HIV Learning Network
The CQUIN Project for Differentiated Service Delivery

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dHTS and linkage to treatment

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Leveraging DSD Strategies to Optimize HIV Testing and Linkage Services
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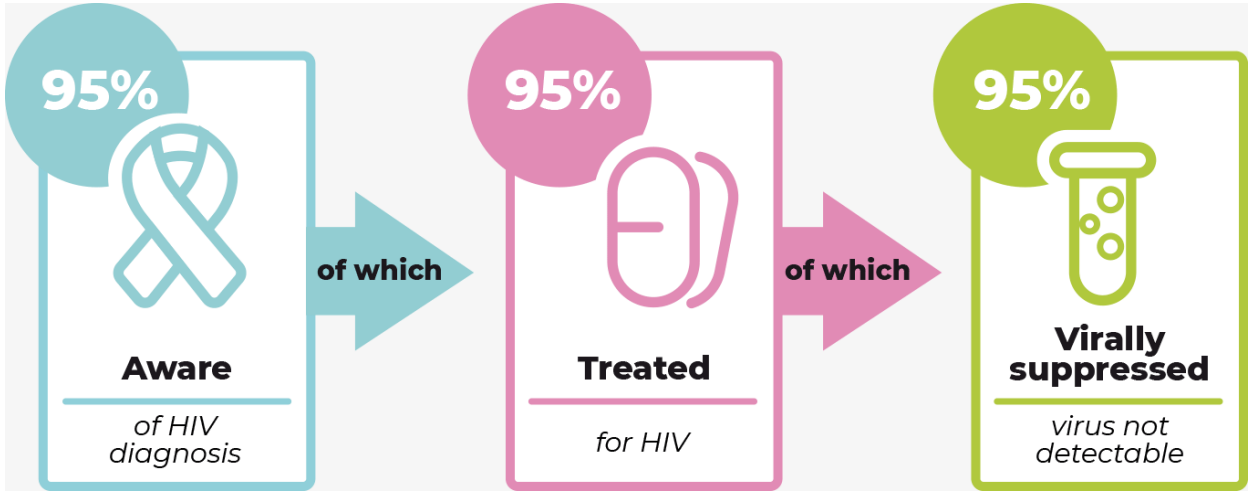
Outline

- Linkage to treatment: Where are we now?
- Barriers to linkage
- Best practices

Global Picture: Linkage to Treatment – Key Points

- Linkage to treatment for those who know their status is high and growing
  - While the first 95 (knowledge of status) remains a challenge, 88% *of those who know their status* were on ART in 2021
  - PHIA data from Africa shows that many countries have linkage rates > 95%
- However, some populations are less likely to link to treatment
  - These include men, younger PLHIV, members of KP groups, migrant and mobile populations, and others
- The *time* between testing and linkage to treatment is not always well-monitored
- We should expand our understanding of linkage to include *early retention*
- Best practices to enhance linkage to treatment are differentiated by group, as well as by testing modality

Defining Linkage to Treatment



- Treatment coverage is dependent on testing coverage
- If we define linkage as "proportion of PLHIV who initiate ART" we are describing both the 1st 95 *and* the 2nd 95
- If we want to focus on the 2nd 95 only, we can use a different denominator and **define linkage as "proportion of PLHIV *who know their status* who initiate ART"**

Definitions

1. **Proportion of PLHIV who initiated ART**
   # starting ART / # of PLHIV
2. **Proportion of PLHIV *who know their s*tatus who initiated ART**
   # starting ART / # testing positive
3. **Proportion of PLHIV *who know their s*tatus who initiated ART within XX days of testing positive**
   # starting ART within XX days / # testing positive

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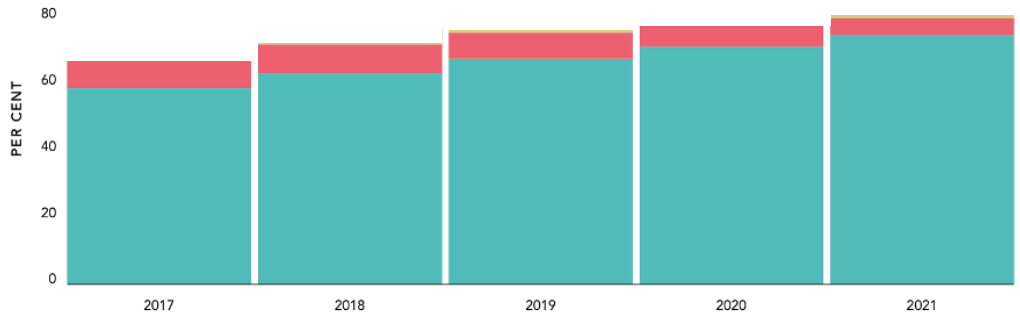
The proportion of PLHIV on ART is growing over time

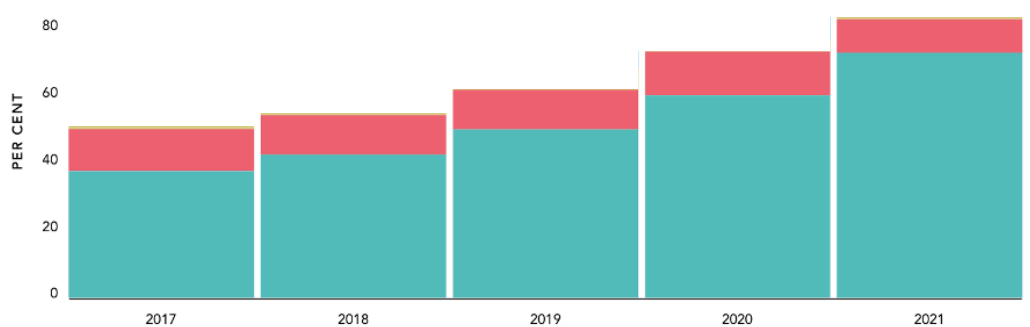
This represents improvements in both testing coverage (1st 95) and linkage (2nd 95)

Eastern and Southern Africa



Source: UNAIDS special analysis, 2022.

Western and Central Africa

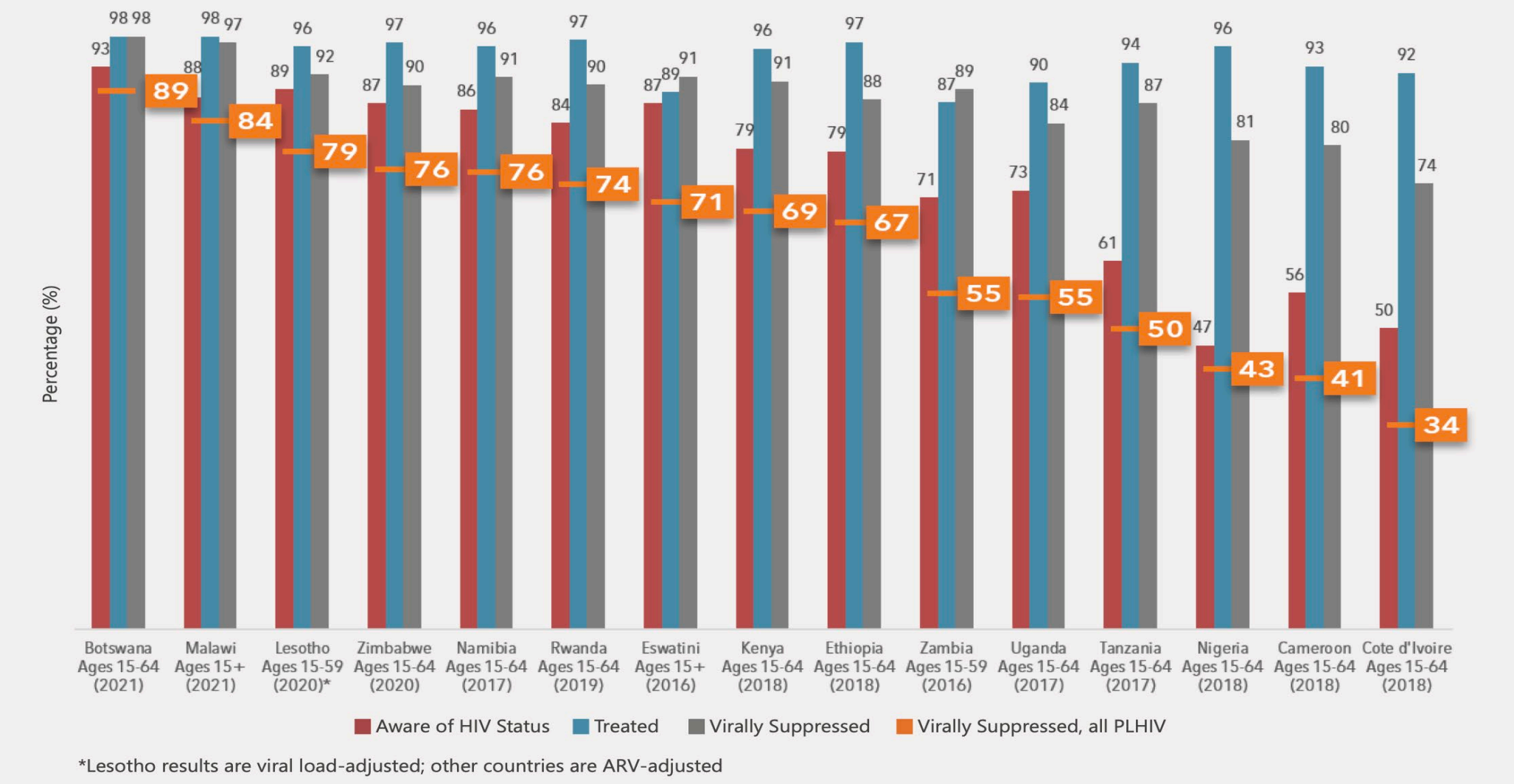


Source: UNAIDS special analysis, 2022.

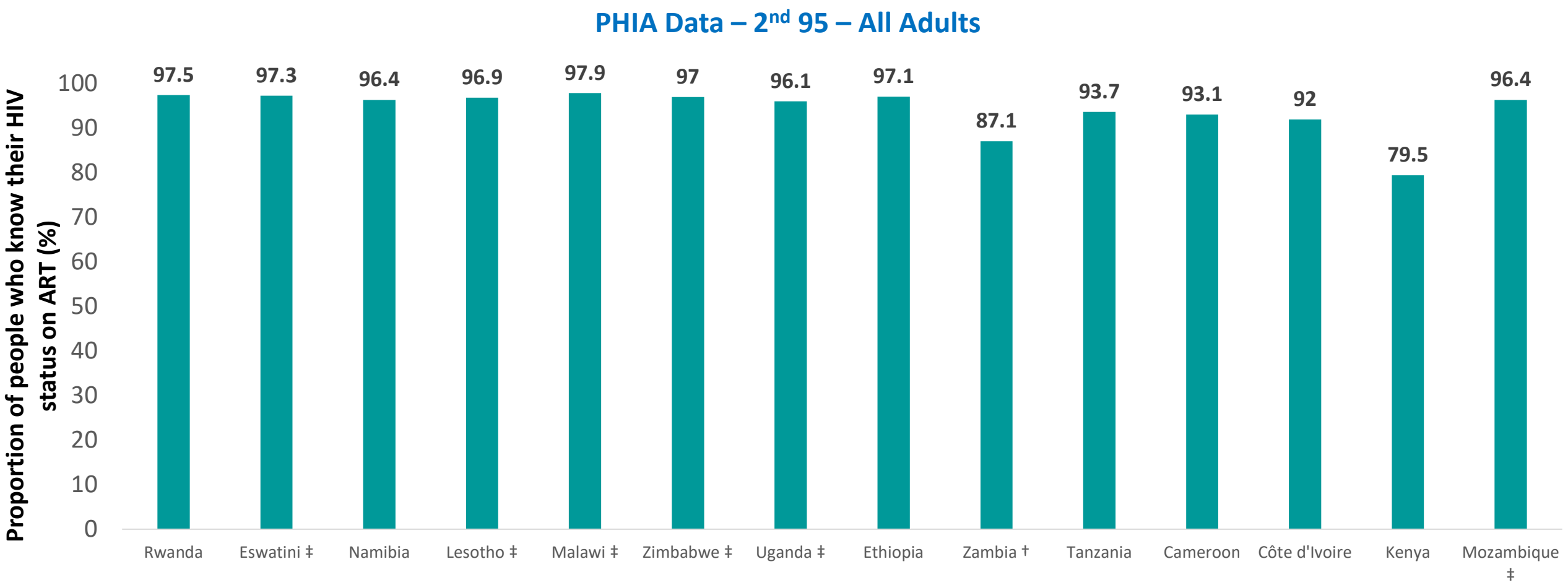
Source: UNAIDS Data 2022

The primary barrier to improving ART coverage is testing, not linkage

PHIA Data



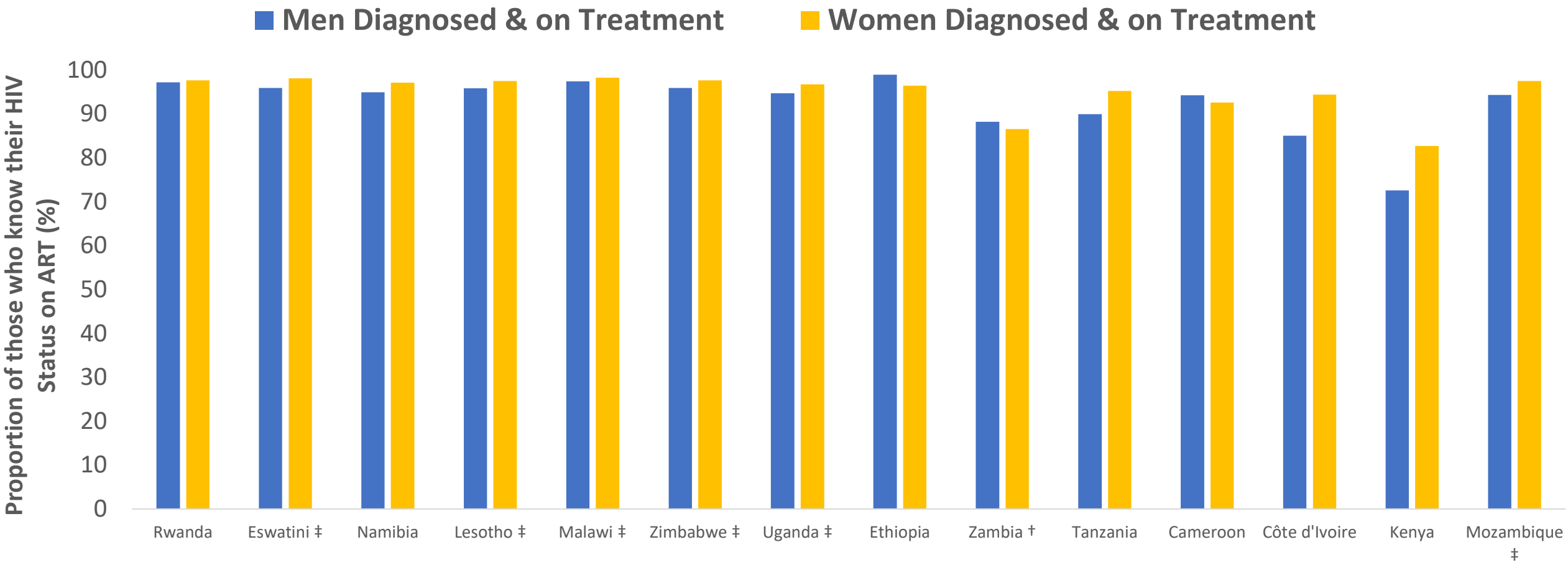
PHIA Data: Linkage rates among those who know their status = high



Data for adults ages 15-64 unless otherwise specified;
†data for adults ages 15-59; ‡data for adults ages 15+

PHIA Data Collected from 2015 - 2021

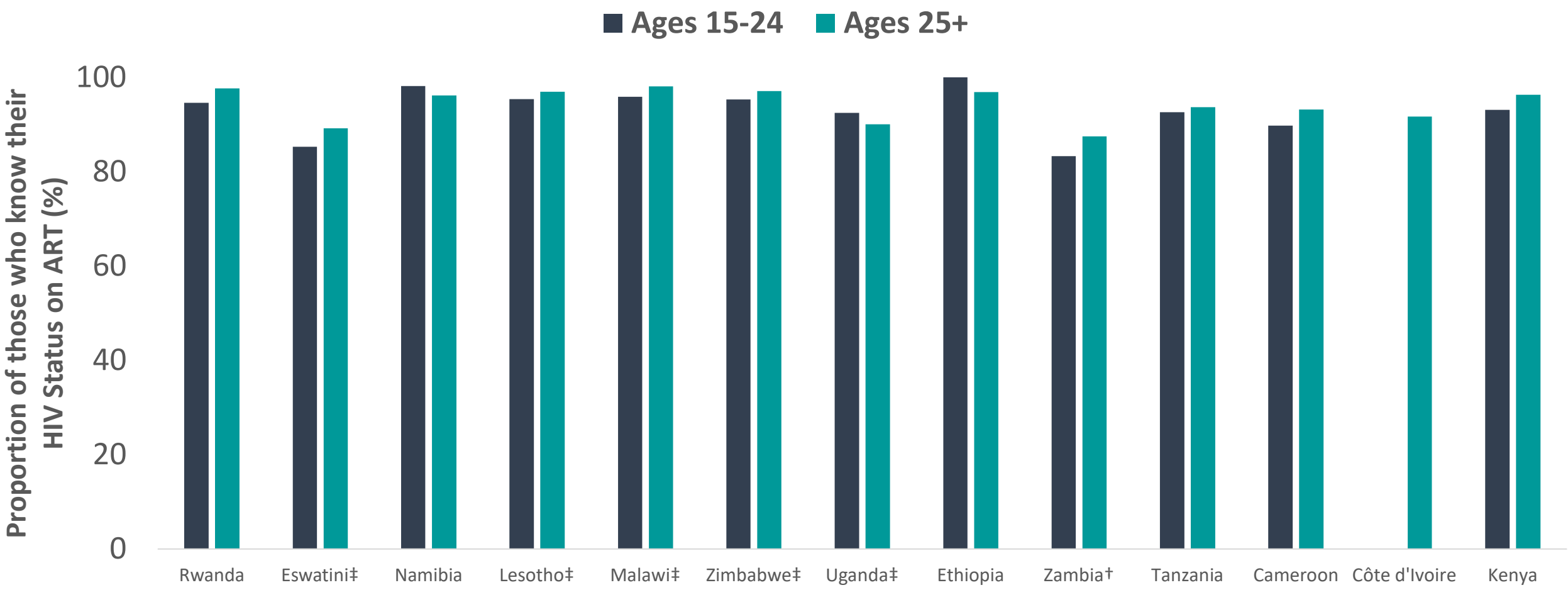
PHIA Data: Men are less likely to link to treatment



Data for adults ages 15-64 unless otherwise specified;
†data for adults ages 15-59; ‡data for adults ages 15+

PHIA Data Collected from 2015 - 2021

PHIA Data: PLHIV < 25 years are less likely to link to treatment



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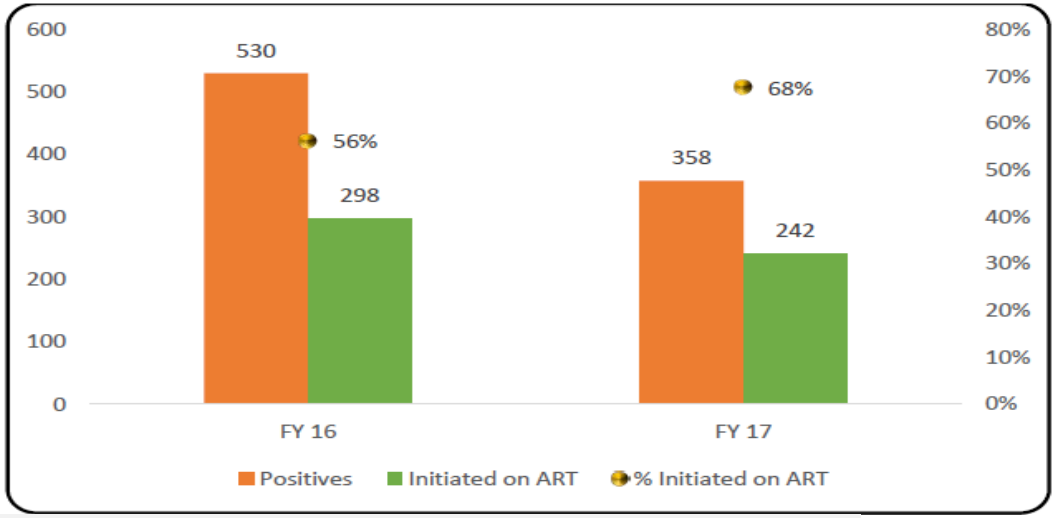
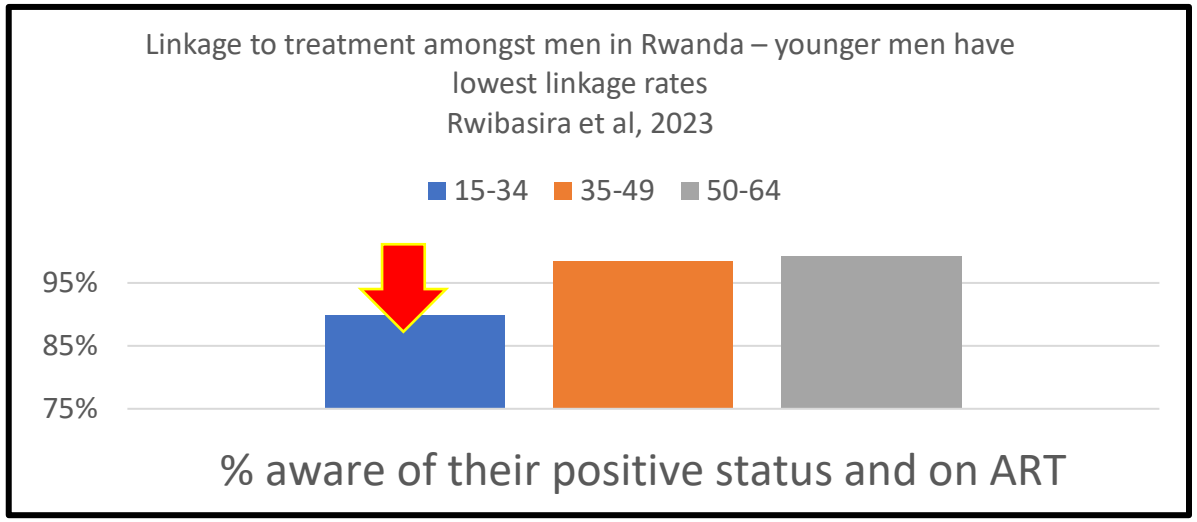
Other populations with linkage challenges

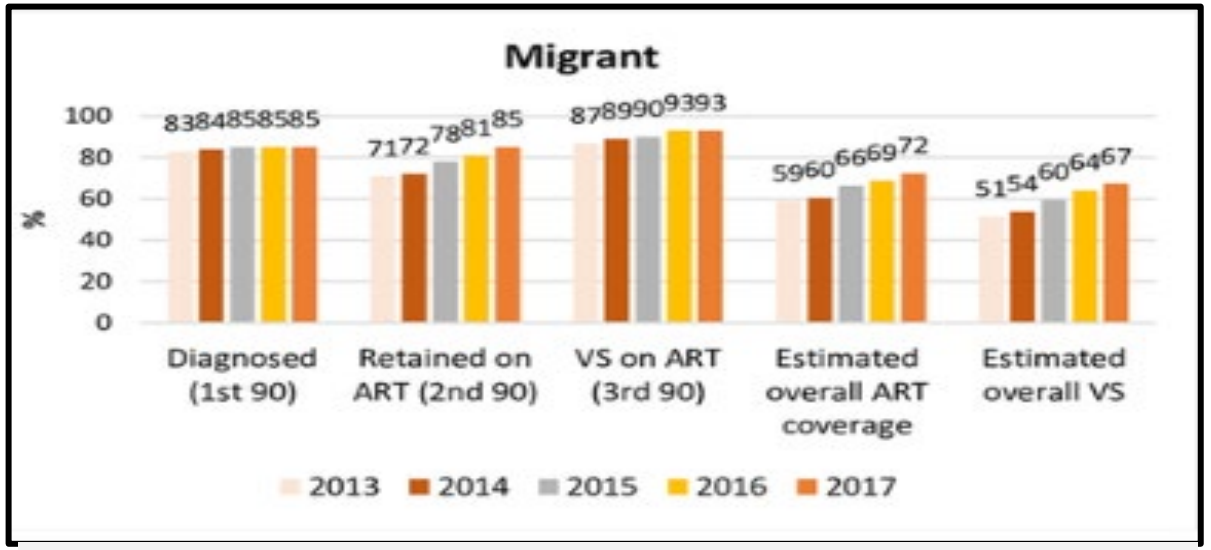
- Children
- Young men
- Key populations
- Migrant and mobile populations

Figure 1. Clinical cascade for female sex workers



Differentiated Care for Antiretroviral Therapy for Key Populations: Case Examples from the LINKAGES Project





Marukutira T et al. *Gaps in the HIV diagnosis and care cascade for migrants in Australia, 2013–2017: A cross-sectional study.*

Time to linkage is often not tracked

Time to linkage is a quality standard:

- WHO Test and Treat/ Treat All: Everyone testing positive for HIV should be initiated on ART on the same day or **within 7 days of diagnosis**
- GF recommendation for NFM4: Accelerate and Optimise ART including Rapid ART initiation (**within 7 days of diagnosis**) for all populations, including children, following a confirmed HIV diagnosis and clinical assessment and on the same day for people who are ready to start. (Program Essential 10)

Measurement of time to linkage is limited:

- Requires individual-level data, not cohort data

CQUIN country dHTS self-staging: Timely Linkage

In a mature national program:

- ✓ National plans include standards for timely and effective linkage to treatment for people testing positive for HIV;
- ✓ linkage rates and time to ART initiation are monitored;
- ✓ and performance meets standards

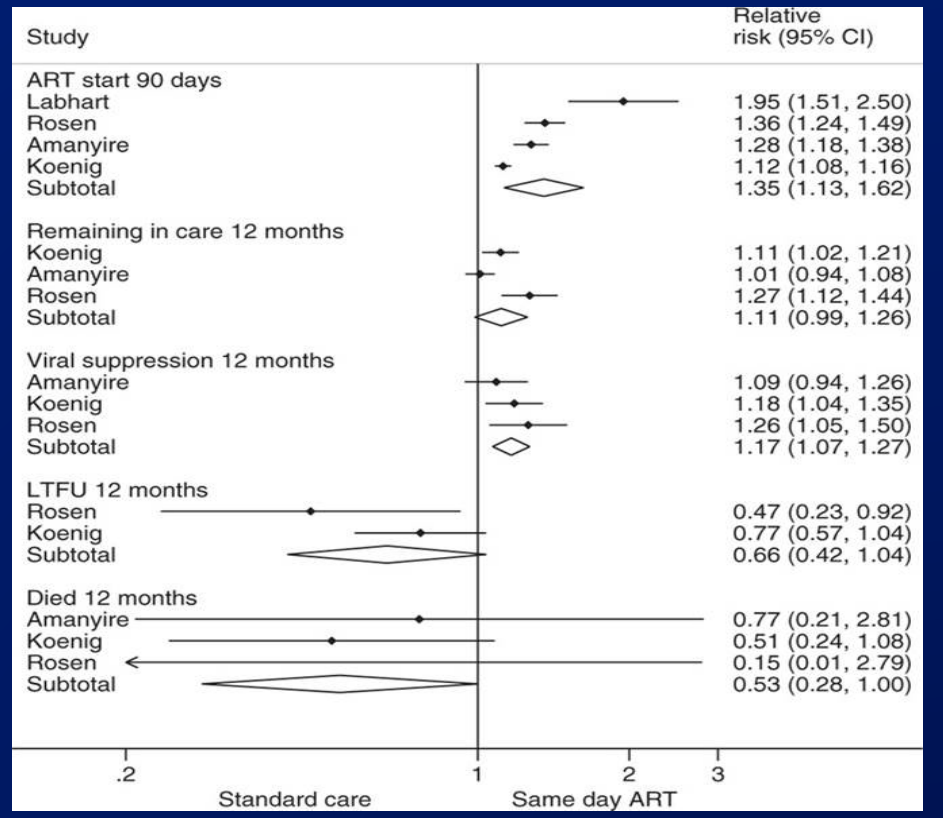
In 9 countries, time to linkage is not routinely monitored

- Variable results across countries
- Lots of opportunities for cross-learning

Linkage and Early Retention

- Need to consider linkage beyond “day one” of ART
- A substantial proportion of treatment interruption/ loss to follow up occurs in the first 6 months of ART
- This has important implications for program design and support for recipients of care initiating ART

- Bai *et al*: **Benefits and Risks of Rapid Initiation of Antiretroviral Therapy: A Systematic Review and Meta-Analysis**
  - Early Initiation had better treatment continuity in the first 8 months
  - And reduced incidence of severe bacterial infections



Results: Across the randomized trials, ART start on the same day increased viral suppression at 12 months [three trials: relative risk (RR) 1.17, 95% confidence interval (CI) 1.07–1.27], retention in care at 12 months (RR 1.11, 95% CI 0.99–1.26), and the likelihood of starting ART within 90 days (four trials: RR 1.35, 95% CI 1.13–1.62) and 12 months after eligibility was established (three trials: RR 1.17, 95% CI 1.07–1.27). There was a nonsignificant trend toward reduced mortality (three trials: RR 0.53, 95% CI 0.24–1.08), as well as reduced loss to follow-up at 12 months (2 trials: RR 0.66, 95% CI 0.42–1.04). In the observational studies, offering accelerated ART initiation resulted in a greater likelihood of having started ART within 3 months (two studies: RR 1.53, 95% CI 1.11–2.10). There was a trend toward an increased risk of being lost to follow-up at 6 months (three studies: RR 1.85, 95% CI 0.96–3.55).

Ford et al: Benefits and risks of rapid initiation of antiretroviral therapy Nathan

Outline

- Linkage to treatment: Where are we now?
- **Barriers to linkage**
- Best practices

Risk factors for late linkage to care in sub-Saharan Africa

Structural

Examples:

- Longer distance and/or time to health facilities / health services
- Staffing shortages and/or long wait times at health facilities
- Cost of accessing health services

Psychosocial

Examples:

- Experience or fear of stigma
- Non-disclosure
- Lack of psychosocial support
- Mobility / migration

Biomedical

Examples:

- Asymptomatic and very ill people less likely to link
- Depression, substance use
- Co-morbidities

Fuge *et al*., International Journal of Infectious Diseases, 2022

Outline

- Linkage to treatment: Where are we now?
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- **Best practices**

Innovations to promote linkage to treatment

Structural

Psychosocial

Biomedical

Examples:

- Decentralized / community-based services
- Same-day ART initiation
- Online / mobile health resources
- Streamlining services to decrease wait times

Examples:

- Staff training
- Support for disclosure and partner services
- KP-led ART initiation
- Peer support / peer counseling / peer navigation
- Feedback from community-based and community – led monitoring

Examples:

- Co-located services
- Integrated service delivery for HIV and other health conditions

Differentiated Linkage to Treatment

Differentiated approaches **for specific groups:**

- Children
- Adolescents and young people
- Key populations
- Mobile, migrant, and displaced populations

Differentiated approaches **for specific testing strategies:**

- VCT
- PICT
- Index testing
- Social network testing
- Self-testing

What do we need to be looking at?

- **Systems:** these are not fully adapted for longitudinal tracking for RoC and measure the time to initiation thus linkage is measured for reporting period e.g. monthly. Cross-sectional data also includes those initiated within the reporting period but tested in the last reporting period
- **Human Resources:** quality counselling for uptake of treatment within the recommended period, navigation? What can we leverage on to improve quality without necessarily straining the HR resources?
- **Recipients of Care:** what are their preferences; what part can they play in this drive to not leave anyone diagnosed behind?
- **Differentiation:** Optimal linkage support may differ by testing strategy – e.g., self-testing *vs.* PICT *vs.* index testing *vs.* social network testing services, etc.

Continue the Discussion at Parallel Session 13b

Co-Moderators: Mirtie Getchew, MOH Ethiopia & Peter Preko, ICAP Eswatini

Panelists:

- Amos Kibusu, MOH Kenya: Linkage to treatment and early retention in Kenya
- Prince Anyawu, ICAP Nigeria: Community testing and linkage
- Olivia Edem Dotse, JSI Ghana: Linkage to treatment for KP in Ghana
- Madjo Leopoldine, MOH Cameroon: Linkage to treatment for adolescents in Cameroon
- Charles Mukoma, ASWA: Linkage to treatment for sex workers
- Richard Nininahazwe, INPUD Burundi: Linkage to treatment for people who use drugs

Thank you!

References

1. Terefe Gone Fuge *et al*., Risk factors for late linkage to care and delayed antiretroviral therapy initiation among adults with HIV in sub-Saharan Africa: a systematic review and meta-analyses. International Journal of Infectious Diseases, Volume 122, 2022, https://doi.org/10.1016/j.ijid.2022.07.037.
2. Tanser F *et al.,* HIV treatment cascade in migrants and mobile populations. Curr Opin HIV AIDS. 2015 Nov;10(6):430-8. doi: 10.1097/COH.0000000000000192. PMID: 26352396.
3. Ehrenkranz P *et al.* (2021) The revolving door of HIV care: Revising the service delivery cascade to achieve the UNAIDS 95-95-95 goals. PLoS Med 18(5): e1003651
4. Bayisa L *et al.* (2021). Time to Antiretroviral Therapy Initiation and Its Predictors Among Newly Diagnosed HIV-Positive People in Nekemte Town, Western Ethiopia. HIV AIDS (Auckl). 2021 Oct 9;13:959-972. doi: 10.2147/HIV.S327967. PMID: 34675687; PMCID: PMC8519411.
5. Claborn K, Hill R, Kioumarsi A. Improving linkage and retention in treatment among people living with HIV and comorbid substance use. AIDS Care. 2022 Oct;34(10):1282-1287. doi: 10.1080/09540121.2021.1967850.
6. Farley SM *et al.,* Progress towards the UNAIDS 90-90-90 targets among persons aged 50 and older living with HIV in 13 African countries. J Int AIDS Soc. 2022 Sep;25 Suppl 4(Suppl 4):e26005. doi: 10.1002/jia2.26005. PMID: 36176030.
7. https://www.unaids.org/sites/default/files/media_asset/UNAIDS_FactSheet_en.pdf

Innovations gathered across the globe

Client Level Interventions

- Client/peer navigation with skills building and linkage to community resources
- Migrant-specific health services, multicultural team to provide tailored services and materials. Improvements in migrant health monitoring systems, an emphasis on the human right to health regardless of citizenship or legal status
- Increased in-person contact or telephone contact,

System Level Innovations

- Co-locating HIV services and integrating HIV services with non-HIV services
- Including peer navigators among clinic staff
- Support phone call reminders or text messaging
- Interactive notification system to alert providers on missed appointments
- Post –test messaging –clear and comprehensive, include all benefits
- Bring services closer to the people e.g., community ART initiation and follow up

LINKING

- **streamlined interventions** to promote rapid initiation: enhanced linkage with case management, support for HIV disclosure, partner services, staff training and co-location of services *(moderate-quality evidence)*
- **peer support** (including peer counselling) and navigation approaches for linkage *(moderate-quality evidence)*; and
- **quality improvement** approaches using data to improve linkages *(low-quality evidence)*.

The findings from the various studies on linkage and retention in care are also mirrored in the WHO 22 guidelines (presented at the CQUIN Annual Meeting