

Population-based estimates of engagement in the continuum of HIV care in western Kenya: from HIV testing to retention



Becky Genberg¹, Violet Naanyu^{2,3}, Juddy Wachira^{2,3}, Monicah Nyambura³, Edwin Sang³, Joseph Hogan^{1,3}, Paula Braitstein^{2,3,4,5,6}

¹ Brown University, Providence, RI, USA

² Moi University, College of Health Sciences, School of Medicine, Eldoret, Kenya

³ AMPATH (Academic Model Providing Access to Healthcare), Eldoret, Kenya

⁴ Indiana University School of Medicine, Indianapolis, IN, USA

⁵ University of Toronto, Dalla Lana School of Public Health, Toronto, Canada

⁶ Regenstrief Institute, Indianapolis, IN, USA



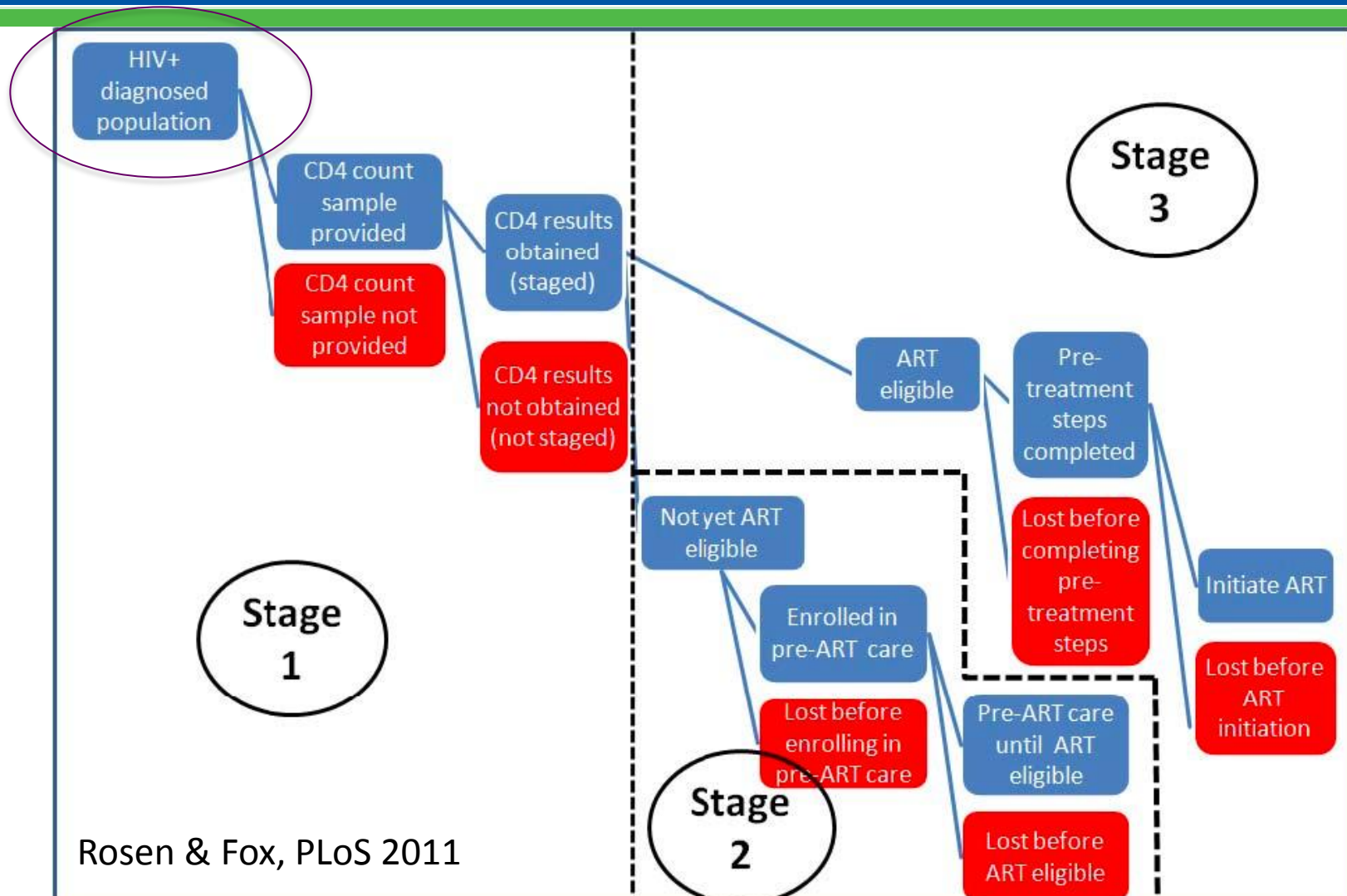
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Introduction

- Importance of find, link, treat and retain for individual and population outcomes.
- There are few estimates of engagement in the early phases of the continuum of HIV care from community-based samples in sub-Saharan Africa.

Introduction



Rosen & Fox, PLoS 2011

Objective

- The objective of this study was to report engagement in and linkage to HIV care among all those diagnosed with HIV in one sub-county in Kenya served by AMPATH (Academic Model Providing Access to Healthcare).
 - Focused on health care, research and education, AMPATH is a partnership between Moi University and Moi Teaching and Referral Hospital in Eldoret, Kenya, and a consortium of North American institutions.

Methods: Study setting

- Data from home-based counseling and testing (HBCT) in one high prevalence catchment from December 2009 through January 2012
- All households were visited and assessed for eligibility



Methods: Study population

- 3,788 HIV-positive individuals were identified
 - Study 1: Cross-sectional sample of individuals already known to be HIV-positive (by self-report)
 - Study 2: Cohort of all those newly testing positive, followed from diagnosis at the time of HBCT to linkage to care
- Data from HBCT was merged with AMPATH medical records to determine outcomes through April 2013

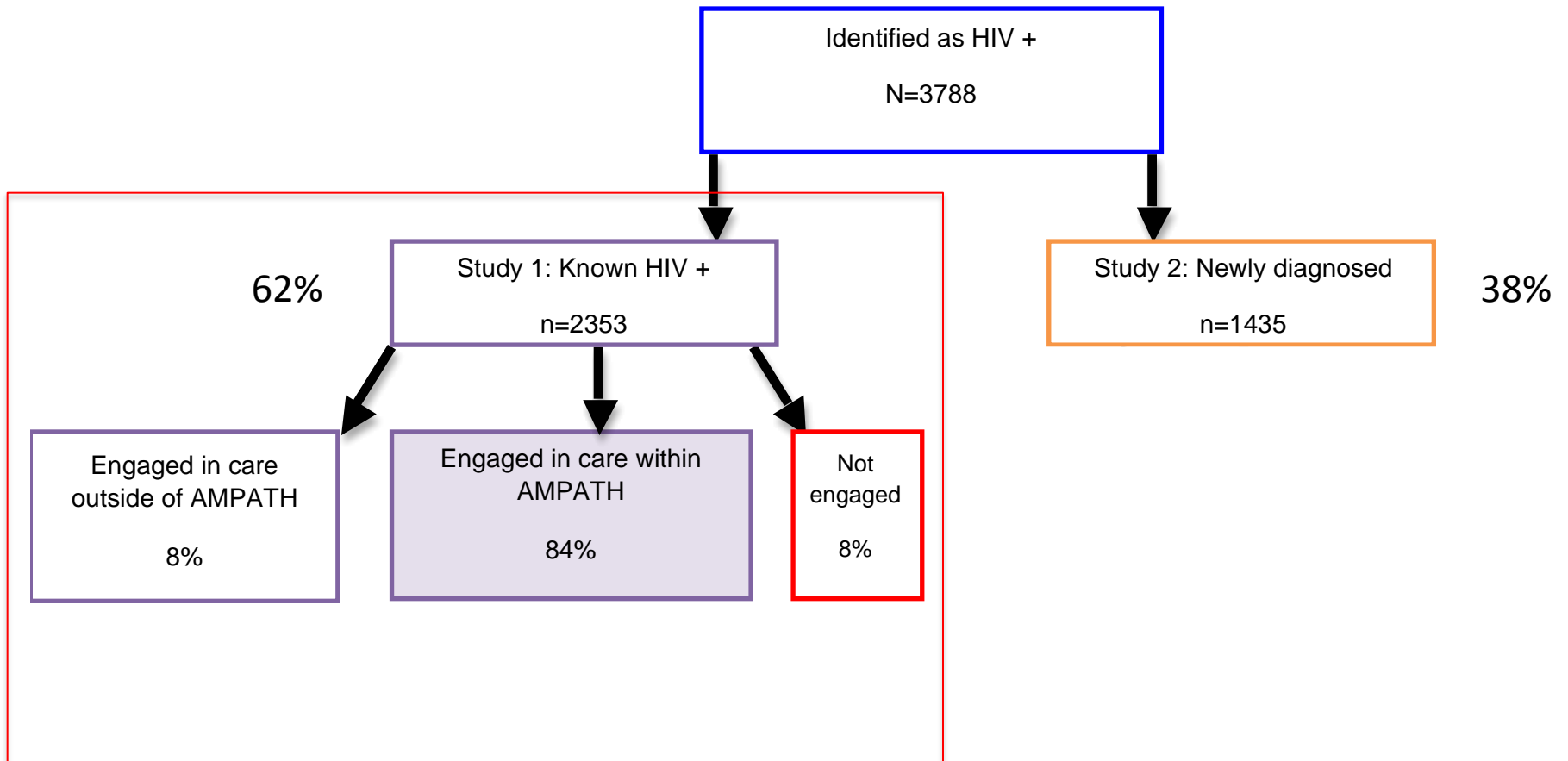
Methods: Outcomes

- Study 1:
 - Enrollment in care (self-report)
 - Among those reporting AMPATH as a provider, medical records data included:
 - Initial encounter with a clinician
 - Treatment eligibility (receipt of CD4 testing)
 - Initiation of ART
 - Lost-to-follow-up (no visit within 3 months of scheduled return date)
 - Mortality
- Study 2:
 - AMPATH medical records data
 - Time to linkage (defined as an initial encounter with a clinician)
 - Among those who linked to care:
 - Treatment eligibility (receipt of CD4 testing)
 - Initiation of ART (among those eligible at enrollment)

Methods: Statistical analysis

- Study 1: Logistic regression analysis was used to examine socio-demographic factors associated with engagement in care at the time of HBCT.
 - Stratified models @ 13 years of age
- Study 2: Survival analysis and Cox regression were used to examine time to linkage to care among those newly diagnosed at the time of HBCT.

Results: Study 1



Results: Study 1

- Among the 2,353 with known HIV-infection at the time of HBCT:

66% female

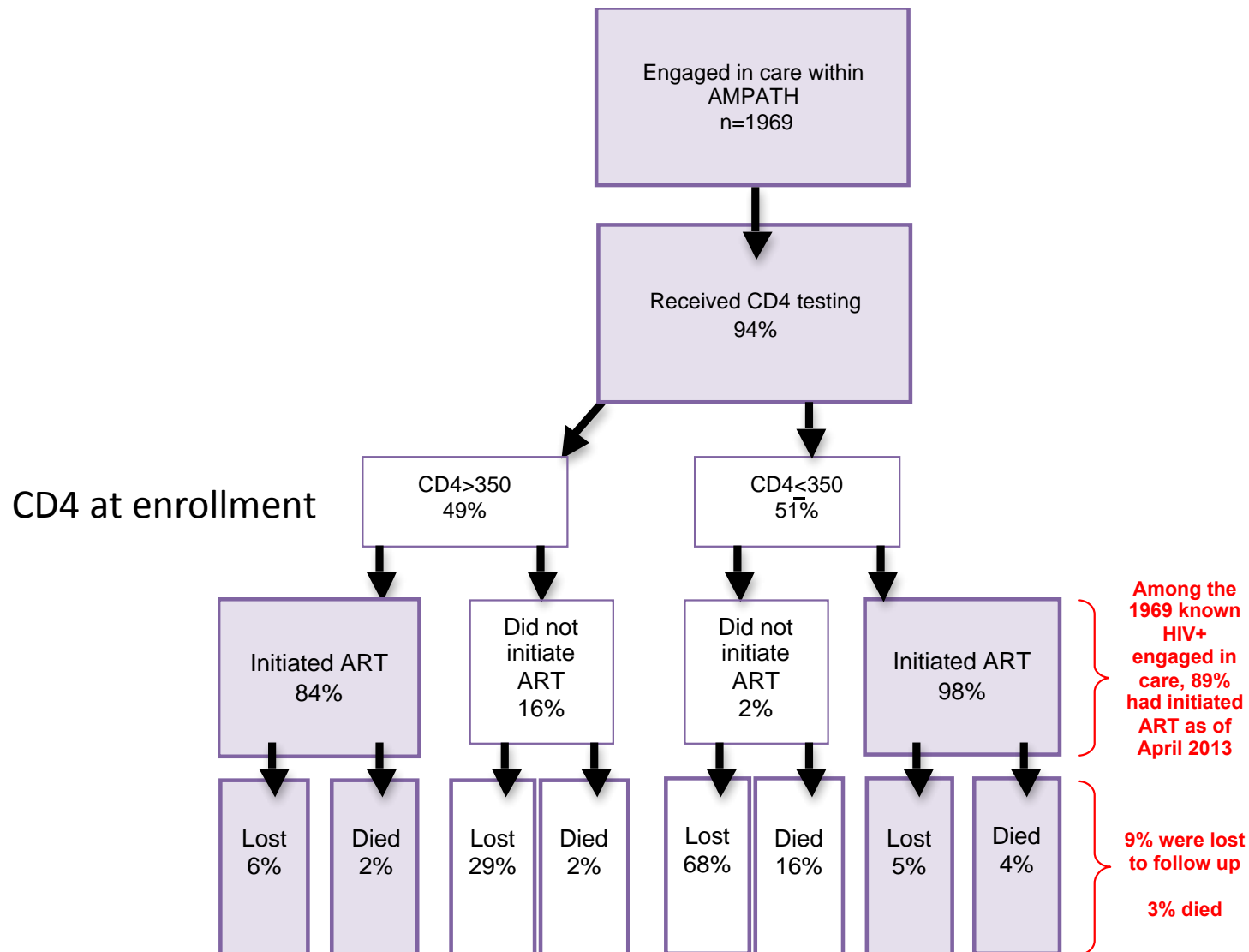
Mean age = 35 years

55% married

21% unemployed

47% with primary school education

Results: Study 1



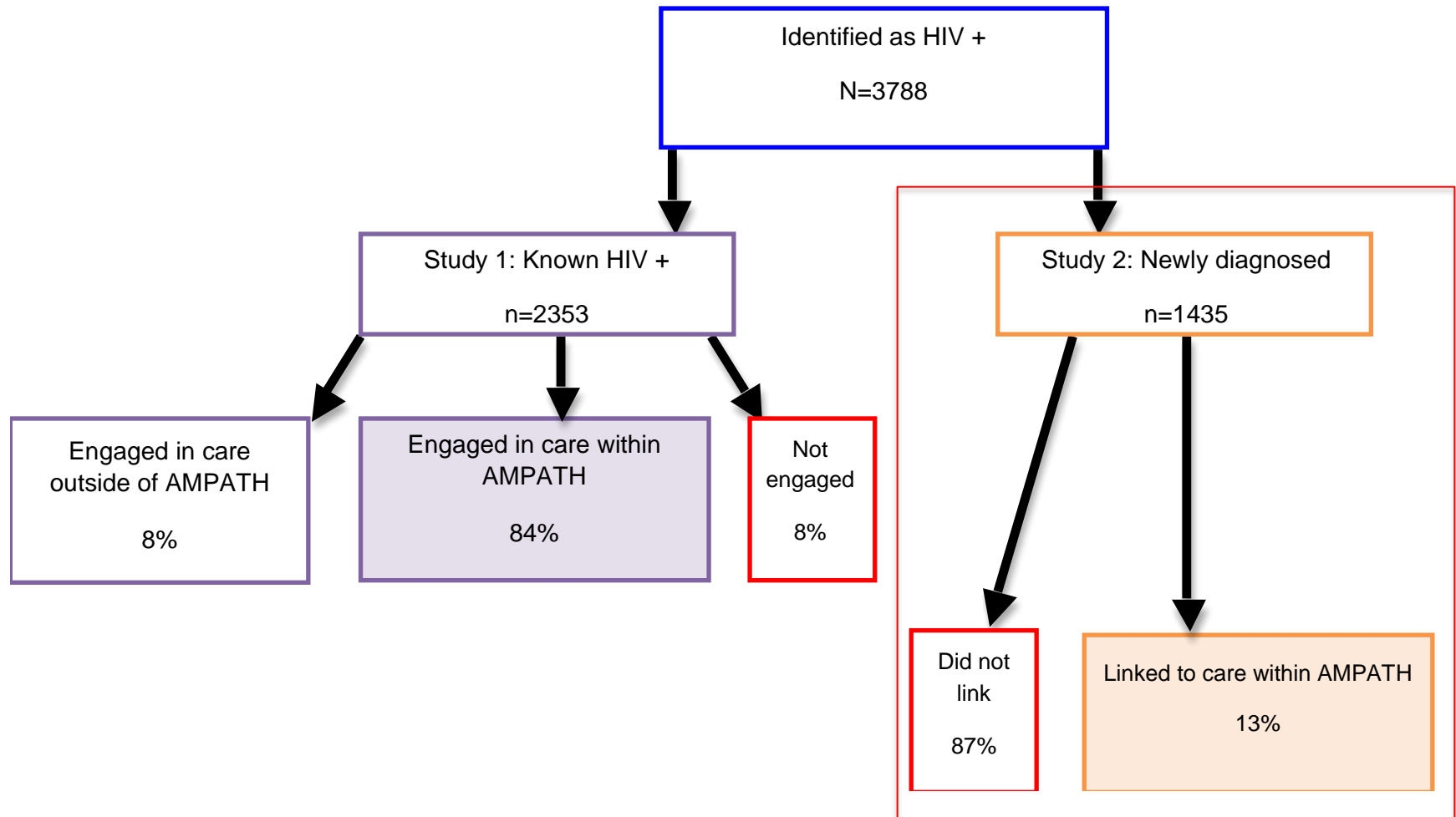
Results: Study 1

Among those known to be HIV-positive at the time of HBCT (≥ 13 years of age):

- Males (OR=0.67, 95% CI: 0.47-0.95) compared with females, and
- Those 13-25 years (OR=0.33, 95% CI: 0.27-0.39) compared with those >25 years

were less likely to have engaged in care.

Results: Study 2



Results: Study 2

- Among the 1,435 newly diagnosed at the time of HBCT:

63% female

Mean age = 32 years

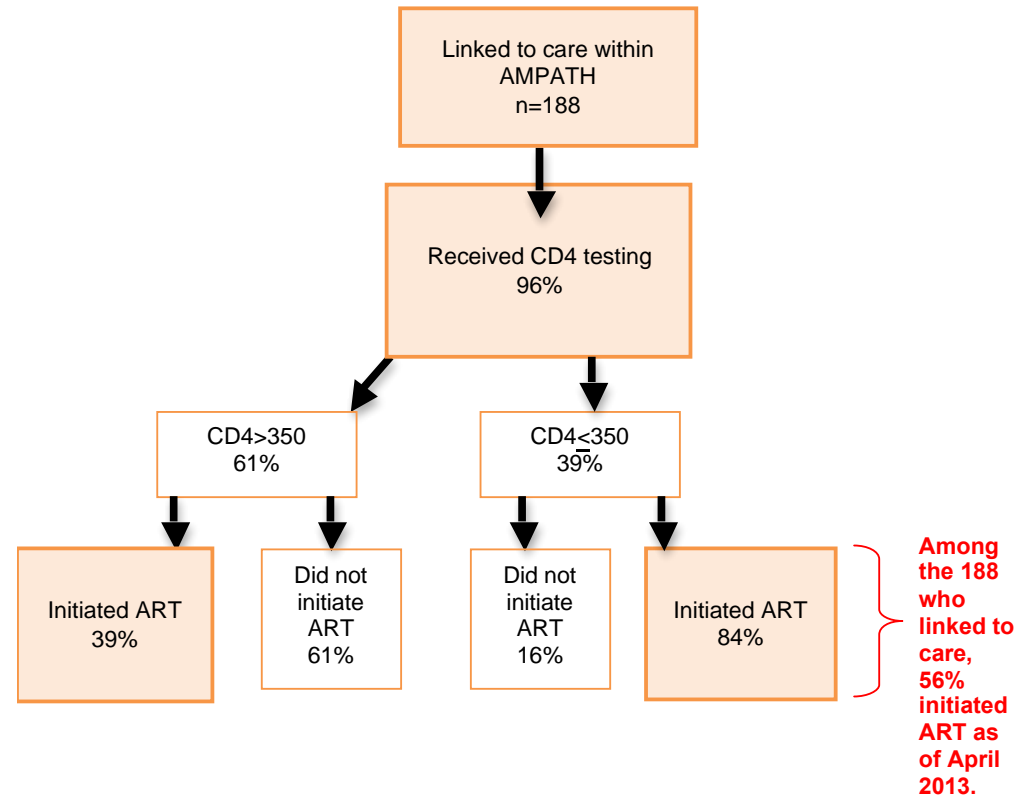
60% married

18% unemployed

56% with primary school education

Results: Study 2

- 13% linked to care following HBCT (as of April 2013)
 - Median time to linkage = 20 days (IQR: 6-149)
 - 70% of those who linked did so within 90 days of HBCT
 - 96% received CD4 testing
 - Median CD4 = 439 cells/mm³
 - Median time to CD4 testing after linkage = 0 days



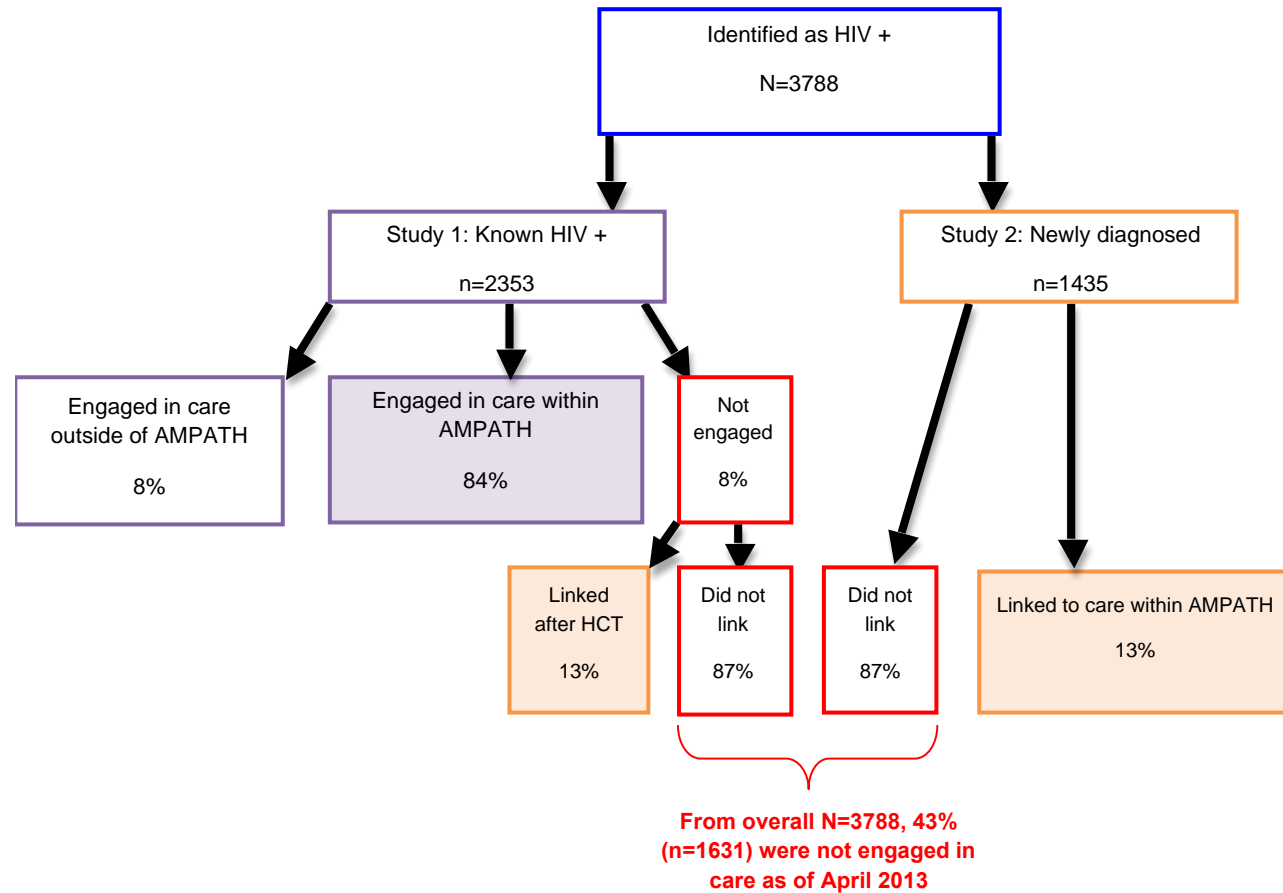
Results: Study 2

- Among those newly diagnosed with HIV at the time of HBCT (n=1435):

Those >25 years (HR=1.85, 95% CI: 1.20, 2.85) were more likely to link to care, compared with those 13-25 years.

Results: Study 1 and 2

- Among the 170 known HIV-positive who had not engaged with care at the time of HCT, 13% linked to care following HCT (as of April 2013)
- Overall engagement estimate: 57%



Discussion

- Engagement in care among those with known HIV was high, but linkage to care among those newly diagnosed during HBCT was low.
- Many estimates of patient losses further along in the HIV care continuum may be underestimates since they exclude those who do not link following testing.
- Additional efforts are needed to engage men and young adults in care in western Kenya.

Limitations

- May be misclassification in outcome due to data merge process.
- Engagement in care outside of AMPATH is not captured (aside from self-report at the time of HBCT)
- Migration, transfer and mortality may explain some of the losses occurring following testing

Thank you

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