2779

A Field-based Sampling Strategy To Revise HIV Treatment Program Retention Estimates

T. Savory [1] , M. Chitala [1], P. Elish [2], J.J Pry [1,3], C. Lupenga [1], J. Mutale [1], W. Muyunda [1], M. Lumpa [1], K. Moomba [1], C. Bolton [1,4], I. Sikazwe [1] ,M. Herce [1, 5]

[1]Centre for Infectious Disease Research in Zambia (CIDRZ), Lusaka, Zambia; [2]Emory University, Atlanta, Georgia, United States; [3]Washington University, St Louis, Missouri United States; [4]University of Alabama at Birmingham, Birmingham, Alabama, United States; [5]University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, United States

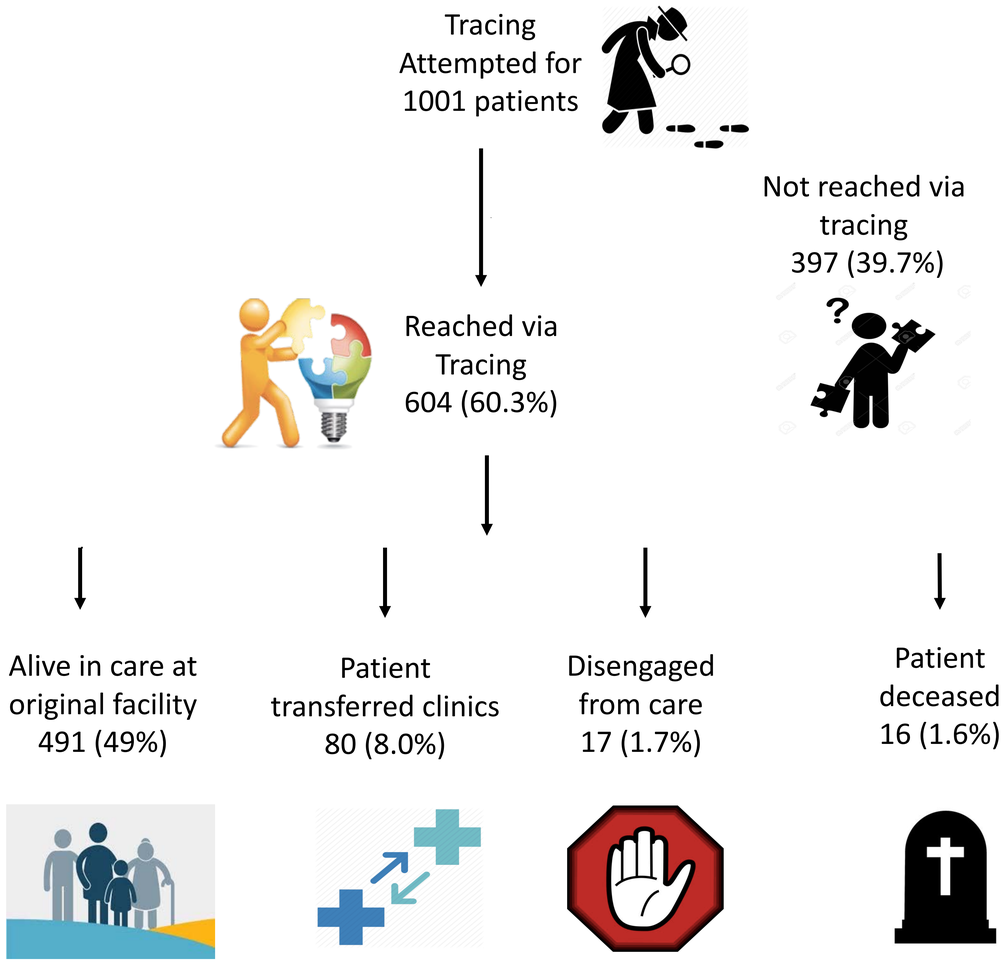
BACKGROUND

- Loss to follow-up (LTFU) in Zambia's HIV treatment & care program threatens progress towards HIV epidemic control.
- We observed a drop in 12-month retention in care from 76% in FY17 to 65% in FY18 in Lusaka Province.
- The recent CIDRZ *BetterInfo*[1,2,3] study used a multi-stage sampling approach to generate revised, estimates for mortality and LTFU, increasing mortality with 6.1% and reducing LTFU with 40.5%.
- The study approach was adapted for implementation in a large PEPFAR/CDC HIV care and treatment program with 326,000 TxCurr to create the "*BetterInfo lite*" method. *BetterInfo lite* helps assess true LTFU and more accurately estimate retention in care.

METHODS

- Study sites: 10 high-volume health facilities in Lusaka with the largest net drop in retention between Q3 and Q4 FY18. (contributing 25% to overall TX curr, net drop range 6%-18%, netdrop average 9% in one quarter)
- Randomly selected 15% of 6968 newly identified "LTFU" patients between Q3 and Q4 who were then traced by phone or in person.
- Trained peer educators administered a brief vital status and retention in care questionnaire.
- Determined patient mortality and true program status (i.e. alive in care, transferred, disengaged from care, dead, or LTFU [i.e., not reached]).

More than ***half*** of **LTFU** patients are alive and in care



CONCLUSIONS

- It is feasible to adapt a rigorous sampling-based strategy for routine program use to revise HIV treatment program retention estimates from 65% to an estimated 85% in Q4 FY18..
- **LTFU overestimation:** 57% of LTFU patients were actually alive in care
  - At same facility suggesting data quality issues, likely due to decentralized ART dispensation.
  - "Silent" transfers" after ART initiation
- **Mortality underestimation:** 16 missed deaths

RECOMMENDATIONS

- **Scale up electronic data systems** to decentralized ART dispensation points to prevent 'false' LTFU due to missed documentation
- **Use unique identifier tools** such as biometrics to track silent transfers
- **Enhance early patient support and follow up,** eg 6 months intensive peer pairing for newly initiated clients.

1. Holmes CB, Sikazwe I, Sikombe K, Eshun-Wilson I, Czaicki N, Beres LK, et al. Estimated mortality on HIV treatment among active patients and patients lost to follow-up in 4 provinces of Zambia: Findings from a multistage sampling-based survey. Rosen S, editor. PLOS Medicine. Public Library of Science; 2018;15: e1002489. doi:10.1371/journal.pmed.1002489
2. Sikazwe I, Eshun-Wilson I, Sikombe K, Czaicki N, Somwe P, Mody A, et al. Retention and viral suppression in a cohort of HIV patients on antiretroviral therapy in Zambia: Regionally representative estimates using a multistage-sampling-based approach. PLOS Medicine. Public Library of Science; 2019;16: 1–17. doi:10.1371/journal.pmed.1002811
3. http://www.cidrz.org/wp-content/toolkits/betterinfo/pages/introduction.html

Contact: Theodora Savory Theodora.Savory@cidrz.org