

World Health Organization Global Strategy for the Surveillance and Monitoring of HIV Drug Resistance – 2012

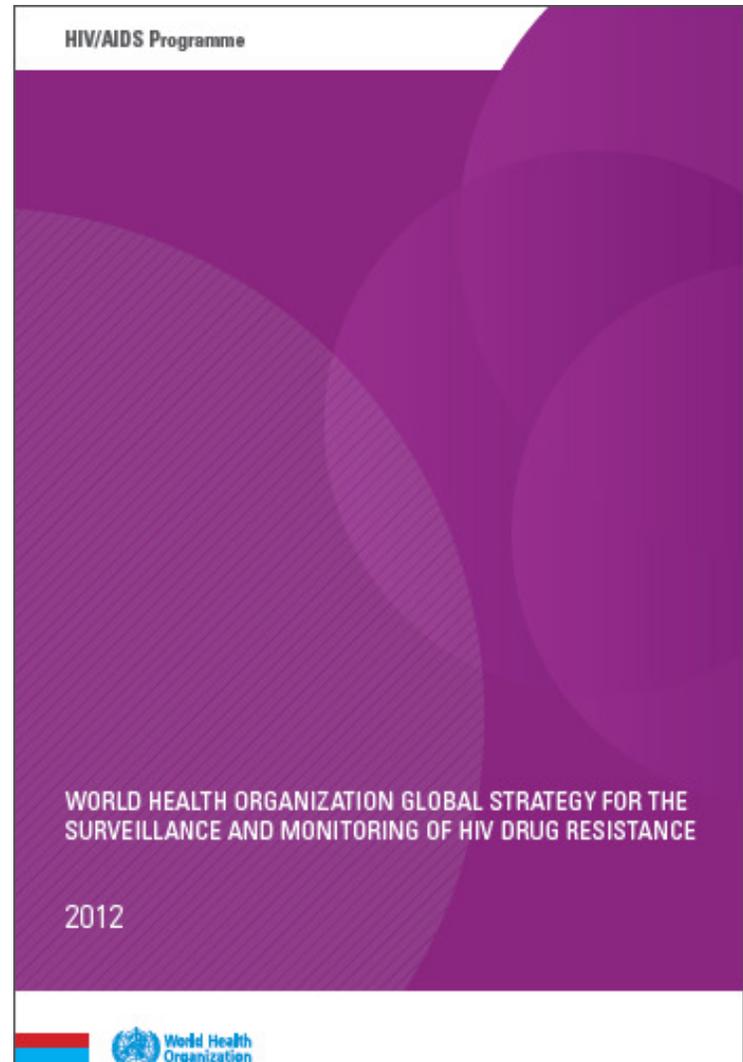


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WHO HIV Drug Resistance Surveillance and Monitoring Strategy - 2012

- Lessons learned from implementation of WHO's global strategy (2004-2011)
+
- ongoing expansion and decentralization of ART delivery
-suggested that elements of the strategy required updating



Key Lessons 2004-2012

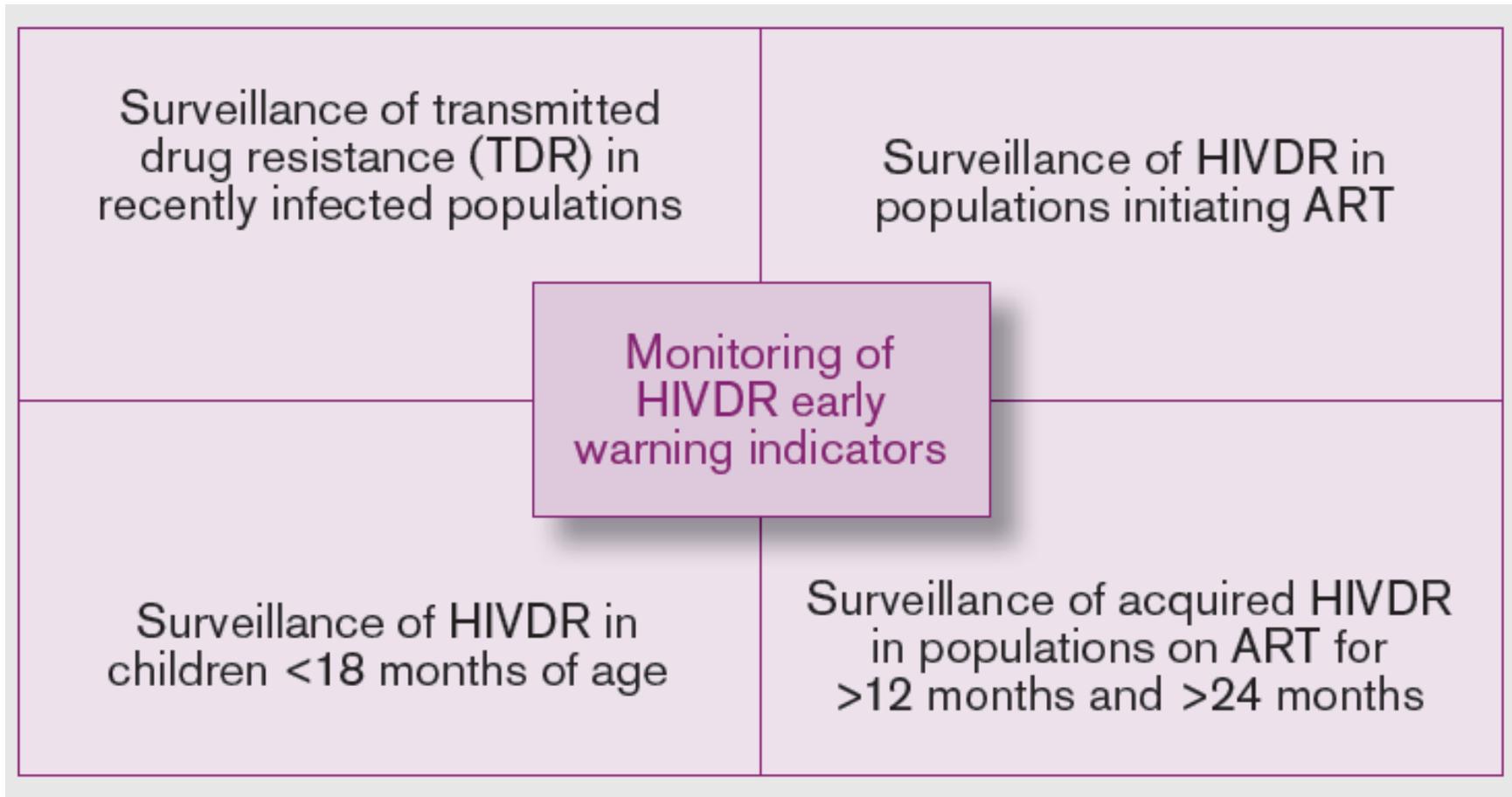
- Nationally representative surveillance data --- ideal to inform national policies
- Propose to move away from:
 - surveys that are *area-specific* (TDR)
 - surveys that use *convenient* selection of sites (ADR)
- Proposed 2012 HIVDR strategy aims for **NATIONAL sample**

because

National sample better inform national policies and generally are easier to implement (esp. TDR)

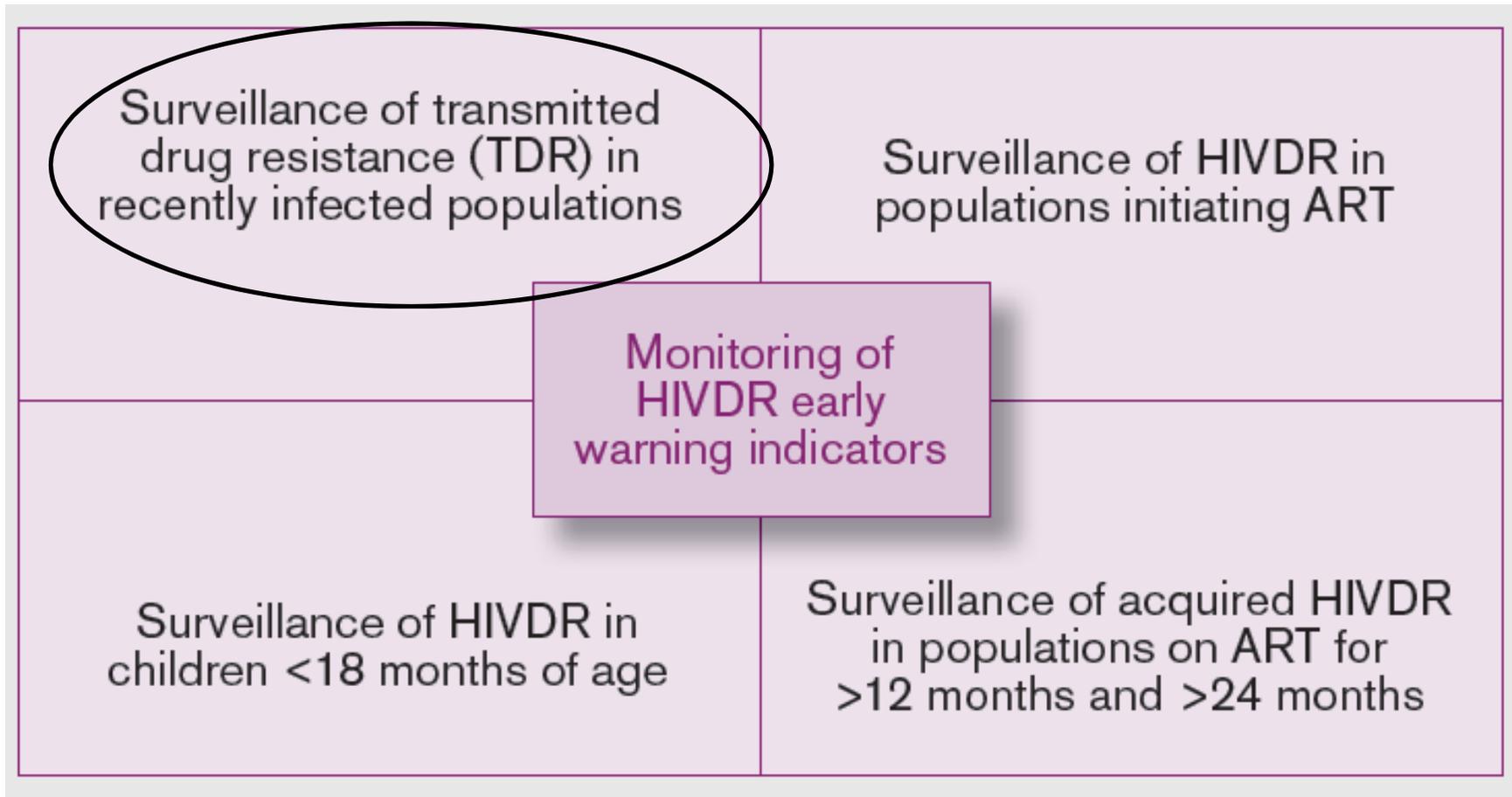


WHO HIV Drug Resistance Surveillance and Monitoring Strategy-2012



Standardized protocols with well-defined target populations permit comparability of results over time and across countries

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Transmitted HIV Drug Resistance

Goal: Document transmission of HIVDR, guide PMTCT, pre- and post-exposure prophylaxis; facilitate analysis of trends over time

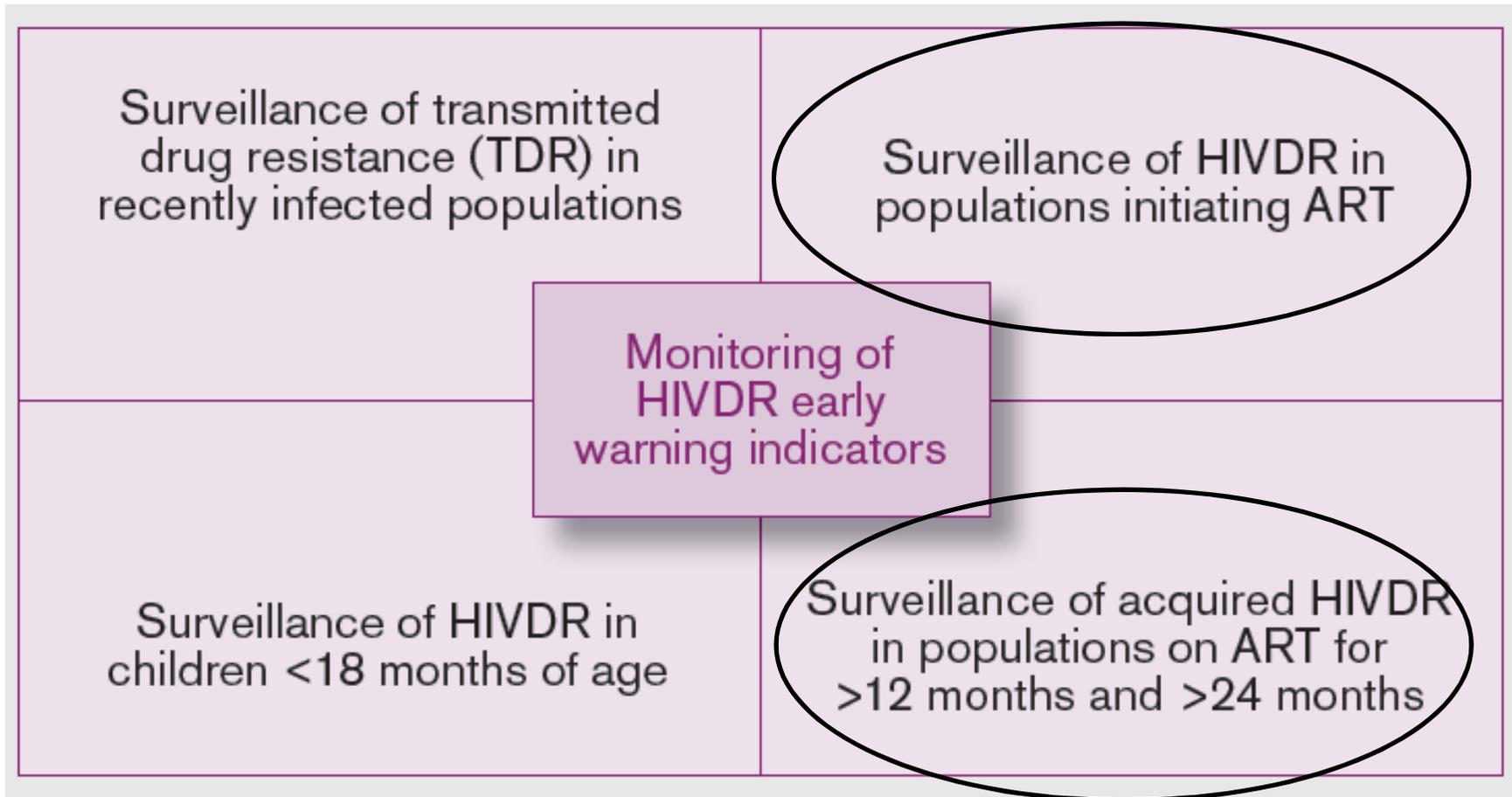
Area-specific survey



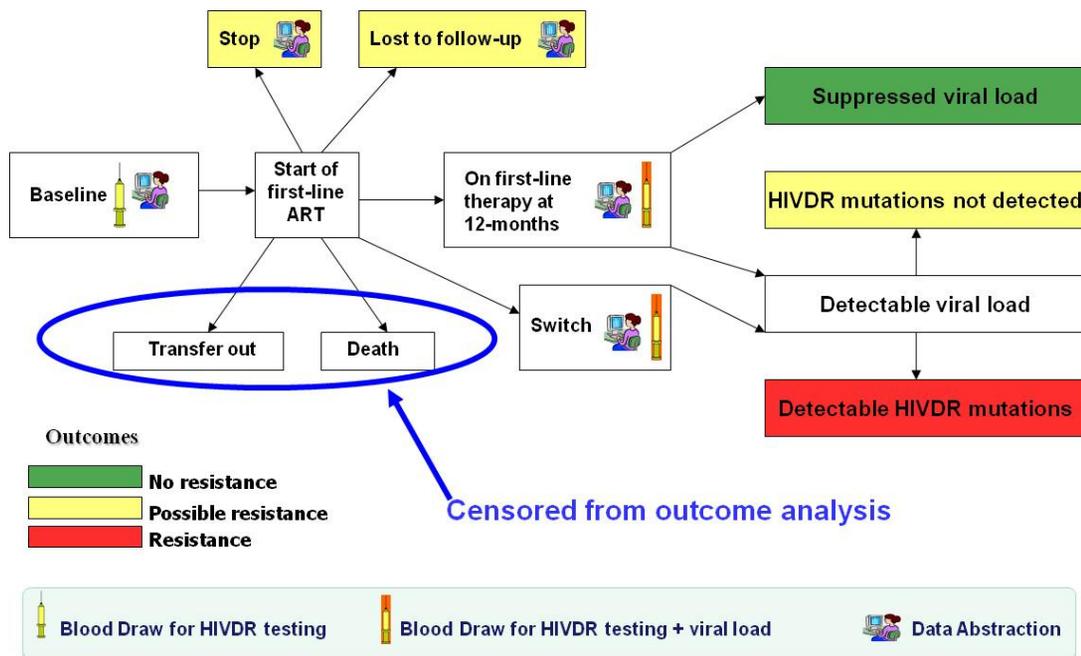
National sample
by piggy-backing national HIV
survey efforts (e.g. ANC)



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WHO Prospective Surveillance Method of Pre-treatment and Acquired HIVDR



- Prospective method
- Sentinel sites (largely chosen for convenience)
- Requiring 1 year of follow-up

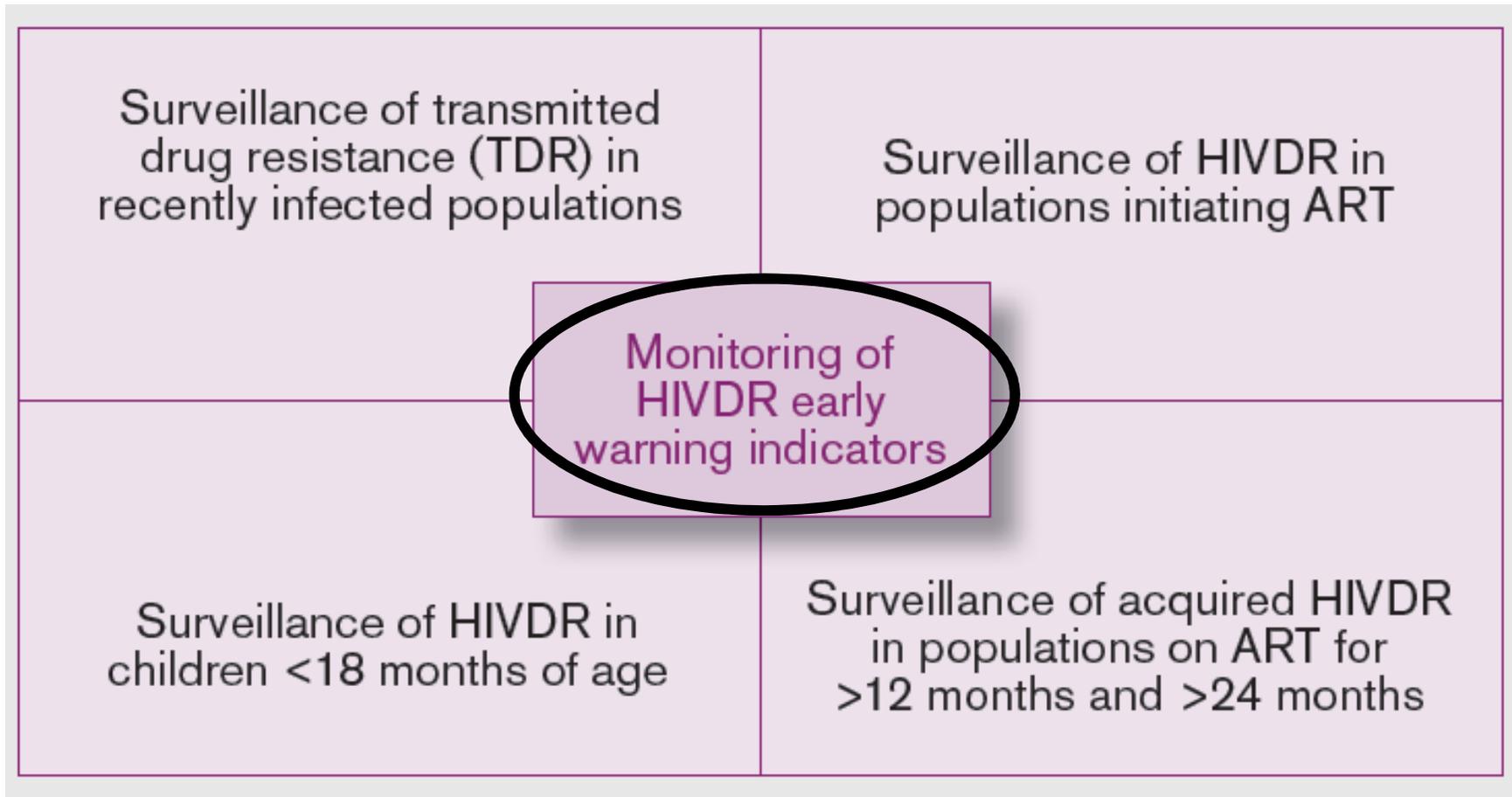


Surveillance of HIVDR in Populations Initiating ART and Populations on ART - 2012

- **Two separate cross sectional** surveys to provide nationally representative prevalence estimates
 - 1. **Pre-treatment HIVDR**
 - National prevalence of HIVDR in populations initiating ART
 - 2. **Acquired HIVDR**
 - National prevalence of **viral load suppression**; facilitate analysis of trends over time
 - Prevalence of **HIVDR** among patients with virological failure
 - Estimate clinic-level performance in achieving targets for viral load suppression, if possible and desired



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Early Warning Indicators of HIV Drug Resistance

- WHO EWIs are **quality of care indicators** which assess **factors associated with virological failure and emergence of HIVDR**
- Designed to be monitored at **all ART clinics** as part of **routine** monitoring and evaluation
- Standardized definitions and targets
- Results provide clinic specific information offering an opportunity for corrective action



WHO HIVDR EWI 2011 Revisions



- EWIs evaluated using GRADE method
 - **EWIs without strong association with HIVDR or VL suppression were eliminated**
- Retained EWIs
 - Maximize efficiency of data abstraction
 - Harmonize definitions with other reported indicators, whenever possible
- Revised targets grounded in literature

Second generation of EWI

HIVDR Early Warning Indicators

7 Indicators

(pilot sites)



5 Indicators

(all sites/nationally representative)



2012 Revised WHO HIVDR Early Warning Indicator Package

Early Warning Indicator	Target
1. On-time pill pick-up	Red: <80% Amber: 80–90% Green: >90%
2. Retention in care	Red: <75% retained after 12 months of ART Amber: 75–85% retained after 12 months of ART Green: >85% retained after 12 months of ART
3. Pharmacy stock-outs	Red: <100% of a 12-month period with no stock-outs Green: 100% of a 12-month period with no stock-outs
4. Dispensing practices	Red: >0% dispensing of mono- or dual therapy Green: 0% dispensing of mono- or dual therapy
5. Viral load suppression at 12 months*	Red: <70% viral load suppression after 12 months of ART Amber: 70–85% viral load suppression after 12 months of ART Green: >85% viral load suppression after 12 months of ART

*Children < 2 years: red: <60%; amber: 60–70%; green: >70% viral load suppression after 12 months of ART.



* Retention in care definition equal to UNGASS #24 and PEPFAR #T1.3.D

2011 Revised EWI Reporting: Scorecard



Poor performance, below desired level



Fair performance, progressing toward desired level



Excellent performance, achieving desired level



Data not available



National level at-a-glance assessment of ART clinic performance

Clinic	EWI 1 On-time pill pick-up	EWI 2 Retention	EWI 3 Drug stock-outs	EWI 4 Dispensing practices	EWI 5 VL suppression
1	95%	77%	100%	95%	95%
2	70%	95%	100%	88%	98%
3	100%	82%	75%	0%	75%
4	85%	...	100%	0%	95%
5	97%	60%	95%	0%	50%
...
...
100	100%	100%	100%	0%	100%

Scorecard facilitates:

- Interpretation at clinic and national levels
- Strategic allocation of resources



Conclusions:

WHO HIV Drug Resistance Surveillance and Monitoring Strategy - 2012

- **2012 strategy aims to:**
 - Provide nationally representative results
 - Generate data for enhanced programme and public health decision making
 - Increased flexibility to provide HIVDR surveillance methods relevant in low-prevalence and concentrated HIV epidemics as well as generalized epidemics



Key points for the discussion

- 1. Review protocol proposal on the table
- 2. Your input **critical** to transform concept notes into protocols
- 3. Regional meetings – hear "users" (implementers and countries) prospective about feasibility



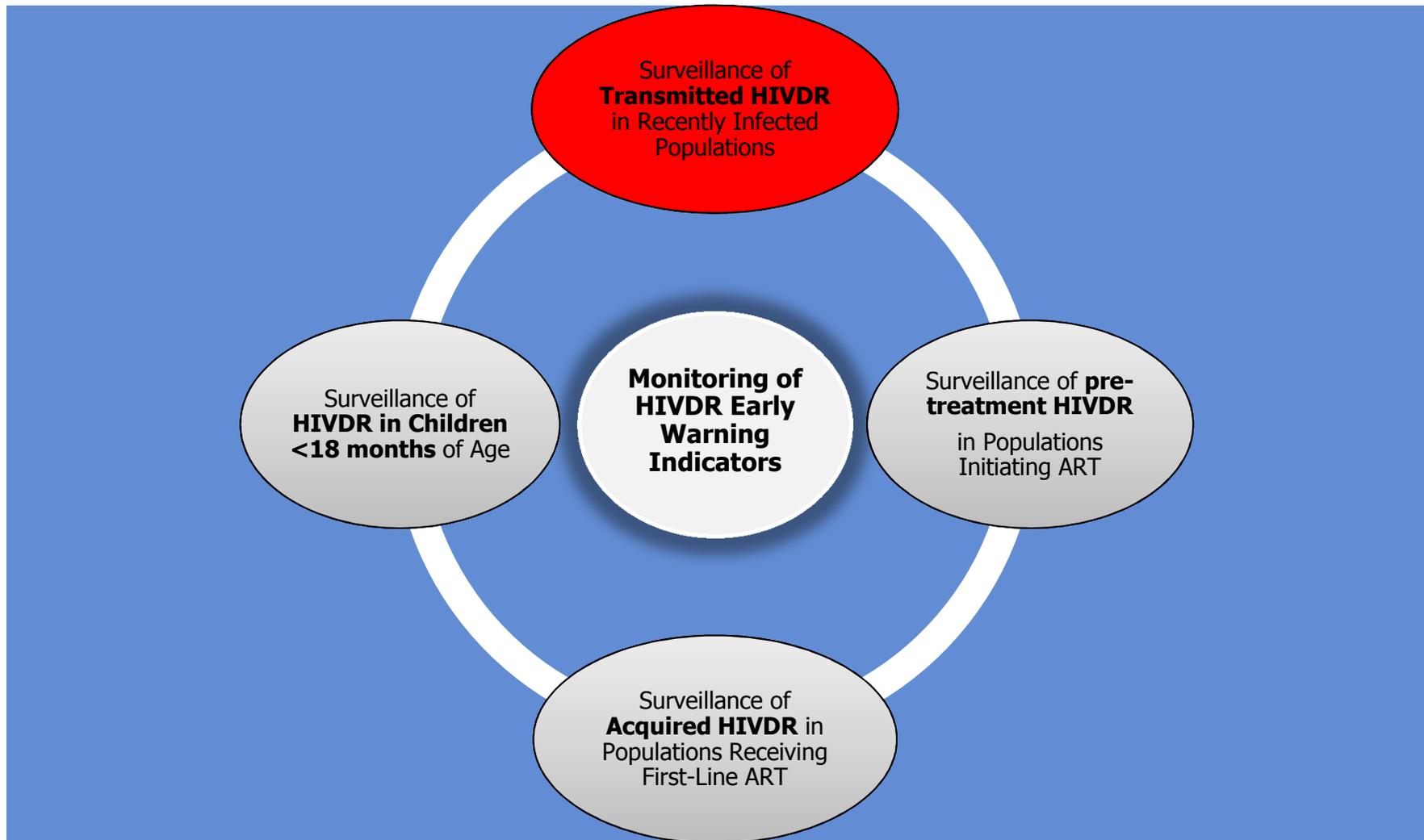


What Public Health HIVDR-related questions are important for your programme?

What would you like to learn from your HIVDR surveillance?



Question #1: At what level is transmission of HIVDR occurring in my country?

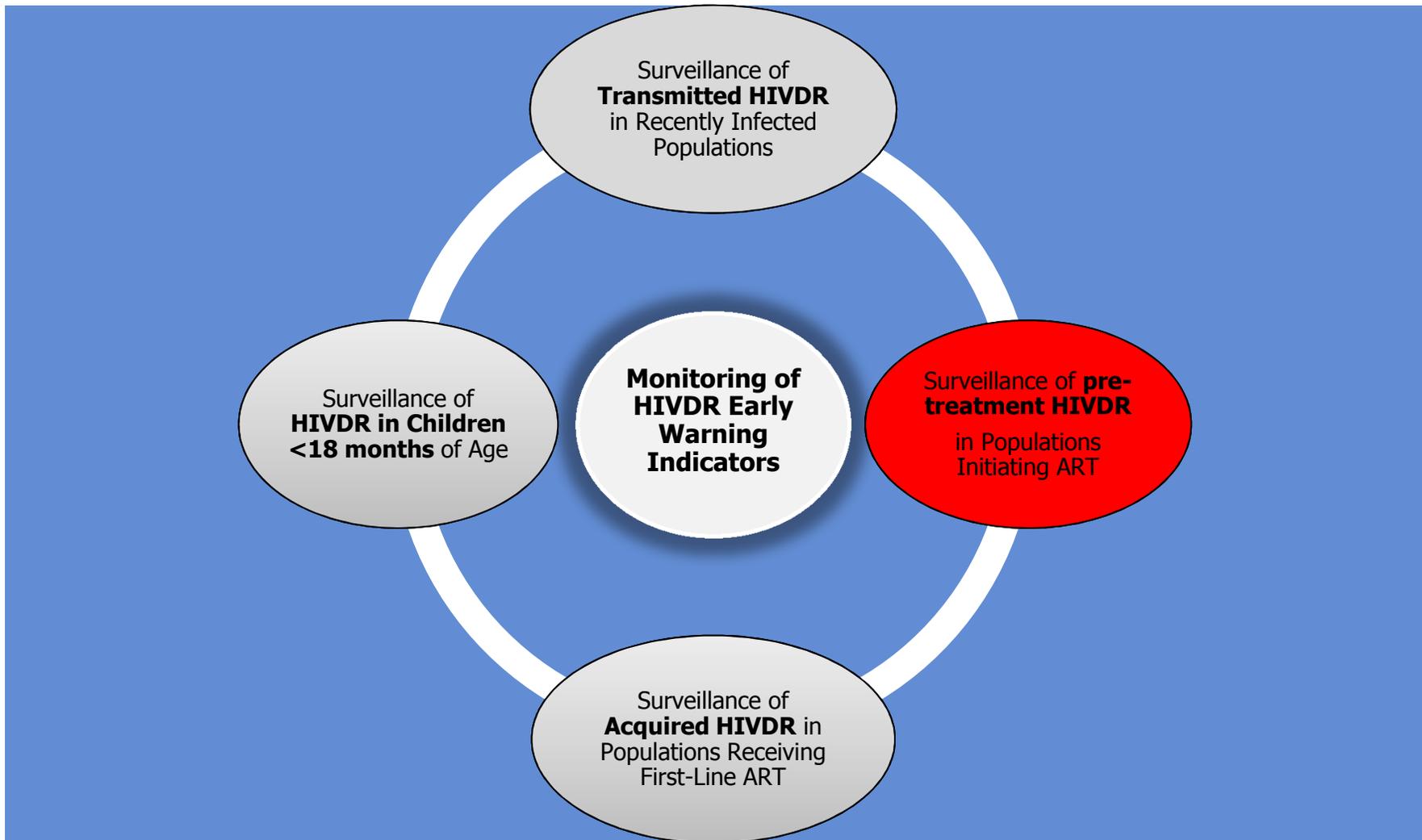


Public Health Actions

- More frequent VL monitoring
- Enhanced focus on Early Warning Indicators of HIVDR
- Enhanced HIV prevention messaging and awareness, particularly for HIV-positives in care
- Guide PMTCT regimens and pre- and post-exposure prophylaxis



Question #2: Are currently recommended first-line regimens still effective for the majority of adults initiating ART in my country?

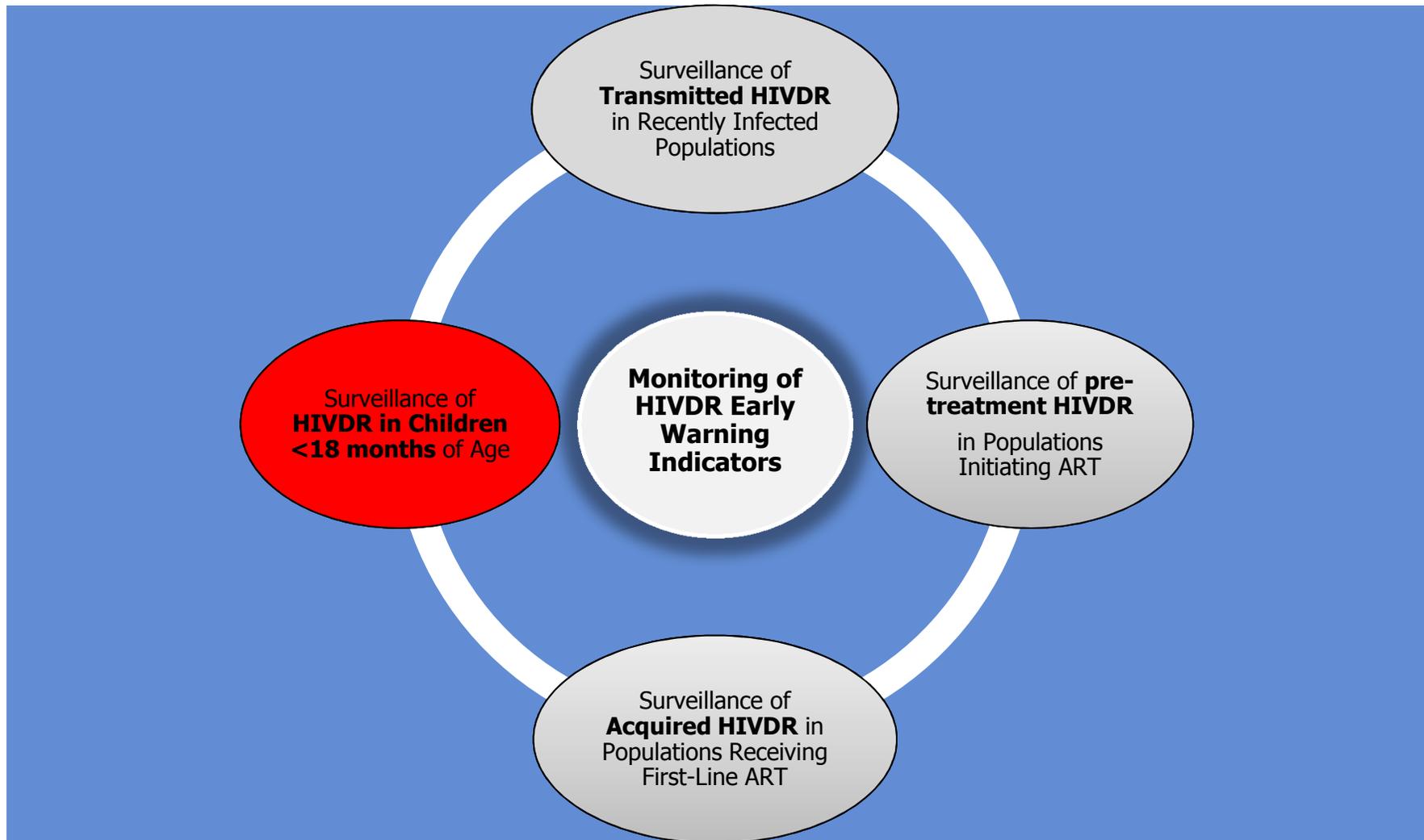


Public Health Actions

- Performed regularly at representative ART clinics, these surveys support national, regional and global decision making regarding choice of first-line regimens.
- Individual patient HIVDR testing prior to therapy initiation
- Population-level switch to PI/r as first-line therapy



Question#3: What is the HIVDR prevalence in children (with or without PMTCT exposure) and its potential implications for response to ART?



Public Health Actions

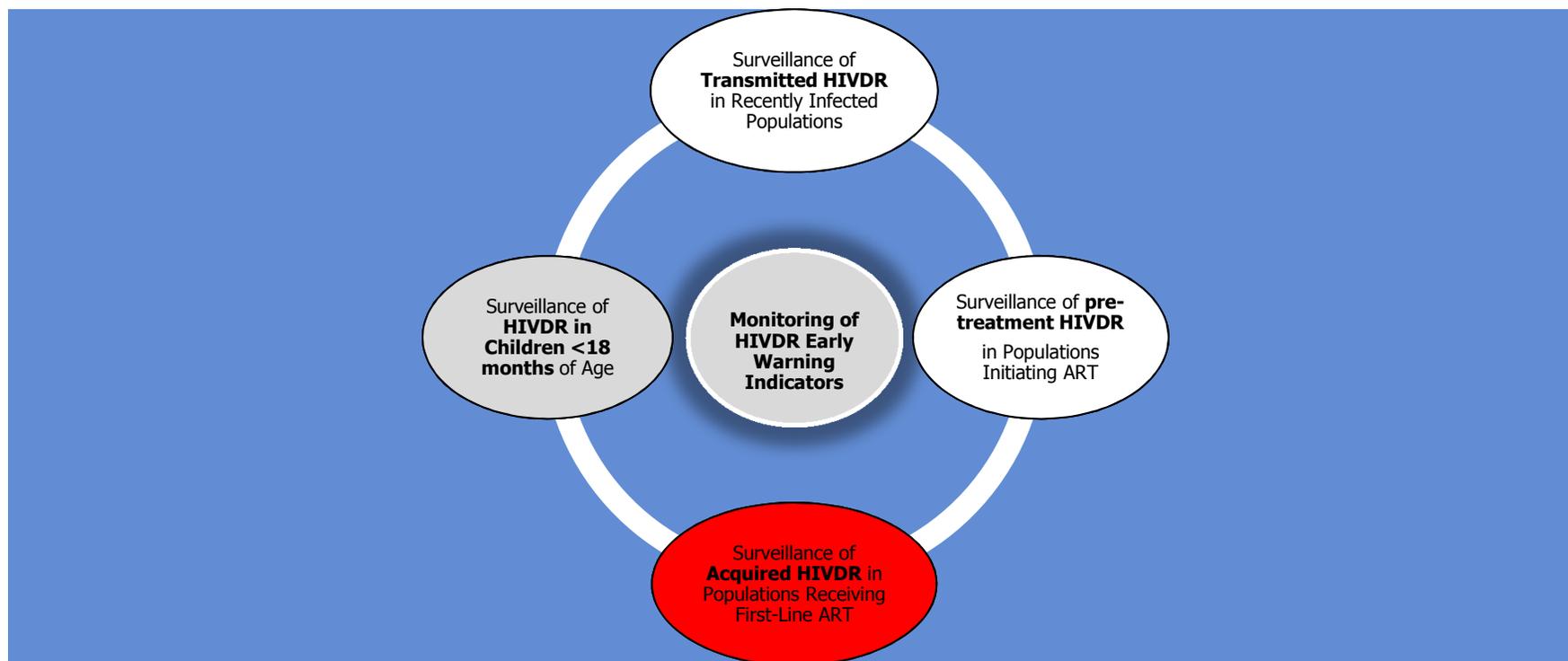
- Results assess differences in populations receiving PMTCT and those with unknown exposures and **support selection of first-line ART in pediatric population**



Question#4:

a) Is my ART programme achieving optimal virological suppression in people on 1st-line ART?

b) Is second-line regimen predicted to be active at population-level?



Public Health Actions

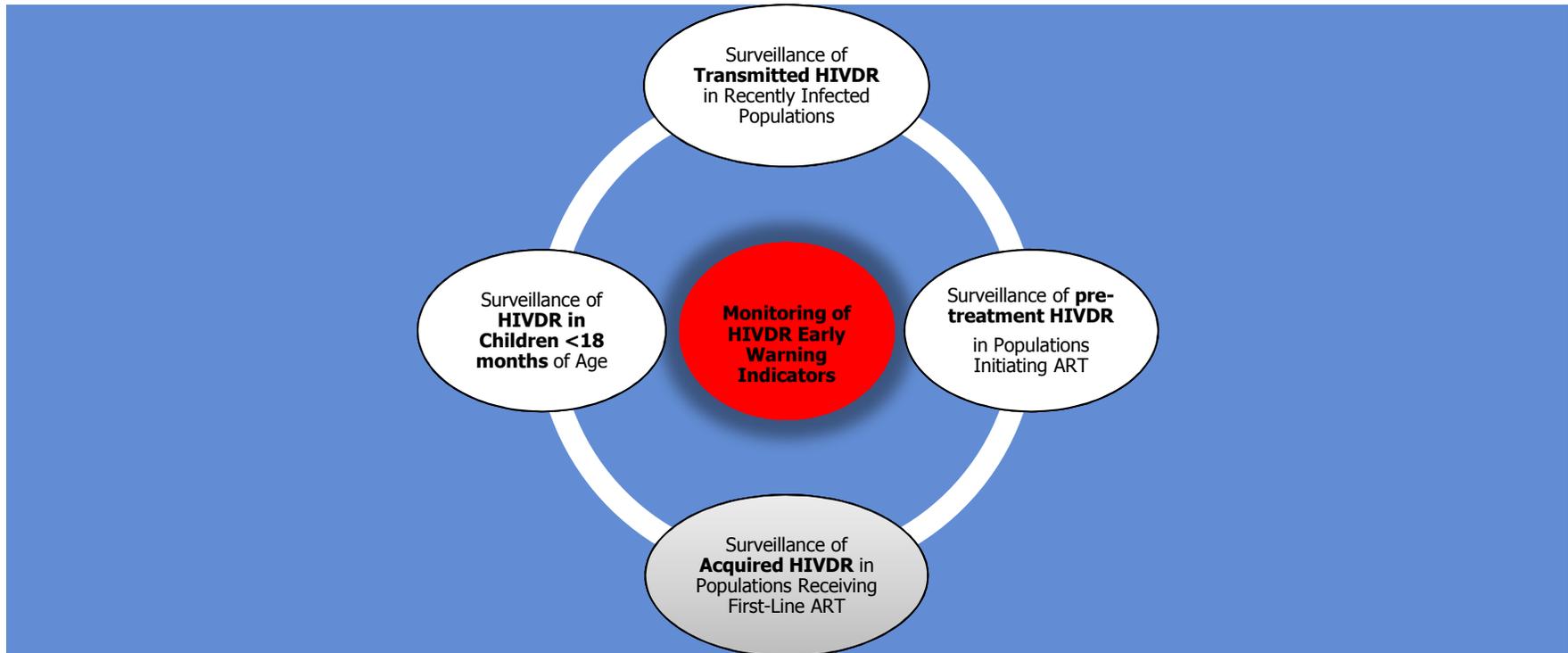
- Performed regularly at representative sites, these surveys provide **evidence for action at the programme and clinic level to minimize HIVDR.**
- They also provide evidence for national and global decision-making on **optimal second-line ART regimens.**



Question #5: How are ART clinics and the ART programme as a whole performing in minimizing population-level HIVDR?

1. Drug stock out
2. Retention in care
3. VL suppression

4. Adherence
5. Dispensing of triple drug regimens



Questions?

