

SUPPLEMENTAL DIGITAL CONTENT

**Appendix 1: Approach 1 (Primary results) – Cox's proportional hazards models of LTFU**

Characteristic	Univariate HR (95% CI)	Final Model aHR (95% CI) n=5 753
Model of Care		
CHC	1.0 (ref)	1.0 (ref)
CAC	0.38 (0.32-0.45)	0.33 (0.27-0.40)
Age when starting ART		
16-24	1.41 (1.27-1.56)	1.19 (1.05-1.36)
25-34	1.0 (ref)	1.0 (ref)
35-44	0.94 (0.87-1.01)	0.92 (0.83-1.01)
≥45	0.94 (0.85-1.04)	0.88 (0.77-1.00)
Gender		
Male	1.09 (1.02-1.17)	0.95 (0.87-1.04)
Year of ART initiation		
2002-2004	0.13 (0.11-0.16)	0.18 (0.14-0.23)
2005-2007	0.40 (0.36-0.44)	0.41 (0.36-0.46)
2008-2010	1.0 (ref)	1.0 (ref)
2011-2012	3.39 (3.10-3.71)	3.21 (2.87-3.58)
CD4 at ART initiation, (cells/µl)		
<50	0.90 (0.80-1.01)	-
50-99	0.94 (0.84-1.04)	-
100-199	1.0 (ref)	-
≥200	1.55 (1.41-1.71)	-
Time-updated CD4 (per 50-unit increase)		
Time-updated viral load, (copies/ml)		
Suppressed (<1000)	1.0 (ref)	1.0 (ref)
Not suppressed (≥1000)	7.30 (6.77-7.87)	3.16 (2.84-3.51)

± Final model includes the probability of being in a CAC and is adjusted for age at ART initiation, gender, year of ART initiation, ever sending a buddy, CD4 at ART initiation, time-updated CD4 and time-updated viral load

Acronyms: CAC – Community-based Adherence Club, LTFU – Loss to follow-up