



INTEREST

8th INTEREST
Workshop

8th INTERNATIONAL WORKSHOP ON HIV TREATMENT,
PATHOGENESIS AND PREVENTION RESEARCH
IN RESOURCE-POOR SETTINGS

The Continuum of HIV Care in Zimbabwe

8th INTEREST Workshop
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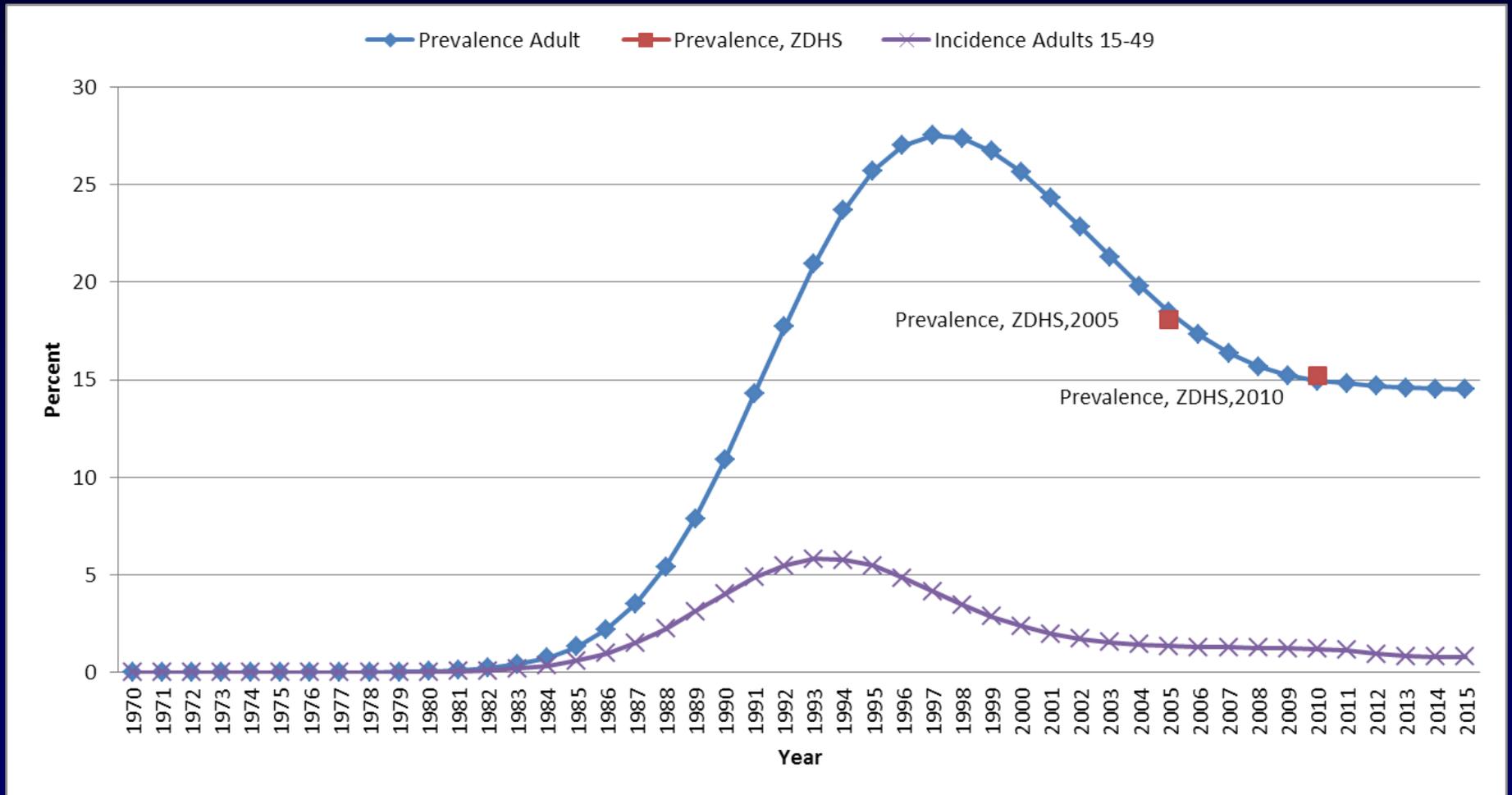
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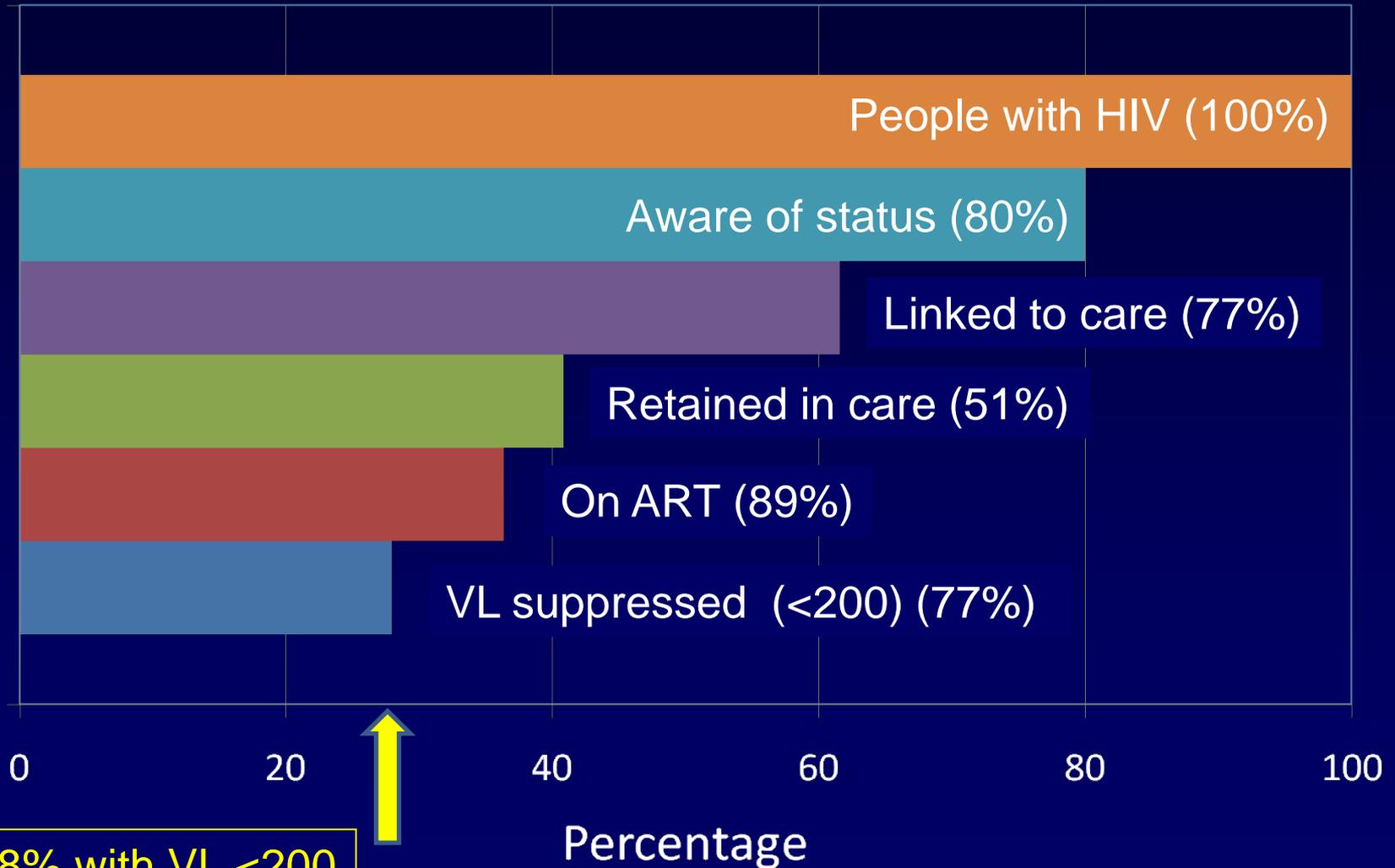
Trends in adult (15-49 years) HIV prevalence and incidence, Zimbabwe – 1970-2015



Background and methods

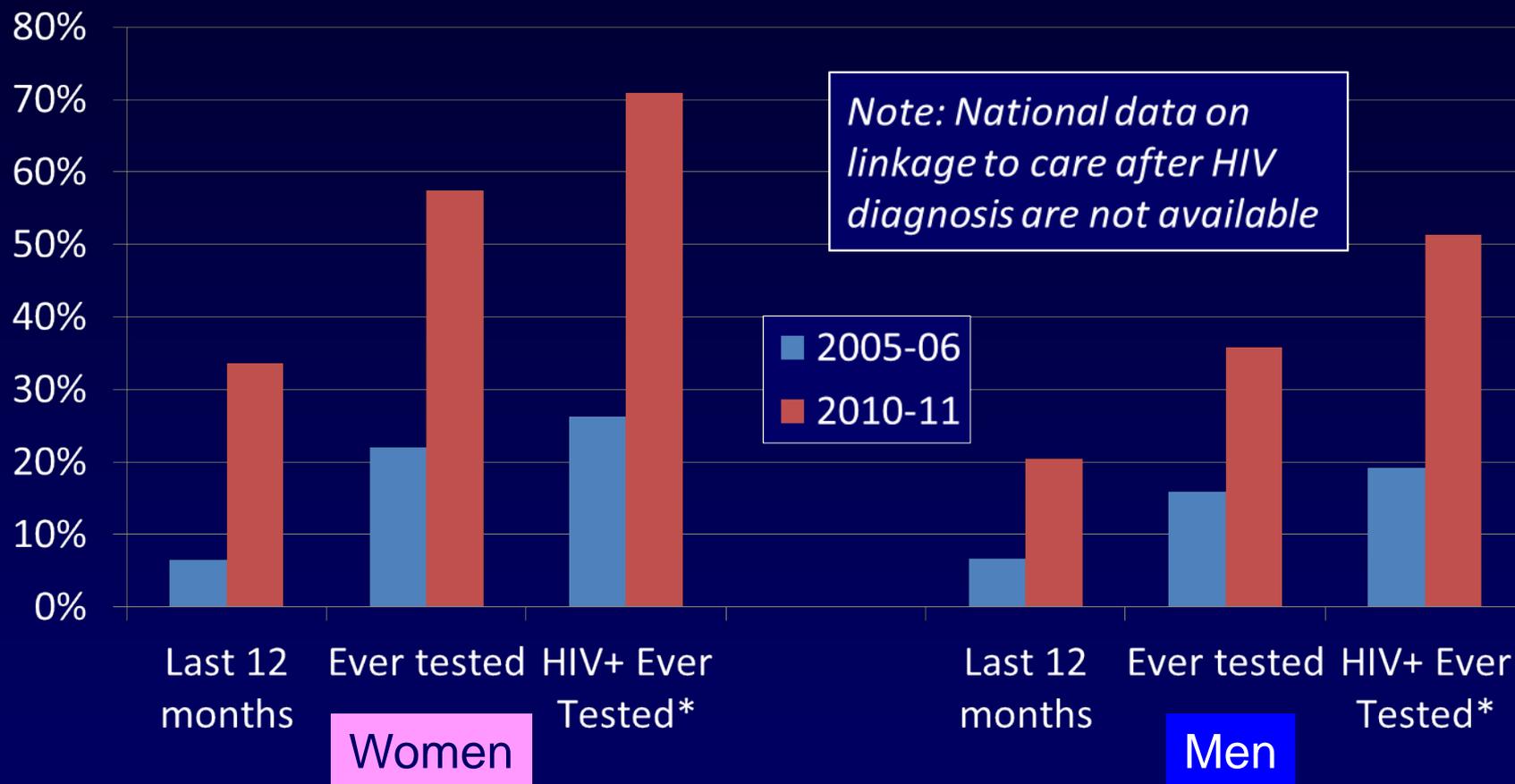
- Many public health programs involve a “cascade” of interventions. Attrition rates at each step are multiplied, potentially resulting in low overall coverage and impact.
- Monitoring of each step in continuum of HIV care and treatment, from HIV diagnosis to viral load (VL) suppression, is critical to improving health status of people living with HIV (PLHIV) and to enhancing prevention of HIV transmission through treatment
- We searched published literature (PubMed), conference abstracts, grey literature, and national program data and compiled available information on the continuum of HIV care in Zimbabwe

Cascade of Care in the United States



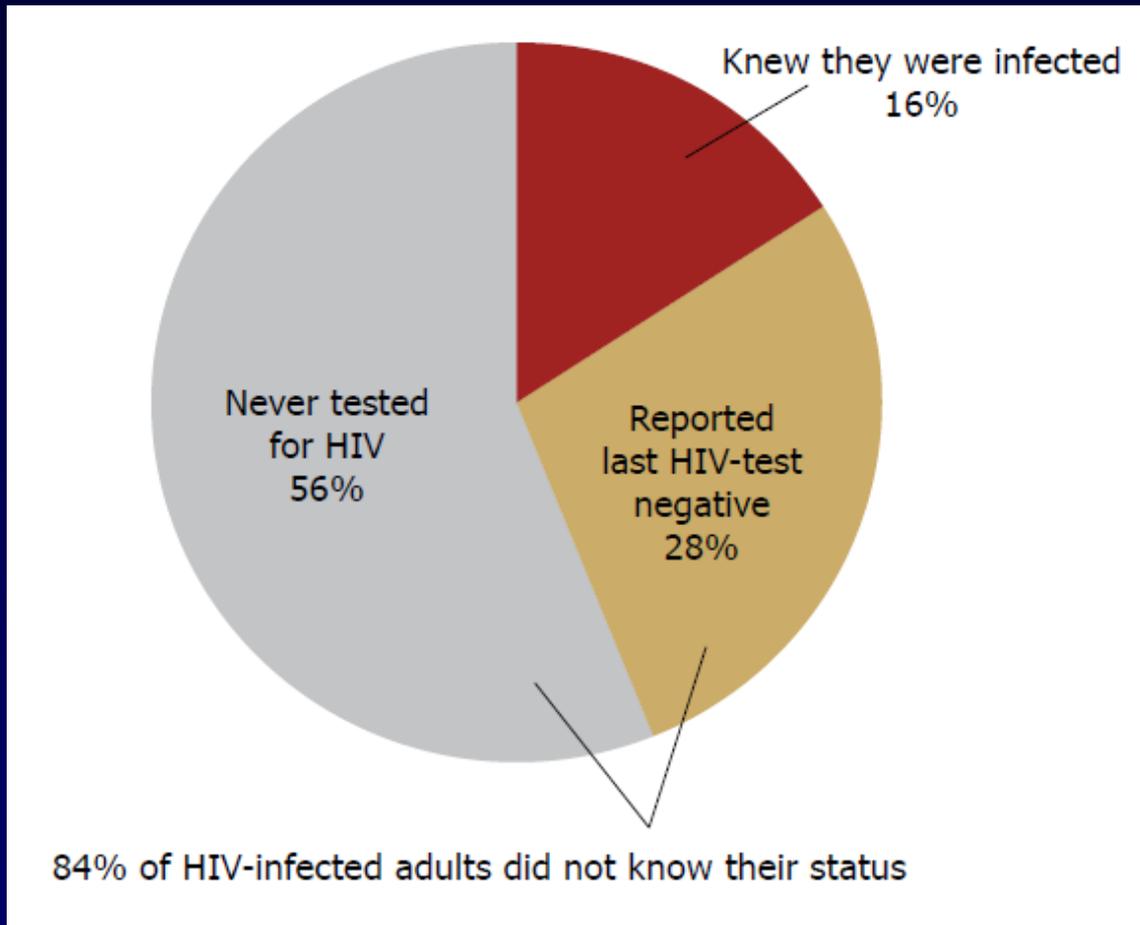
28% with VL <200

HIV Testing, Age 15-49 Years Zimbabwe – 2005-6 and 2010-11



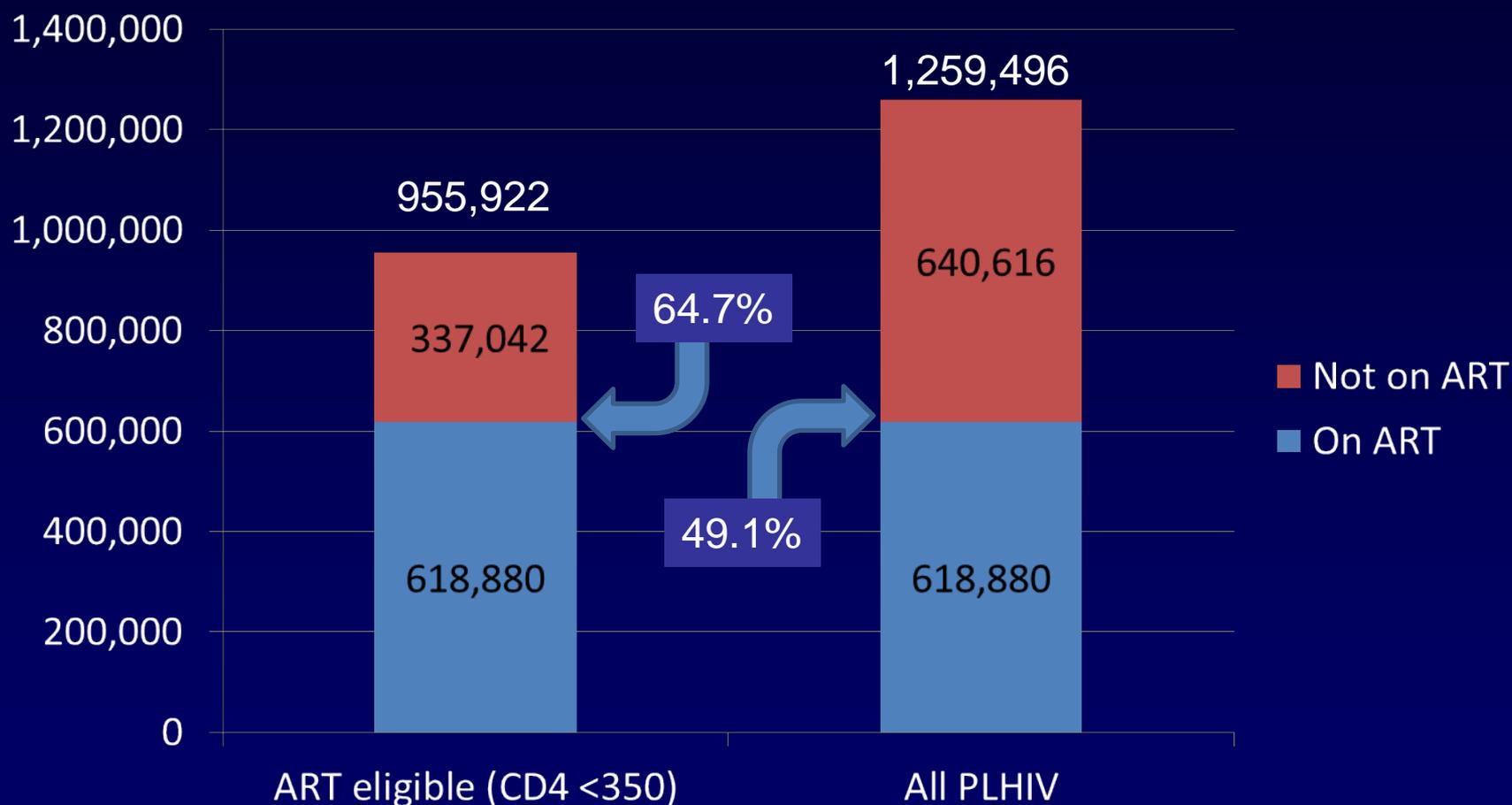
*Overall, 63.7% of PLHIV were ever tested, but this *overestimates* the percentage who have been *diagnosed* since many would have lasted tested HIV-negative (e.g., Kenya AIS 2007)

Kenya AIDS Indicator Survey, 2007



44% of PLHIV had tested, but only 16% aware of infection

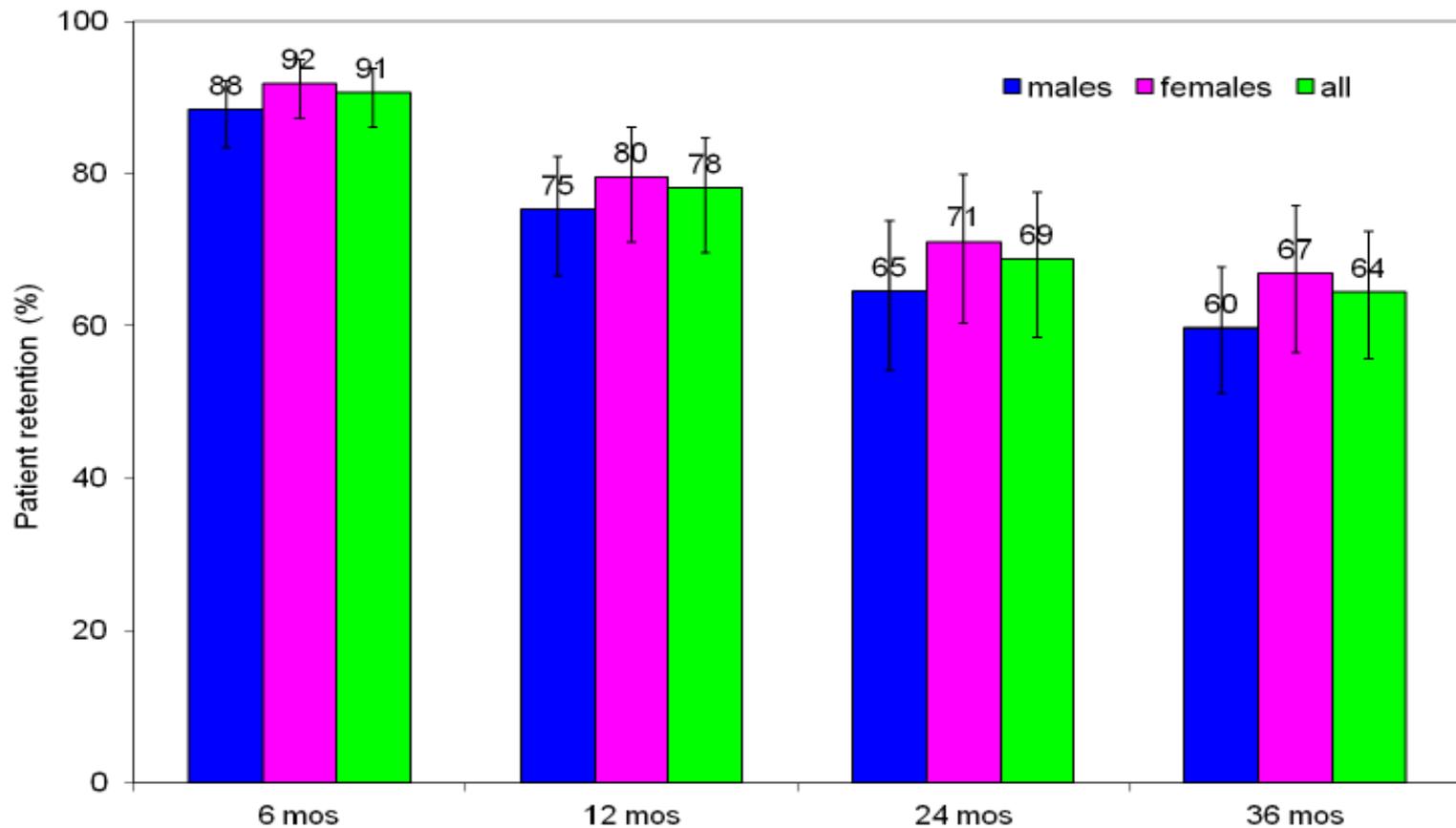
Antiretroviral Treatment (ART) coverage Age ≥ 15 Years, Zimbabwe – end 2013



Sources: Ministry of Health and Child Care (MOHCC) program and Spectrum data

Retention of adolescent and adult patients initiating ART during 2007-2009 in Zimbabwe

Retention of Patients Initiating ART during 2007-2009, Zimbabwe



Retention in HIV Care, Zimbabwe – 2012

- Retention in care at 12 months after ART initiation assessed in adult and paediatric patients in 73 sites in 2012:
 - $\geq 85\%$ retention – 36 (48.6%) facilities
 - 75-85% retention – 19 (25.7%) facilities
 - $< 75\%$ retention – 17 (23.0%) facilities
 - **Median retention at 12 months– 86%**
 - Mean retention at 12 months– 82.5%

Adherence to highly active antiretroviral therapy: a meta-analysis

- Meta-analysis of 84 observational studies, conducted across 20 countries
- Average rate of reporting $\geq 90\%$ adherence - 62%
- Better adherence in countries with *lower* Human Development Index (HDI) scores
- Nationally representative data on ARV adherence unavailable in Zimbabwe

Virological follow-up of adult patients in antiretroviral treatment programmes in sub-Saharan Africa: a systematic review

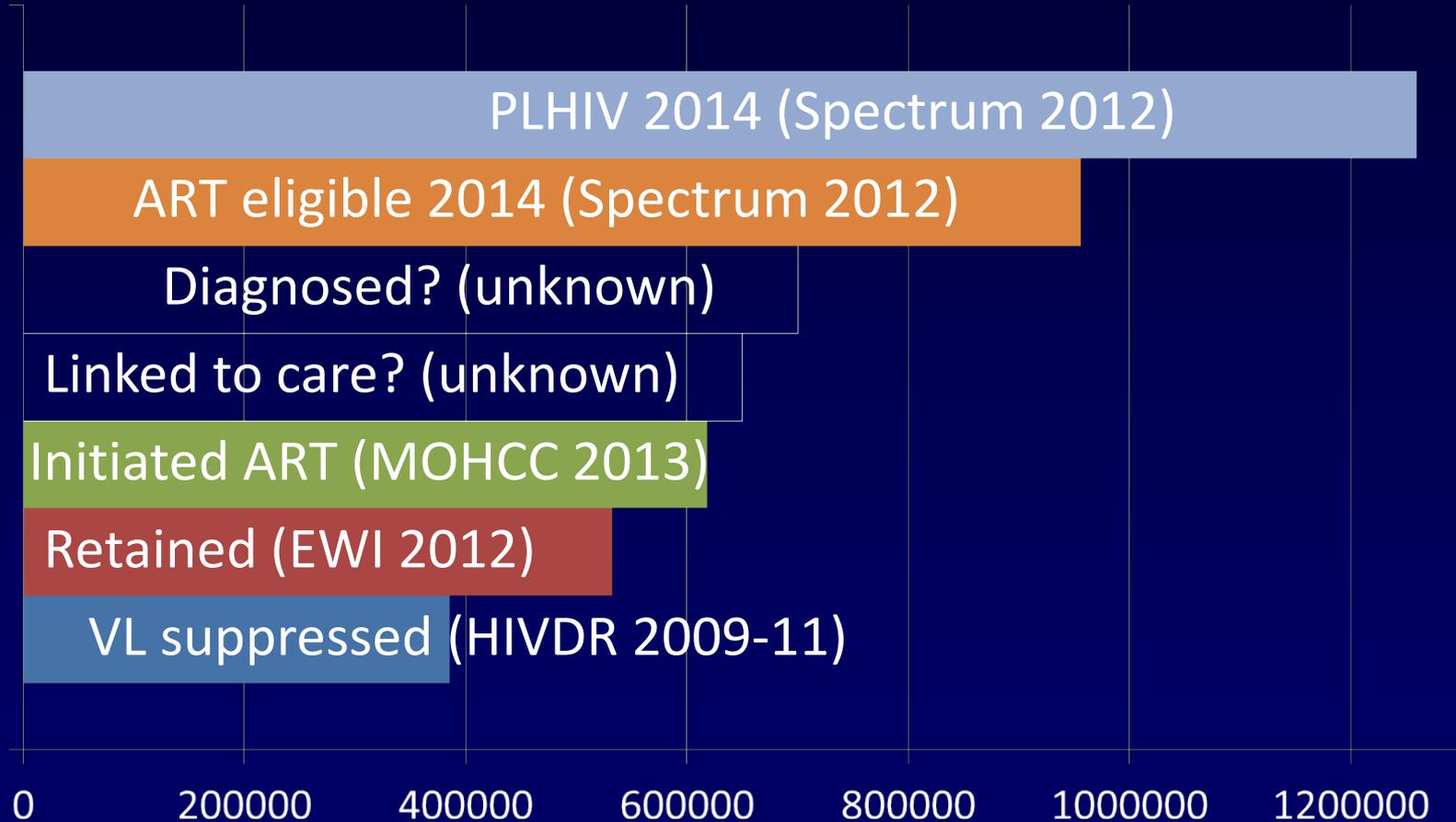
- 89 studies identified
- Overall, in on-treatment analysis, virological suppression (HIV-1 RNA <1000 copies per mL)
 - 10,351 (78%) of 13,288 patients after 6 months ART
 - 7,413 (76%) of 9,794 after 12 months
 - 3,840 (67%) of 5,690 after 24 months

Virological Suppression, Zimbabwe – 2009-11

- Documented VL suppression among PLHIV on ART (<1,000 copies/mL at 12 months after ART initiation)
 - 89.5% among those retained in treatment
 - 62.4% overall (accounting for loss to follow-up)
- Limited/very limited/negligible access to CD4, viral load, and drug resistance monitoring
- Overall virological suppression = (number adults on ART x VL suppression prevalence)/number of adult PLHIV = 30.6% (crude estimate at 12 months; actual result, including PLHIV on ART >12 mo., likely lower)

Source: *National HIV Drug Resistance Survey, MOHCC, 2009-11*

Estimated Cascade of Care, Age ≥ 15 Years, Zimbabwe – 2014



Overall, VL suppression (VL<1,000) ~30% of all PLHIV (crude estimate)

Summary of cascade of care in Zimbabwe

- Testing and diagnosis – 63.7% of PLHIV ever tested
 - % PLHIV diagnosed not monitored, lags behind
- Linkage – not monitored nationally
- Treatment initiation, CD4 <350 (adults): 64.7%
 - Of all PLHIV – ~49.1%
- Retention – 86% at 12 months
- Adherence – not monitored nationally
- Virological suppression (VL <1,000) – 62.4% at 12 mo.
- Overall virological suppression estimated ~30%

“Know your cascade”

- While high ART access for adult PLHIV with CD4 <350 has been achieved, overall VL suppression in adult PLHIV is ~30%
- Substantial attrition in each step of continuum is documented or may be inferred
- Critical data gaps include unknown rates of: 1) HIV diagnosis among PLHIV, 2) linkage to HIV care among diagnosed PLHIV, and 3) adherence to ART
- Zimbabwe AIDS Indicator Survey planned

Improving Continuum

- Steps to improve overall VL suppression:
 - expand HIV testing (opt-out testing);
 - raise threshold for ART eligibility to CD4 <500; offer ART to pregnant women, PLHIV in serodiscordant relationships, HIV-infected members of key populations;
 - implement interventions to enhance linkage, retention, and adherence;
 - optimize ART;
 - carefully monitor with quality improvement at each step cascade of care from facility to national level