

Patterns of retention in care during clients' first 12 months after HIV treatment initiation in Zambia

BACKGROUND

- ◆ Retention in HIV care during the first year after antiretroviral therapy (ART) initiation is one of the most important challenges facing many 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 in Zambia between ART initiation, 6 months, and 12 months after initiation.

METHODS

- ◆ Accessed SmartCare data provided to the leDEA consortium by the Centre for Infectious Disease Research in Zambia (CIDRZ) for 543 healthcare facilities from early 2018 to early 2023.
- ◆ Included all adult clients who initiated ART on or after Jan 1, 2018 and had at least 14 months' follow up before censoring on Feb 28, 2023.
- ◆ 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.

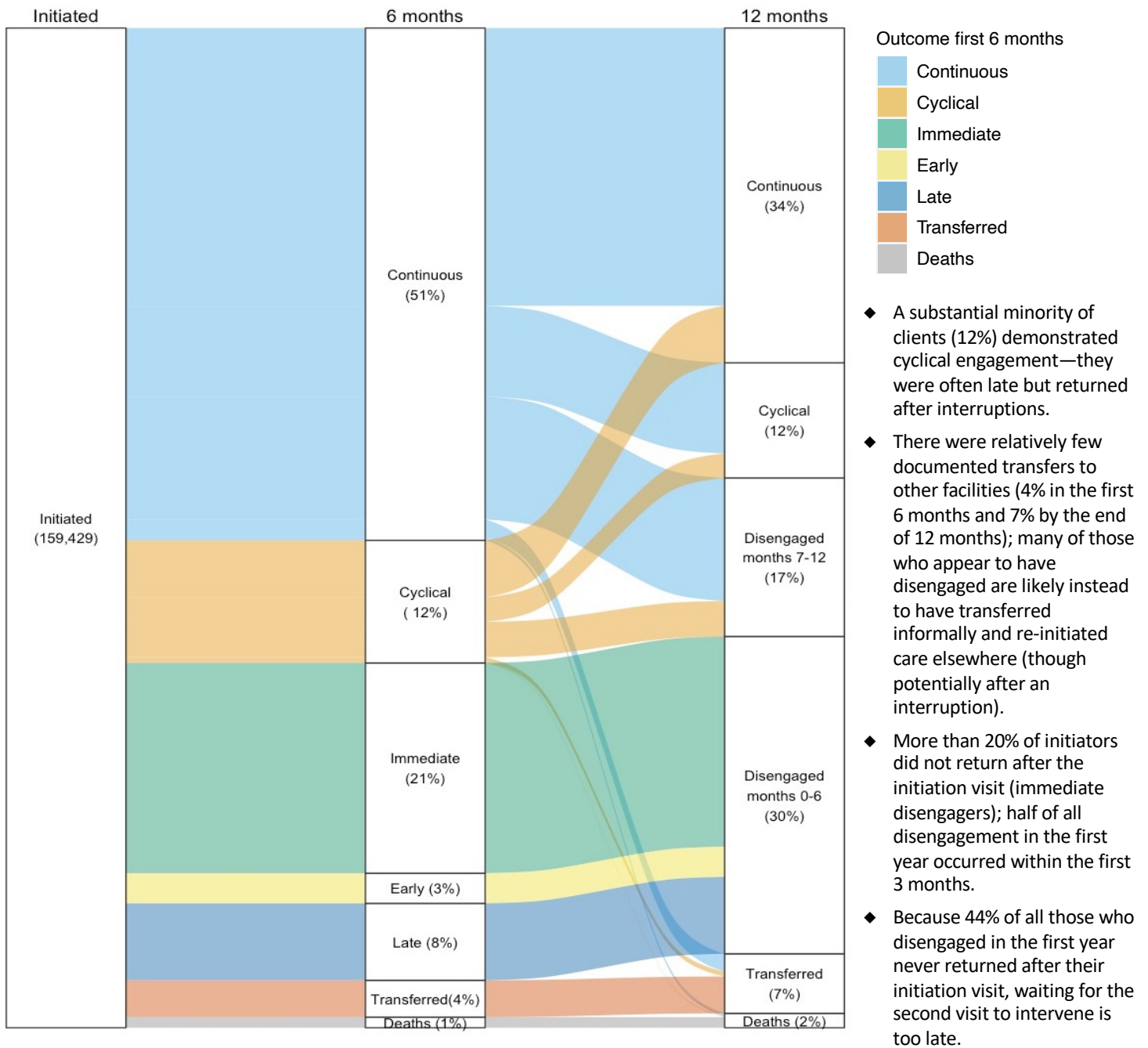
Table 1. Defined retention patterns for each observed 6-month period

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 visit 4-6 months after initiation (and no scheduled visit 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; 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 7-12
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.
- ◆ 51% of clients who initiated ART remained continuously engaged at 6 months (no visits > 28 days late), and 34% remained continuously in care at 12 months.
- ◆ 32% of initiators disengaged from care by 6 months; by 12 months, 47% had disengaged.

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



CONCLUSIONS

- ◆ Rates of ITT and disengagement from care appear 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, about half of those initiating do not need additional support to achieve continuous engagement, while outcomes for the other half may improve with targeted interventions.
- ◆ Tracking clients as they transfer among facilities is essential to understanding patterns of engagement.

SOURCES: The data for this policy brief were drawn from SmartCare, Zambia's national electronic medical record system for HIV treatment in public sector facilities. Anonymized data were provided by CIDRZ and the leDEA Consortium, with approval from human research ethics committees in Zambia and South Africa.

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