»SESSION 7A: TRACING PRIORITIZATION AND PROCESS

Session 7A

Overview of WHO guidelines on tracing and implementation

Lynne Wilkinson

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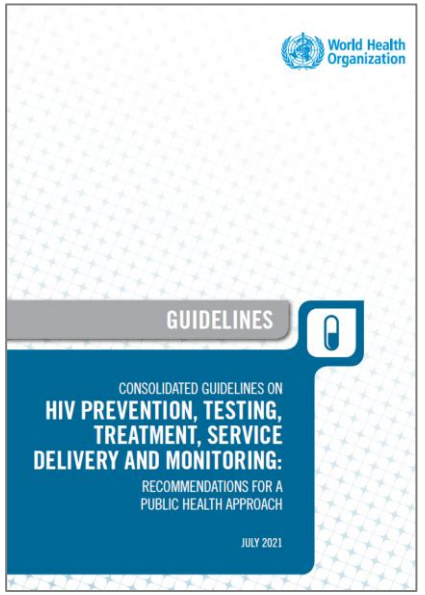
WHO tracing guidance



- Benefit of encouraging/facilitating some individuals to return to care and back onto life-saving ART
- **Recommend tracing despite low-certainty evidence**

7.6.2 Tracing and re-engagement in care

Recommendation (2021)

HIV programmes should implement interventions to trace people who have disengaged from care and provide support for re-engagement *(strong recommendation, low-certainty evidence)*.

Source: *Updated recommendations on service delivery for the treatment and care of people living with HIV (63)*

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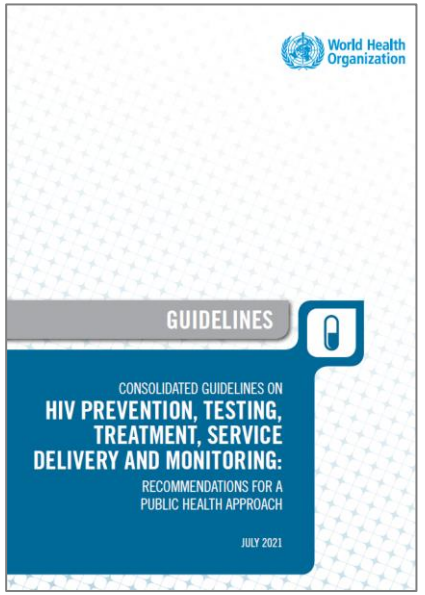
Feasibility & prioritization (1/3)



- No cost-effectiveness data on tracing

- Cost depends on:
  1. Missed appointment verification systems (to limit unnecessary tracing)
  2. Who is prioritized for tracing
  3. When tracing efforts start and stop
  4. What tracing method(s) are used

Feasibility, cost and cost–effectiveness

Most reports described the tracing activities undertaken by existing health facility personnel; in some cases, social workers and community health workers formed part of the tracing team, and personnel were trained. Other associated costs include establishing systems to trace and support re-engagement. In-person tracing requires resources to support the travel of tracing teams and human resources with appropriate training and remuneration, including the potential need to undertake multiple tracing attempts.

Implementation considerations

The criteria for tracing and recall should consider those who are seven or more calendar days late for a scheduled appointment. Although efforts should be made to trace everyone who has missed appointments and/or has abnormal results, the following groups should be given priority: (1) people initiating treatment in the past six months with advanced HIV disease, (2) people with abnormal results, (3) people not initiating treatment and (4) people overdue for clinical consultations or laboratory tests.

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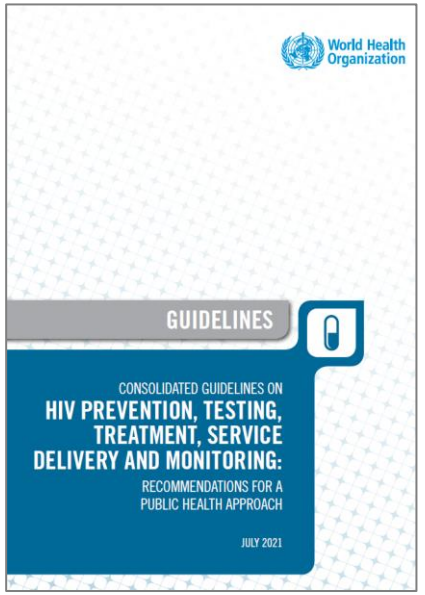
Feasibility & prioritization (2/3)



Tracing should focus on those with missed visits (not LTFU) and abnormal results

With limited resources and many clients returning on their own shortly after a visit date:

Tracing should not take place before a client is 7+ days late for a missed appointment

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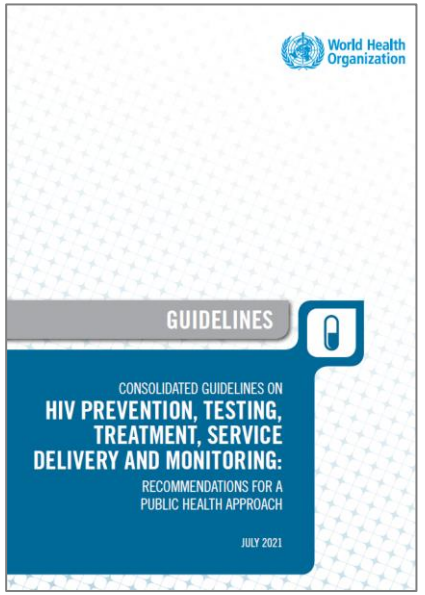
Feasibility & prioritization (3/3)



Due to limited resources and clients returning late:

Tracing should prioritize people at higher risk of morbidity and mortality

1. Initiated past 6 months with CD4<200
2. Abnormal results – for example CrAG+
3. People not initiating ART
4. People overdue for clinical consults or lab tests (above refill only visits)

Feasibility, cost and cost–effectiveness

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Why is it important to understand tracing studies?

- WHO's guidance on tracing is based on these studies,
  PLUS

→They can provide additional insights into how to make tracing more effective and for who……

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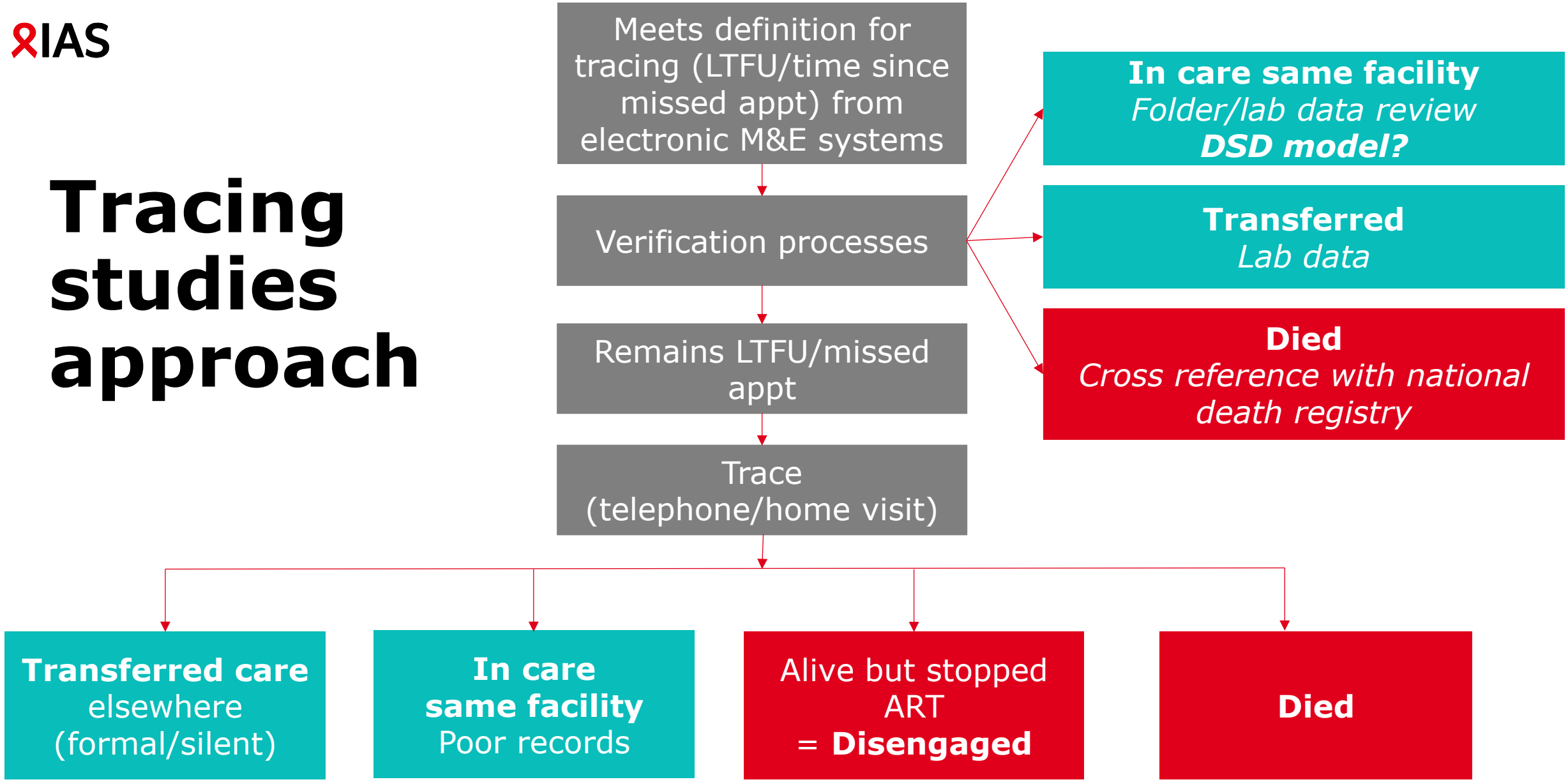
Tracing studies approach



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Verification processes

Use of lab data to reduce unnecessary tracing (determine who is in care elsewhere)

South African ART cohort retention when matched against lab data
Clients initiating ART 01/04/2004- 31/12/2006 (database closure 31/12/2012)

Fox et al 2018

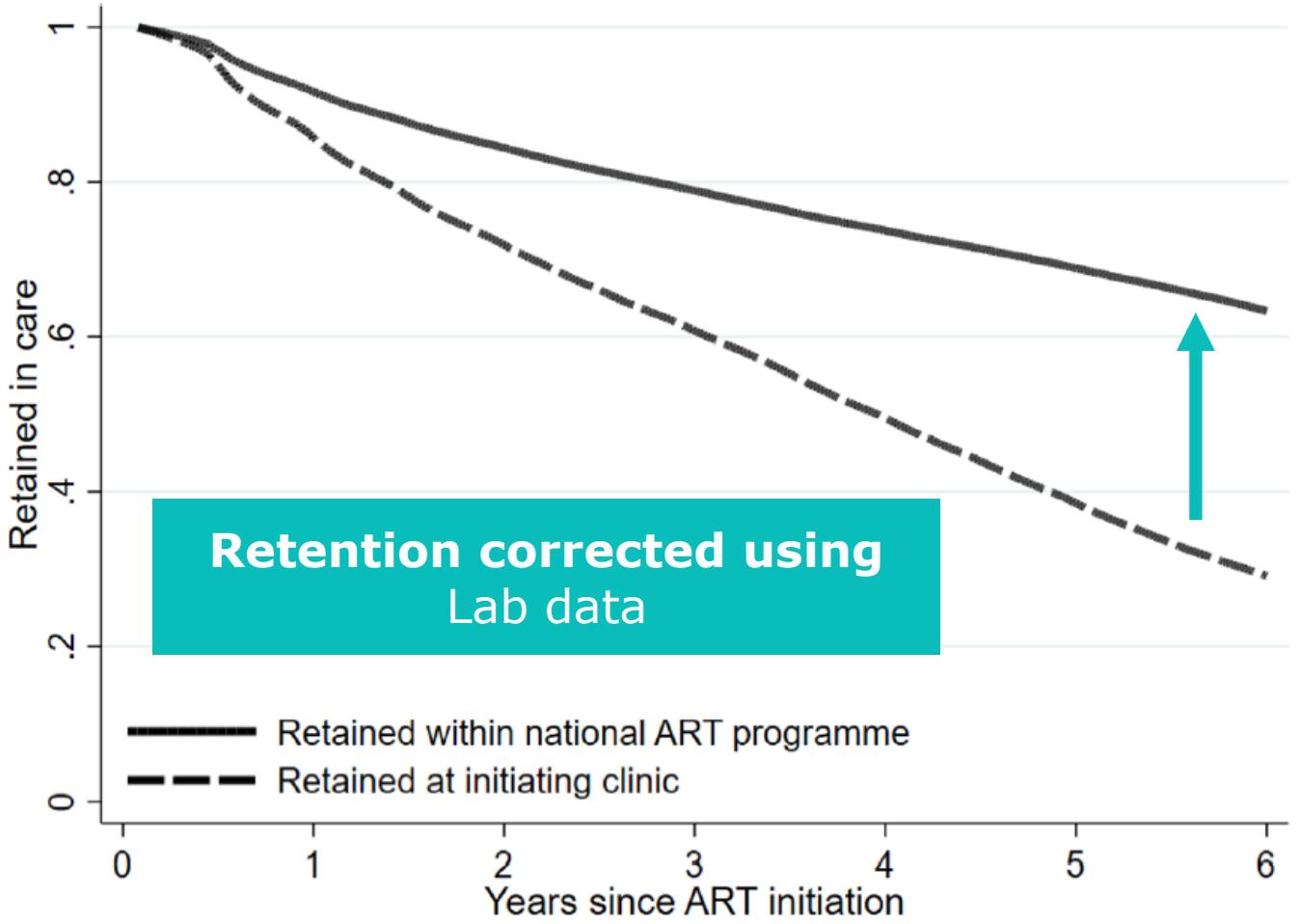

Fig 1. Effect of patient transfer on retention estimates overall in South Africa among 55,836 patients initiating ART in 2004–2006, with attrition defined as retained in care on December 31, 2012.

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Verification processes

Use of national vital registration system/death registry to reduce unnecessary tracing (determine who has died)

South African clinic
Clients LTFU in 2008

Fox et al 2011

	Vital Registration System		
Themba Lethu Clinic Records	**Registered as died**	**Not registered as having died**	**Total**
Died	230	28	258
LTFU	333	704	1037
Alive and in care	60	4850	4910
Total	623	5582	6205
Performance		**% (95% CI)** ^	**N/Total**
Mortality before updating		4.2% (3.7%–4.7%)	258/6205
Mortality after updating		10.0% (9.3%–10.8%)	623/6205
Mortality among LTFU after updating		32.1% (29.3%–35.0%)	333/1037

* Data was validated against South Africa's Department of Home Affairs Vital Registration System

Died
Cross reference with death registry

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Latest systematic review (now old) + recent tracing studies all show **many people traced in care at the same facility or elsewhere**

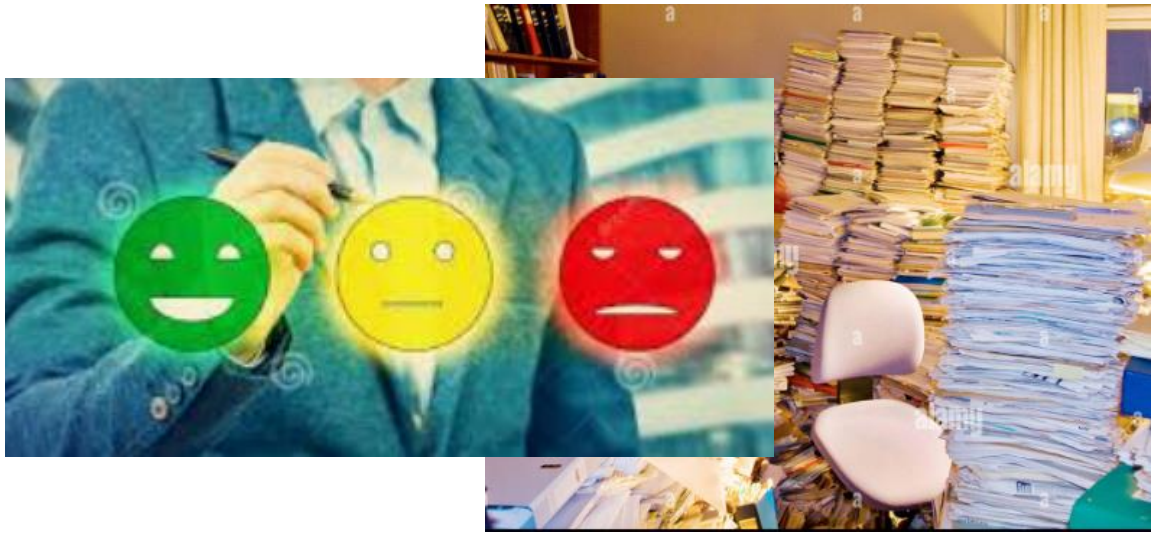
		Transfer	In care at the same facility	Disengaged (Alive stopped ART)	Death
Wilkinson et al Systematic review and meta-analysis (2015)	Tracing studies Both missed appts & LTFU 2003-2013	**18.6%** Silent transfers	**3-29%** (never dis-engaged)	28.6%	38.8% (30% in post 2007 studies)
Bailif et al 6 country sample tracing study (2021)	LTFU (>60 or >90 days) 2014-2017 *Traced 2017-2019* Lesotho, Malawi, Mozambique, South Africa, Zambia, and Zimbabwe	Alive in care from record check: 13% Alive in care from tracing: 29% **Total 42%**		20%	11%
Ssemwogerere et al Tanzania (2022)	LTFU (>90 days) 2017-2021 3 large public facilities (n=740)	**76%** Silent transfer	**1.9%** (re-engaged)	5%	13%

Take-aways (1/2)

- **Limited impact if traced months after LTFU**. (Tracer contact did not causally increase patient return to HIV care among those LTFU.) **More useful for actioning missed appointments** (Beres et al 2021).

- **Re-engagement rates are higher in the first two weeks post-tracing LTFU list**. Likely similar for missed appointments, with impact diminishing quickly, limiting benefit of repeated follow-ups beyond 2-3 attempts (Beres et al 2021).

Take-aways (2/3)



- Over time **tracing has increased identification of silent transfers and disengagements** with reduction in deaths (Zurcher et al 2018)
- The higher the **% of all LTFU/missed appointments traced**, the **more silent transfers identified** (Wilkinson et al 2015)
- **Newer verification/tracing studies** showing **high % silent transfers** (Ssemwogerere et al 2022, Etoori et al 2022, Pry et al 2023)
- **Short tracing periods**, **increase % still in care at the same facility** (poor capturing/records) (Wilkinson et al 2015)

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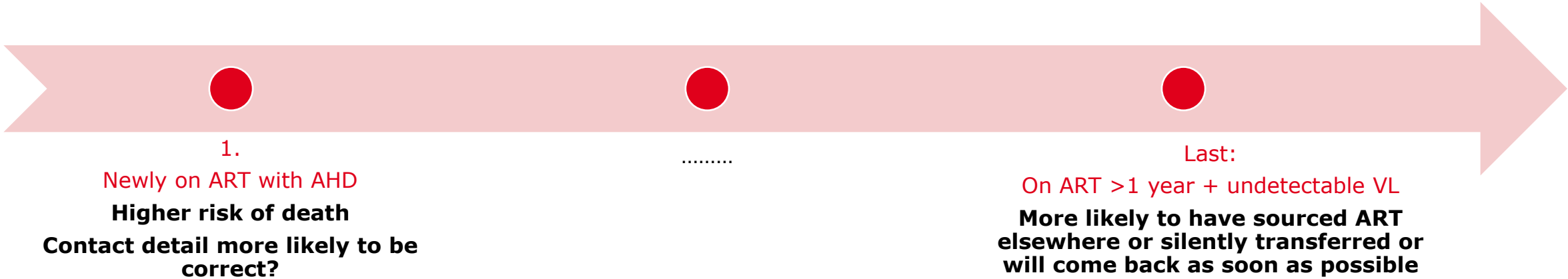
Take-aways (3/3)

- The **longer tracing takes**, **increase % deaths** (Wilkinson et al 2015, Ballif et al 2021)
- **Higher % deaths in people LTFU on ART <1 year** (Ballif et al 2021)
- **Fewer people traced if only using telephone calls** (20 vs 60%) (Zurcher et al 2018)
- When **tracing is only phone calls**, **lower % deaths identified** (likely % people who have died not successfully traced) (Wilkinson et al 2015; Zurcher et al 2018)

Prioritization

- Develop a priority order for tracing categories of clients with missed appointments
- Biggest impact first…..

"When there is no explicit prioritization, it happens implicitly and can lead to greater inequity and reduce overall impact of tracing"



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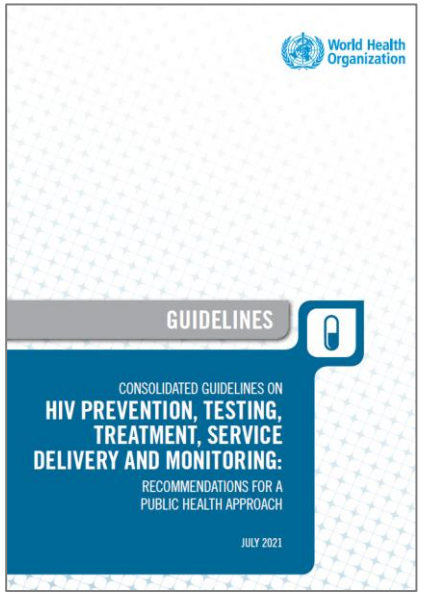
Remember WHO prioritization guidance



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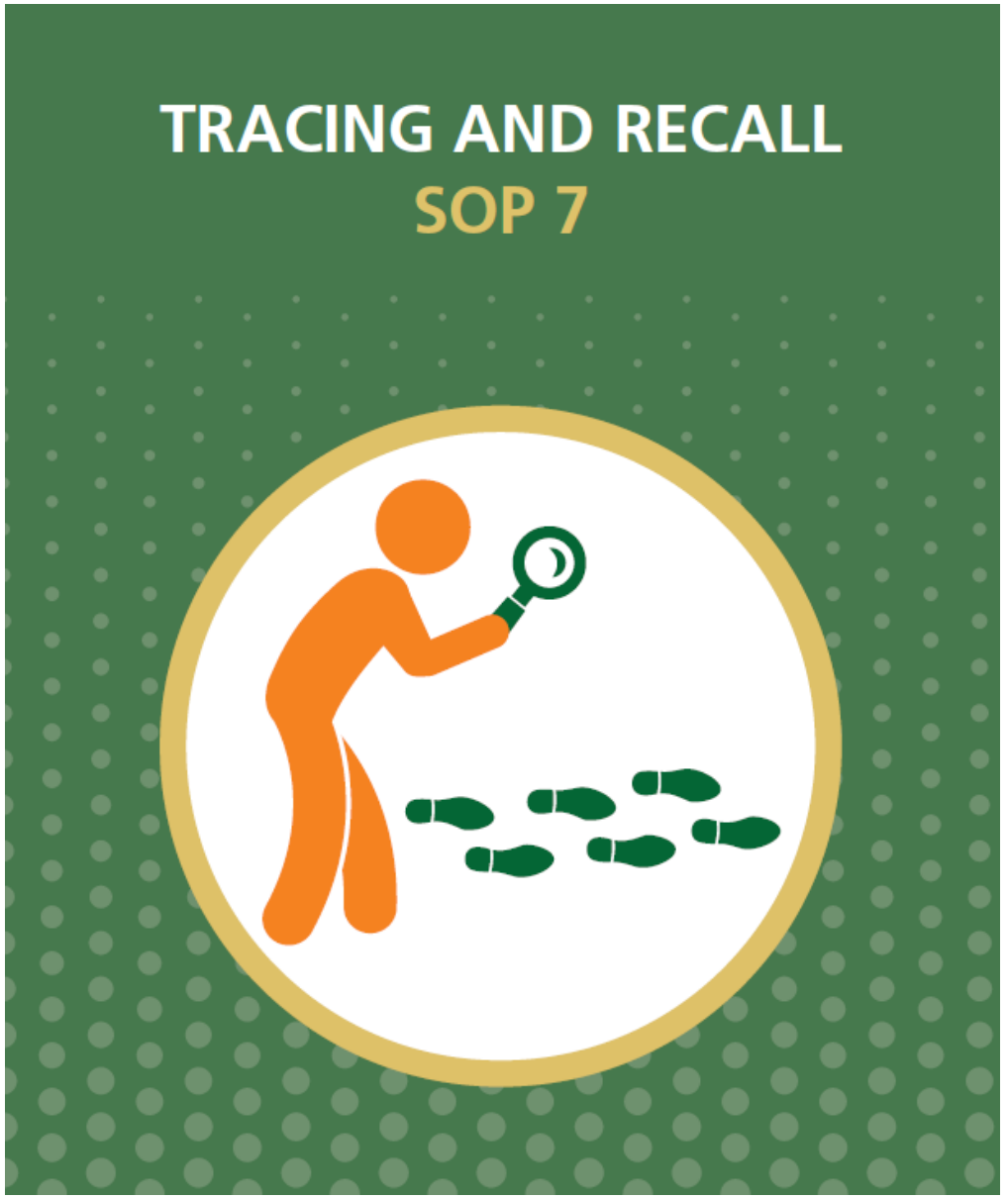
Example: South Africa

Prioritisation order for tracing and recall:

Every effort should be made to trace all patients with missed appointments and/or abnormal results. However, tracing and recall should be prioritized for the following patients in the order set out below:

1. Patients started to restarted on treatment in the last 6 months with advanced HIV disease (AHD)
2. Patients with abnormal results (HIV: Serum CrAg+, PCR+ or viral load >50 copies/ml, diabetes: HbA1c >8%, hypertension: BP > 140/90, TB: positive GXP, Smear, Culture, Line Probe Assay (LPA))
3. Patients diagnosed but not started on treatment (failed linkage)
4. Patients overdue for their condition specific assessment and/or investigation (test)



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Key elements: Tracing process

- Monitoring systems in place
- Identify eligible and prioritized clients for tracing
- Co-ordinate with outreach teams
- Respectful and consensual tracing
- Supportive and non-judgemental encouragement to return to care

Operationalizing the tracing process

- Programmes should have monitoring systems in place to identify and alert about clients on ART who disengage.
- When a client is eligible and given priority for tracing and when consent for tracing has been given, the programme should coordinate with the outreach or tracing team to locate the client.
- The tracing team may include lay workers, peer supporters and community health workers, who are tasked with following up a list of clients (1).
- This approach must ensure that tracing efforts are respectful, consensual and tailored to the needs and preferences of each client, enhancing the effectiveness of re-engagement strategies in care.
- Once the client is reached through tracing, it is important to be supportive and non-judgemental and give clear information and counselling to encourage re-engagement in care and treatment.

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Enabling effective tracing

Tracing process: Client supported

1. **Obtain consent to trace** (explain why: abnormal results or missed appointments to check person is okay?)
2. **Update contact details at every visit** – explain why
3. **Clarify tracing preferences** – by phone call, SMS, WhatsApp and/or home visit.
   - Communicate and ensure HIV status will never be disclosed during tracing processes.
4. **Document** in specified place in clinical stationary

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Enabling effective tracing
Tracing process: System supported

1. **Optimized monitoring systems**
2. **Tracing SOP (focus for today)**
    i. Clarified roles and responsibilities
    ii. Verification processes
    iii. Methods/Timing
    iv. Feedback/documentation approach
3. **Funded logistics for tracing – phones, airtime, transport etc**
4. Tracing indicators? For priority categories?
5. **Tracing system audit processes**

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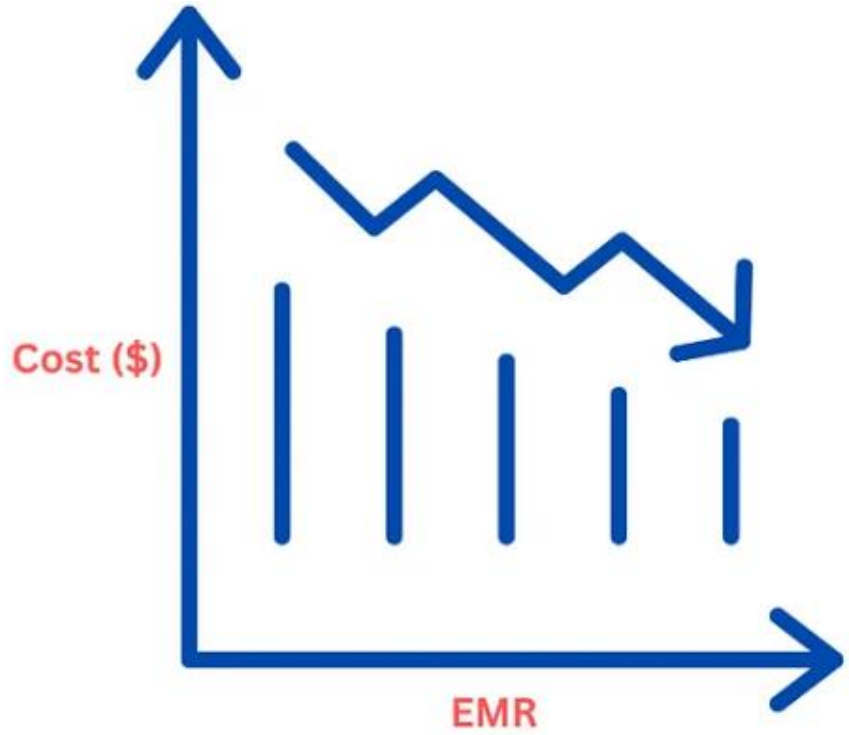
1. Optimized monitoring system

- EMR generated tracing reports?
  - Calculates days after a missed appointment for tracing?
  - Categorises missed appointments by priority order? *Using ART start date, CD4<200, abnormal labs red flag, overdue for VL*



Consider feasible sustainable EMR supported verification steps:
Checks against lab system/death registry/registration at other ART sites
- Possible from a database perspective?
- Possible process within centralized tracing call centre?

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2. Tracing SOP

1. Clear roles and responsibilities:

- **Clinic staff**: responsible for generating tracing reports, verifying clients for tracing, communicating with phone tracers + community-based tracers, recording feedback
- **Phone tracers** (at the clinic or centrally)
- **Community-based tracers**

2. Specify feasible clinic-based verification steps

- Check national database system if it exists
- Check folder – attended/DSD client?
- Check DSD model register?
- Check lab data – tests done elsewhere?

3. Specify tracing process:

i. Check client consent and preferred tracing mechanism

ii. Specify method/timing:

- Timing of phone call or SMS/WhatsApp messaging
- How many calls/messages before home visit
- Number of home visits

iii. Set out feedback process

iv. Set out documentation process

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OPERATIONAL AND SERVICE DELIVERY MANUAL

FOR THE PREVENTION, CARE AND TREATMENT OF HIV IN ZIMBABWE

2022 EDITION

AIDS & TB Programme

Ministry of Health and Child Care, Zimbabwe

Figure 19: Standard operating procedure for defaulter tracking

HIV CARE AND TREATMENT DEFAULTER TRACKING FLOW CHART

Conduct daily check of RoCs who have missed appointment from available electronic systems (ePMS, eHR, ePOC) and/or appointment diary. Verify with the ART register, ART pharmacy register and RoC OI/ART care booklet.

DAY 0 TO DAY 3 — Place OI/ART care booklets for RoCs who have missed appointments in the tray for early defaulters. Booklets for RoCs coming 1-3 days late are found in this tray.

If RoC fails to come for appointment within 3 days of scheduled appointment

DAY 4 & DAY 5 — Record RoC in the defaulter tracking register and send SMS or make first follow-up call. If RoC does not have a phone number, jump straight to home visits; do not wait for Day 8.

If RoC was not reachable

DAY 6 — Make a second follow-up call & record outcome in the health facility defaulter tracking register.

If RoC was not reachable

DAY 7 — Make a third follow-up & record outcome in the health facility defaulter tracking register.

If RoC has not been reached through phone calls within 7 days

DAY 8 — CBHW enters defaulter who consented to community follow-up in the community defaulter tracking pocket diary. Conducts home visit. Records outcome in the pocket diary & health facility defaulter tracking register.

If RoC not found on first home visit

DAY 15 — CHWS conducts a second home visit and records the outcome in defaulter tracking community pocket diary and health facility defaulter tracking register.

If RoC not found on second home visit

DAY 22 — CHW conducts a third home visit. Records the outcome in defaulter tracking community pocket diary and defaulter tracking register.

FINAL OUTCOME — CBHW records final outcome in the pocket diary. Updates the defaulter tracking register, the OI/ART booklet and ART register.

If the RoC does not return to care after day 28, they are declared lost to follow-up

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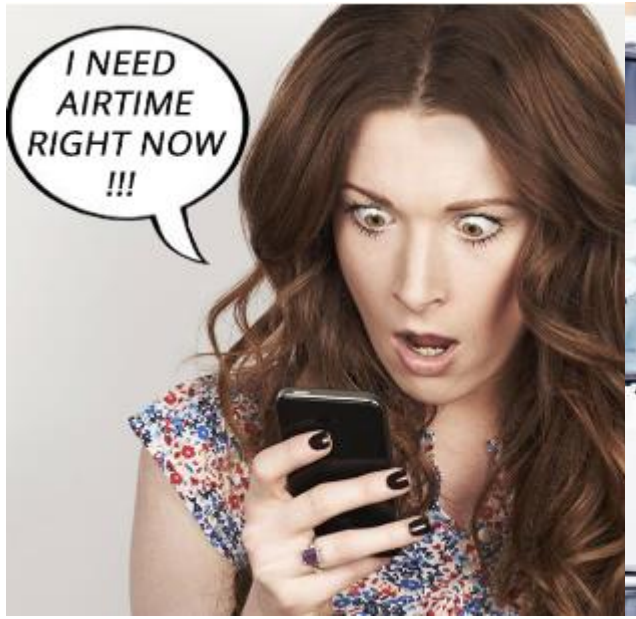
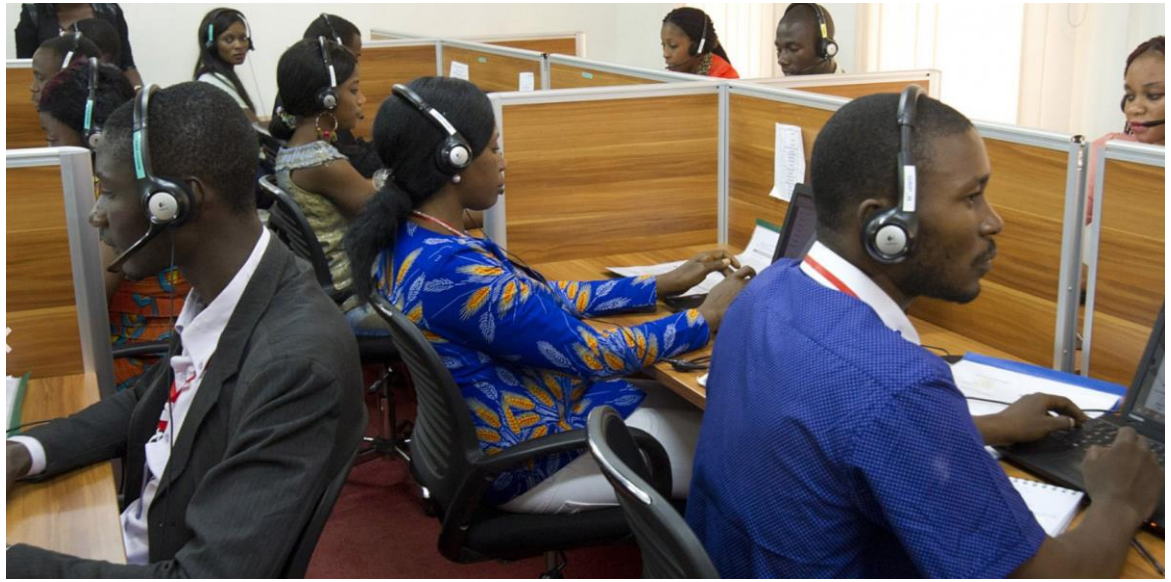
3. Logistics

- **Biggest barrier to effective tracing!**
- Every clinic needs a necessary funded logistics: Phone lines/mobile phones, airtime, transport etc.

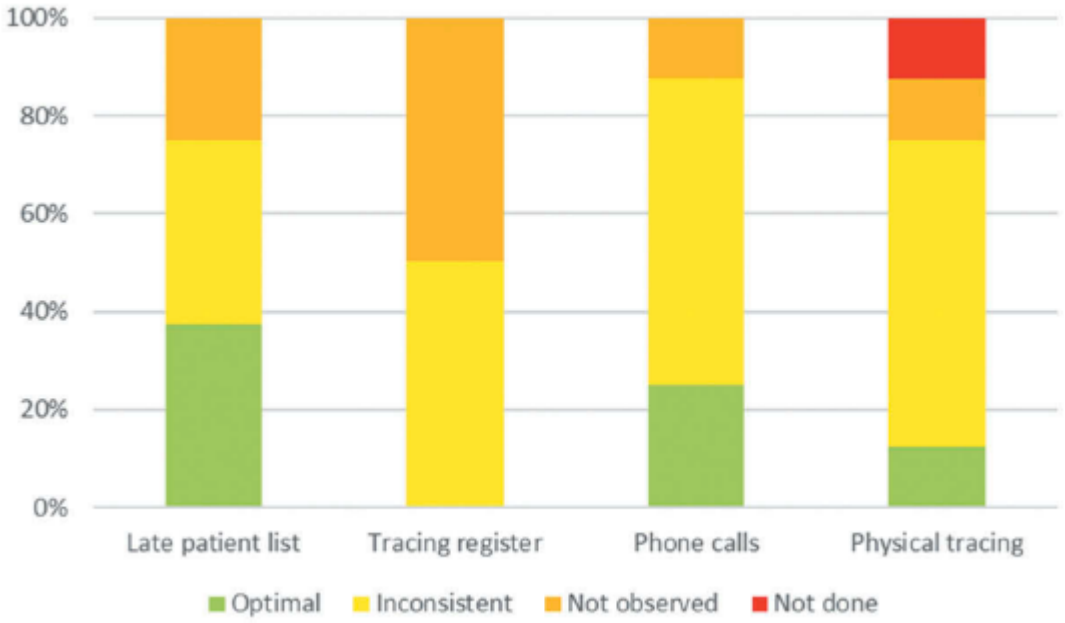




Do we need to start thinking out of the box…..what can sustainably be centralized? Verification? Call component? District based mobile teams?

4. Tracing indicators?
5. Tracing QA

- Decide on critical reporting requirements
  - possibly priority categories tracing outcomes?
- Ongoing tracing system quality improvement assessments/process audits



Etoori et al 2020

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Figure 2. Tracing process

Programme identifies client who needs tracing and re-engagement services

Clients should be provided the opportunity to tracing when ART follow-up is discussed during patient counselling and at ART

Check whether the client has stated communication preference or asked to not be followed up via certain interventions

Programme should have monitoring systems in place to identify and alert about clients who disengaged

Confirmed consent for contact; programme communicates with outreach and tracing team to attempt to locate client

Outreach team may be comprise facility or community lay workers (including peer negotiators), who may receive a list of clients needing follow-up

Outreach/tracing team attempts to locate client and records the outreach and result

Tracing approaches: remote communication (phone, text, mail and email); in-person tracing and a combination of both approaches

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Client located

The tracing team provides: non-judgemental support, clear re-engagement pathway information and counselling

Client not located

Tracing outcome

Information may come from the client, a treatment supporter or family member

Determine next steps

The decision to return to care lies with the individual; however, programmes can still provide support: regularly reassess readiness to return and wellness. Offer community and peer support. Offer appropriate support for mental health or substance use issues and other barriers are reported

Self-reported transfer

Wrongly categorized as missing appointment

Reported as deceased

Refused care

Returning to care

Verify transfer

Confirm death

Client agreed with scheduled appointment date for returning to care. Record reason for disengagement if available

Source: adapted from Digital adaptation kit for HIV: operational requirements for implementing WHO recommendations in digital systems (23).