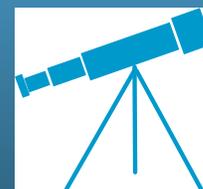




# Patterns of retention in care during clients' first 12 months after HIV treatment initiation in South Africa



## BACKGROUND

- ◆ Retention in HIV care during the first year after antiretroviral therapy (ART) initiation is one of the most important challenges facing South Africa's national HIV programs, with high reported rates of interruption to treatment (ITT) and disengagement from care.
- ◆ Despite the importance of the early treatment period, the timing and patterns of early ITT and disengagement from care remain poorly understood.
- ◆ In this brief we analyze routinely collected medical record data to reveal patterns of care between ART initiation, 6 months, and 12 months after initiation.

## METHODS

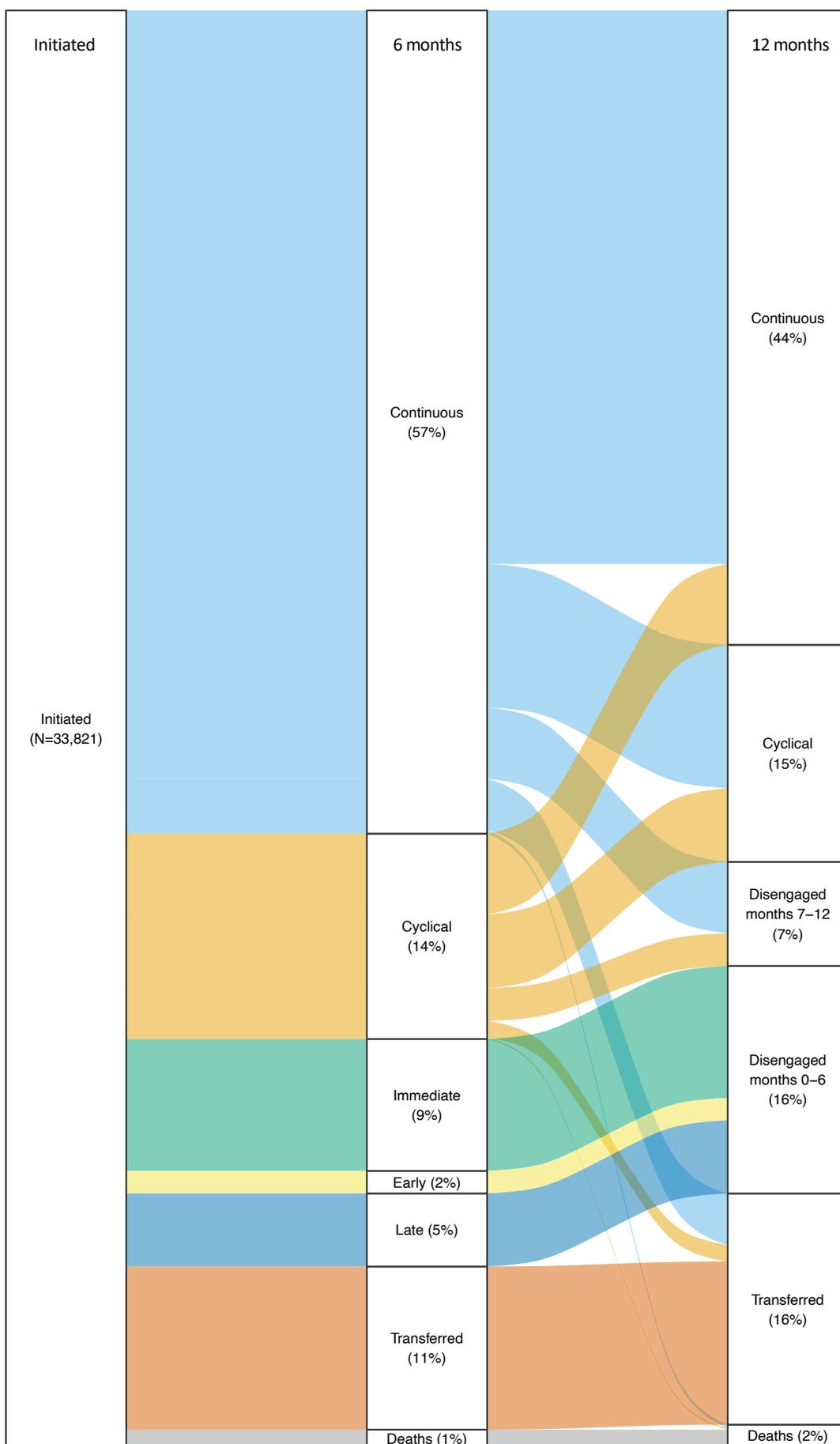
- ◆ Accessed TIER.Net data from 6 facilities in each of Ehlanzeni District (n=12,813, Mpumalanga), King Cetshwayo District (n=8,741, KwaZulu Natal), West Rand District (n=3,695, Gauteng), and Ekurhuleni District (n=8,572, Gauteng).
- ◆ Included all adult clients who initiated ART ≥ Jan 1, 2018 and had ≥14 months' follow up in data set (censor dates varied by district).
- ◆ Analyzed patterns of visit attendance and outcomes during the periods from 0-6 months and 7-12 months after dates of ART initiation.
- ◆ Defined visits as 1) "as planned" for visits that occurred on or before the next scheduled date; 2) "late ≤28 days" for visits that were attended after but ≤ 28 days of the scheduled date; 3) "late >28 days" for visits that were attended >28 days after the scheduled date; or 4) "scheduled not attended" to specify the date of disengagement for disengagers, 28 days after the last attended visit.
- ◆ Defined retention patterns for each 6-month period as shown in the table below.

Pattern of engagement	0-6 months after ART initiation	7-12 months after ART initiation
Continuous	No visit > 28 days late in first 6 months and next visit scheduled >6 months after initiation (i.e. all visits as planned or late ≤28 days)	Continuous or cyclical at 6 months AND no visit > 28 days late in months 7-12 and next visit scheduled >12 months after initiation (i.e., all visits attended as planned or late ≤28 days)
Cyclical	Attended at least 1 visit late by more than 28 days between initiation and month 6 but subsequently re-engaged in care by 6 months after initiation.	Continuous or cyclical at 6 months; attended at least one visit late by more than 28 days between months 7 and 12 but subsequently re-engaged in care by 12 months after initiation.
Immediate disengagement	No visits after date of ART initiation; not observed during months 0-6 after ART initiation	Not reported for months 7-12; aggregated under "Disengaged months 0-6"
Early disengagement	≥1 visit after date of ART initiation but last visit ≤ 3 months after initiation	Not reported for months 7-12; aggregated under "Disengaged months 0-6"
Late disengagement	≥1 visit after date of ART initiation but last observed visit occurs 4-6 months after initiation (i.e. no further scheduled or observed visits in 7-12 month period)	Not reported for months 7-12; aggregated under "Disengaged months 0-6"
Disengaged months 0-6	Composite pattern including all immediate, early, or late disengagers in first 6 months; no visits observed after 6 months	Classified as Immediate, early, or late disengagers in first 6 months AND no visits observed during months 7-12
Disengaged months 7-12	Not reported for months 0-6	Classified as continuous or cyclical at 6 months; at least 1 visit observed in months 7-12 but ≥1 scheduled visit late by >28 days with no evidence of return during months 7-14
Transferred	Documented transfer to another healthcare facility during month 0-6	Documented transfer to another healthcare facility at any time from 0-12 months
Died	Death recorded at any time from 0-6 months	Death recorded at any time from 0-12 months

## FINDINGS

- ◆ Figure 1 illustrates patterns of engagement in months 0-6 and months 7-12 after ART initiation.
- ◆ 57% of clients who initiated ART remained continuously engaged at 6 months (no visits > 28 days late), and 44% remained continuously in care at 12 months.
- ◆ 16% of initiators disengaged from care by 6 months; by 12 months, 23% had disengaged.
- ◆ A substantial minority of clients (15%) demonstrated cyclical engagement—they were often late but returned after interruptions.
- ◆ Transfers to other facilities were common, even in the first 6 months (10%); many of those who appear to have disengaged are likely instead to have transferred informally and re-initiated care elsewhere (though potentially after an interruption).
- ◆ More than 10% of initiators experienced very early disengagement; 47% of all disengagement in the first year occurred within 3 months.
- ◆ Because 40% of all those who disengaged in the first year never returned after their initiation visit, waiting for the second visit to intervene is too late.

**Figure 1. Engagement patterns at 6 and 12 months after ART initiation**



Outcome first 6 months

- Continuous
- Cyclical
- Immediate
- Early
- Late
- Transferred
- Deaths

### CONCLUSIONS

- ◆ Rates of ITT and disengagement from care are high during clients' first year after treatment initiation, but patterns of engagement are varied and dynamic, with many clients shifting between continuous and cyclical engagement.
- ◆ During the first 6 months, roughly 6 out of 10 clients do not need additional support to achieve continuous engagement, while outcomes for 4 out of 10 may improve with different models of service delivery (which could be more or less intensive than current conventional care).

### SOURCES

The data for this policy brief were drawn from TIER.Net, South Africa's national electronic medical record system for HIV treatment in public sector facilities. Anonymized data were accessed with permission of the Provincial Health Research Committees and District Departments of Health.



Cite as: Maskew M, Benade M, Huber A, Pascoe S, Sande L, Rosen S. Patterns of retention in care during patients' first 12 months after HIV treatment initiation in South Africa. Retain6 Policy Brief, June 8, 2023.