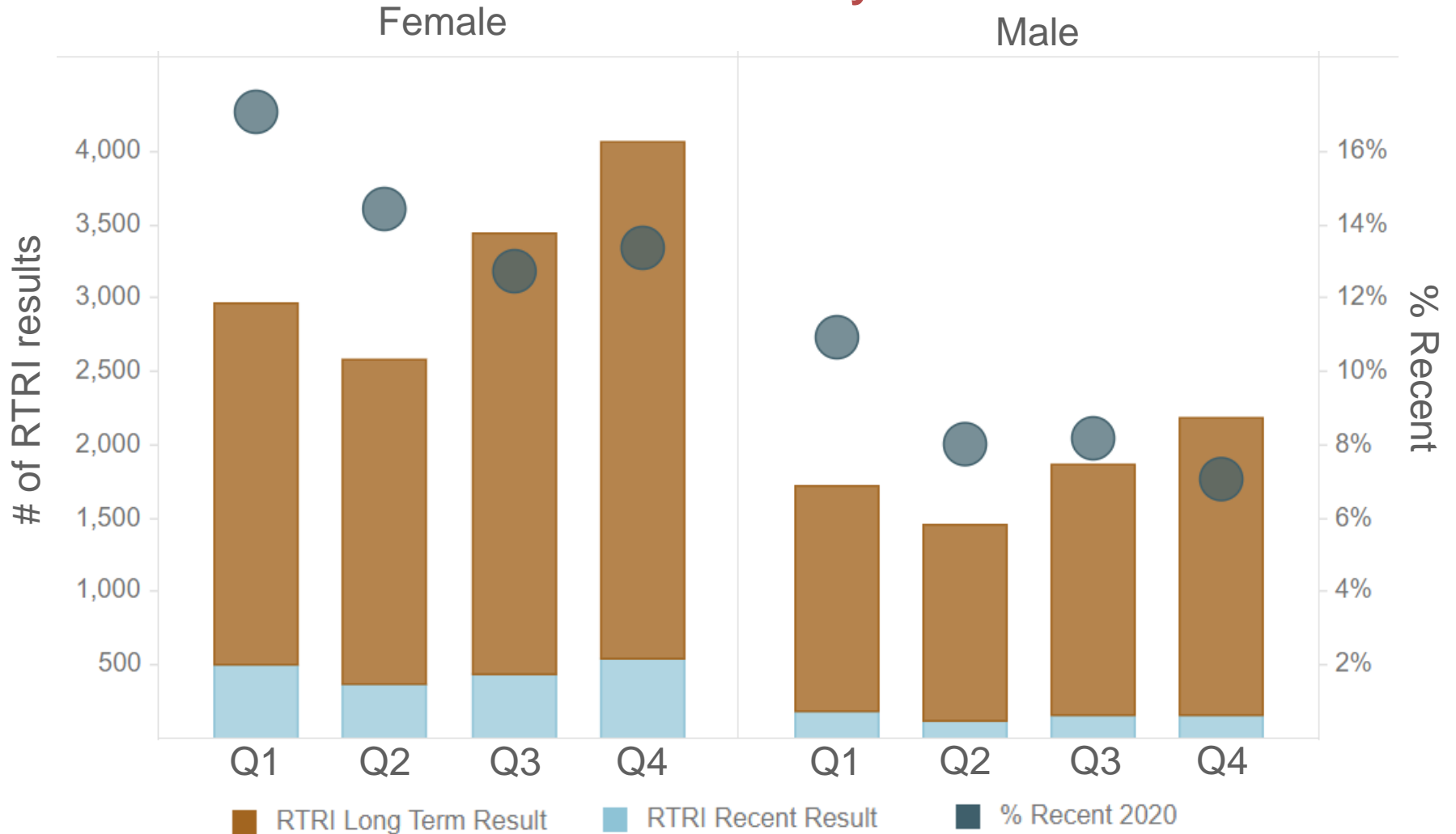
- Identify areas and subpopulations with ongoing transmission to quickly target resources to increase case finding, intensify index testing services, and interrupt transmission.
- Changes over time should be monitored to assess program impact.

- **Program implementation**

- Monitor the rollout of testing for recent infection.
- A crude estimate of testing coverage may be calculated by dividing HTS_RECENT by HTS_TST_POS (applicable age/sex disaggregates).

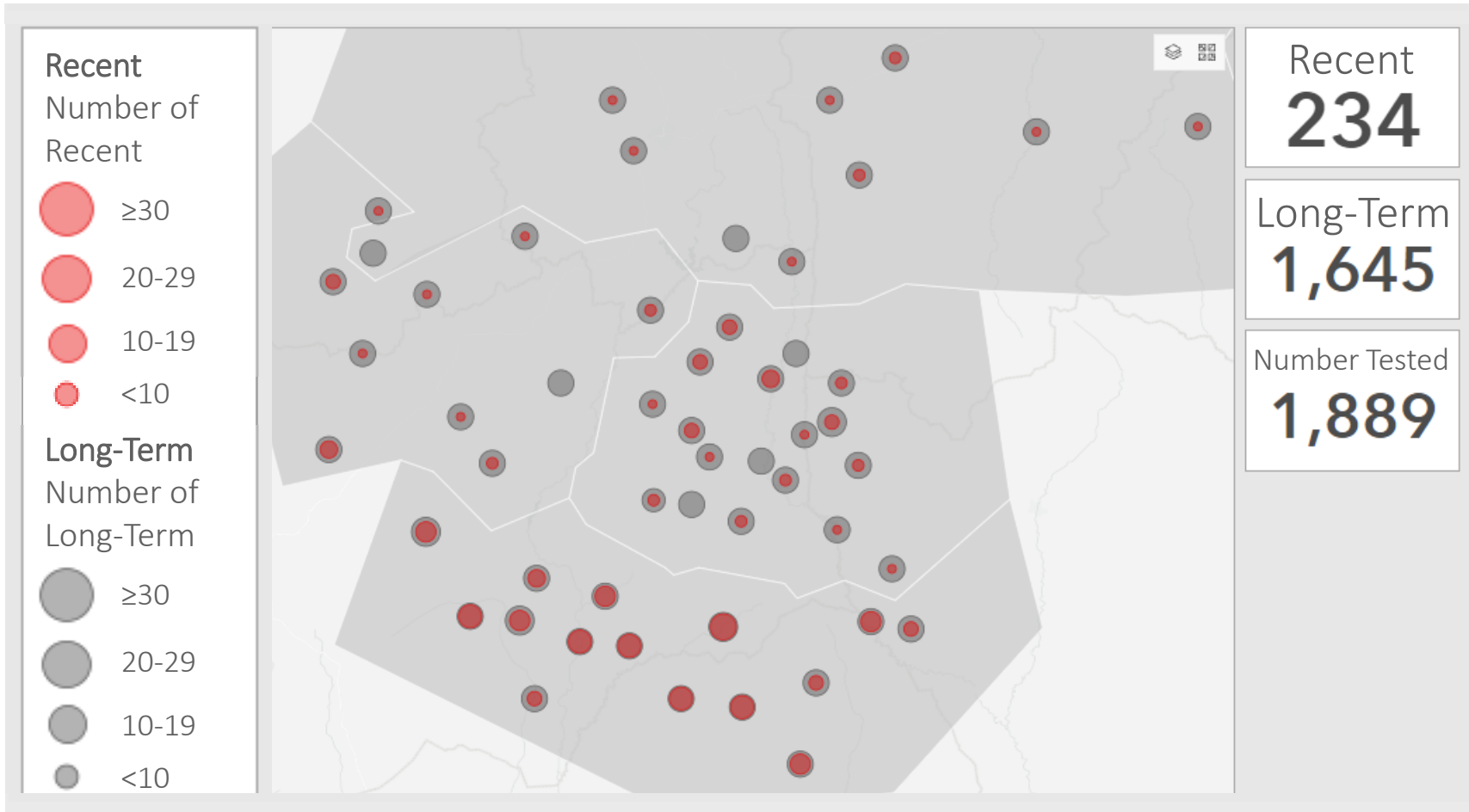
Data Use Examples

RTRI Trends by Sex



Data Use Examples

Recent Infection Surveillance Dashboard: RITA Result Map



Section 4: Overview of guiding narrative questions



Guiding Narrative Questions

1. As testing for recent infection is being scaled, **please describe the stage/scope of implementation** (SNUs, sites, populations, etc.).
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. Calculate the percent recent by dividing the number of persons with a recent result by the total number of persons tested. Please **explain whether the observed percent recent is expected**, and if not, what investigations are being done.

Section 5: Data quality considerations for reporting and analysis



Data Quality Considerations

- **HTS_TST_POS (≥ 15 years) \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 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 \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 Tracking with Recency Assays to Control the Epidemic (TRACE) eLearning Hub: 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!