

Uptake and yield of a 24/7 HIV testing service across four Eastern Cape hospital Emergency departments

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Background

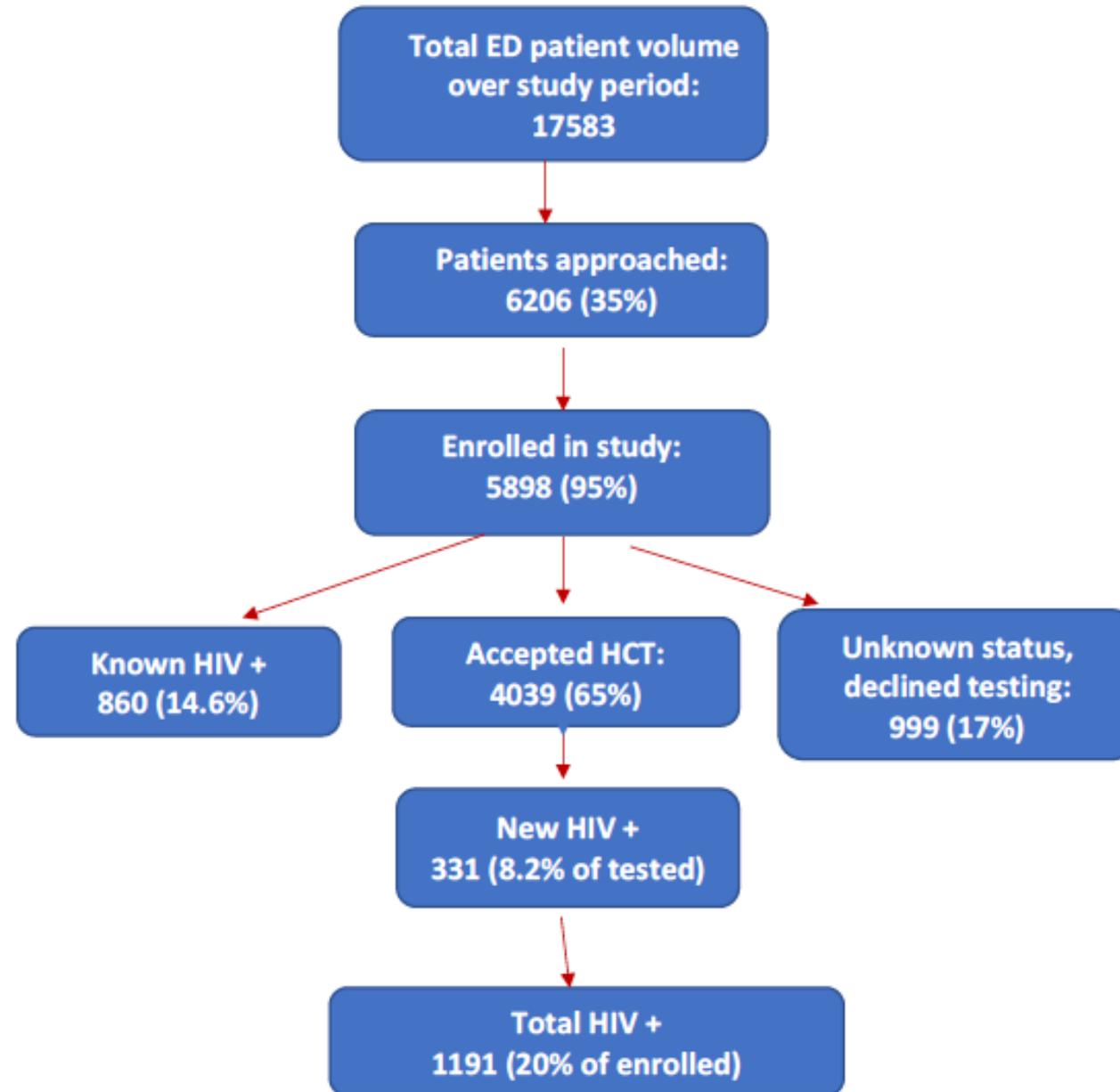
- HIV testing is the critical first step to meeting the WHO 90-90-90 goals
- Only 65% of South Africans report ever taking a HIV test (59% males, 72 % females)
- Emergency Departments (ED) in US have found higher rates of HIV compared with antenatal and other primary care settings with 20-27% new diagnoses
- CDC in 2006 has recognized critical role of ED in US HIV strategy
- SA NSP recommends universal HIV counselling and testing (HCT) at all health care facilities & departments, but it is seldom offered in South African EDs

Methods

- 4 prospective observational studies in 3 tertiary and 1 regional hospital
- PE, EL and Mthatha, 2016 to July 2018
- Shifts of 2 lay counsellors ea. provided HCT 24/7
- All patients presenting to the ED that were ≥ 18 years, fully conscious, and clinically stable were eligible for enrolment, and offered point-of-care finger-prick HIV testing
- 3 sites also took blood for HIV VL, ARV levels, incidence testing
- Ethics approval (WSU, UCT, and Johns Hopkins University)



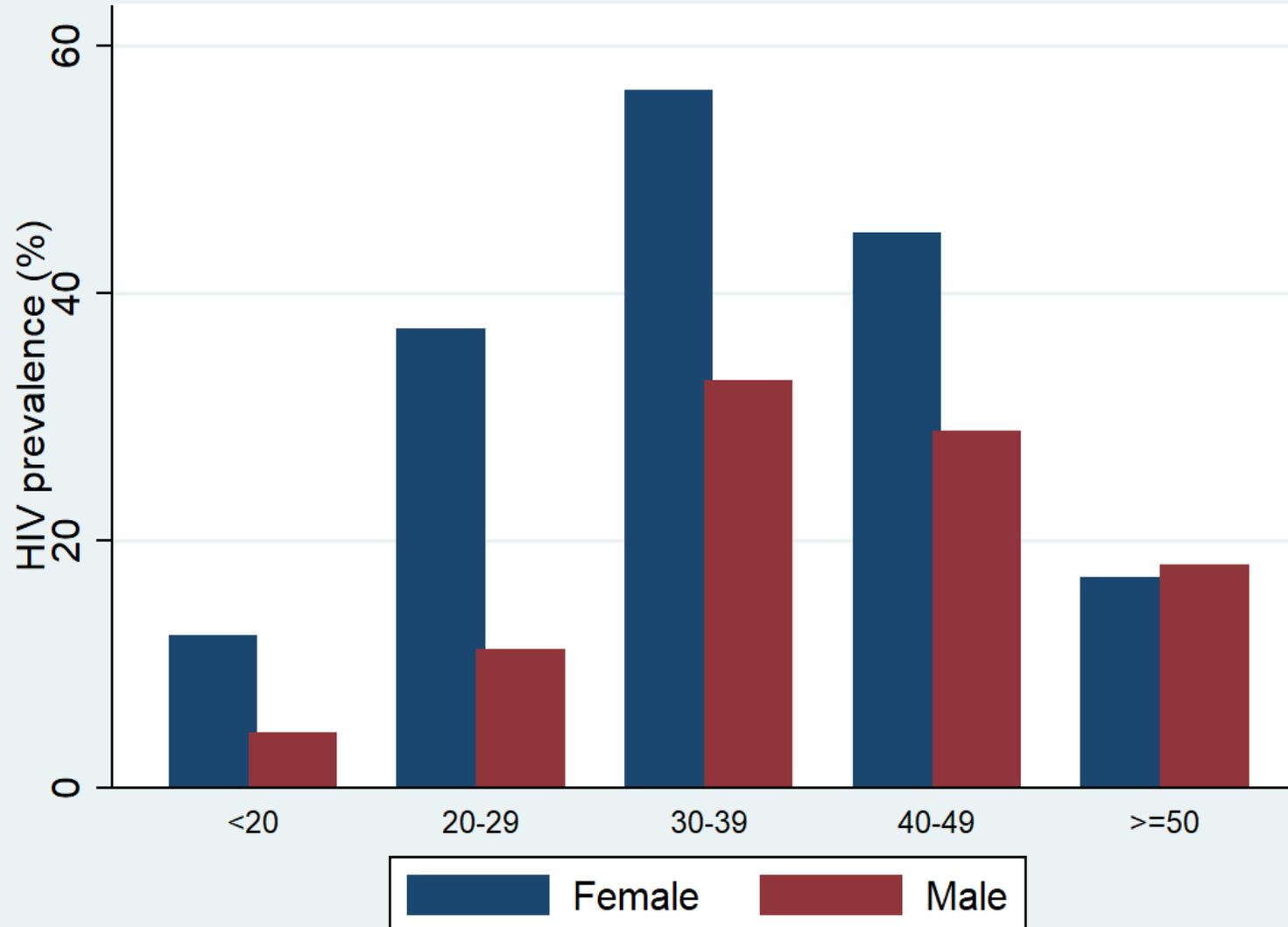
Results



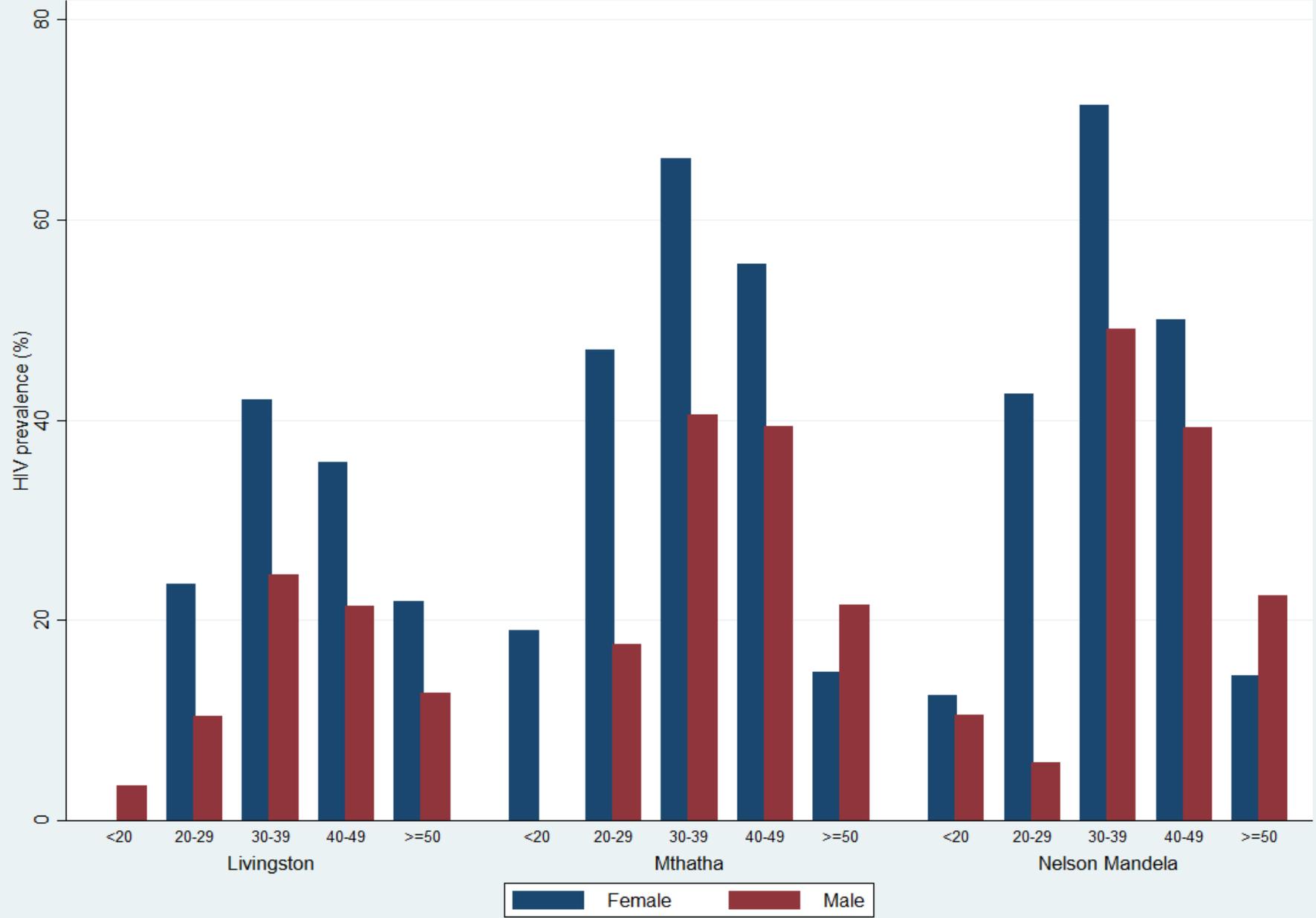
Baseline characteristics of enrolled patients

	Frere Hospital n = 2,355 [†] (%)	Nelson Mandela Academic Hospital + Mthatha Regional Hospital n = 1,880 [†] (%)	Livingstone Hospital n = 1,657 [†] (%)	Total n = 5,892 [†] (%)
Age				
18-30	993 (42.2)	794 (42.2)	590 (35.6)	2,377 (40.3)
31-50	928 (39.4)	563 (29.9)	700 (42.3)	2,191 (37.2)
51-70	352 (14.9)	345 (18.4)	328 (19.8)	1,025 (17.4)
70+	80 (3.4)	178 (9.5)	39 (2.4)	297 (5.0)
Sex				
Male	1,361 (57.8)	914 (48.6)	864 (52.1)	3,139 (53.3)
Female	994 (42.2)	967 (51.4)	793 (47.9)	2,754 (46.7)
Presenting complaint				
Medical	694 (29.5)	1,277 (67.9)	742 (44.8)	2,713 (46.1)
Trauma	1,661 (70.5)	602 (32.0)	914 (55.2)	3,177 (53.9)

Prevalence of HIV Among South Africa ER patients by age categories



Prevalence of HIV Among South Africa ER patients
by gender, age categories and site

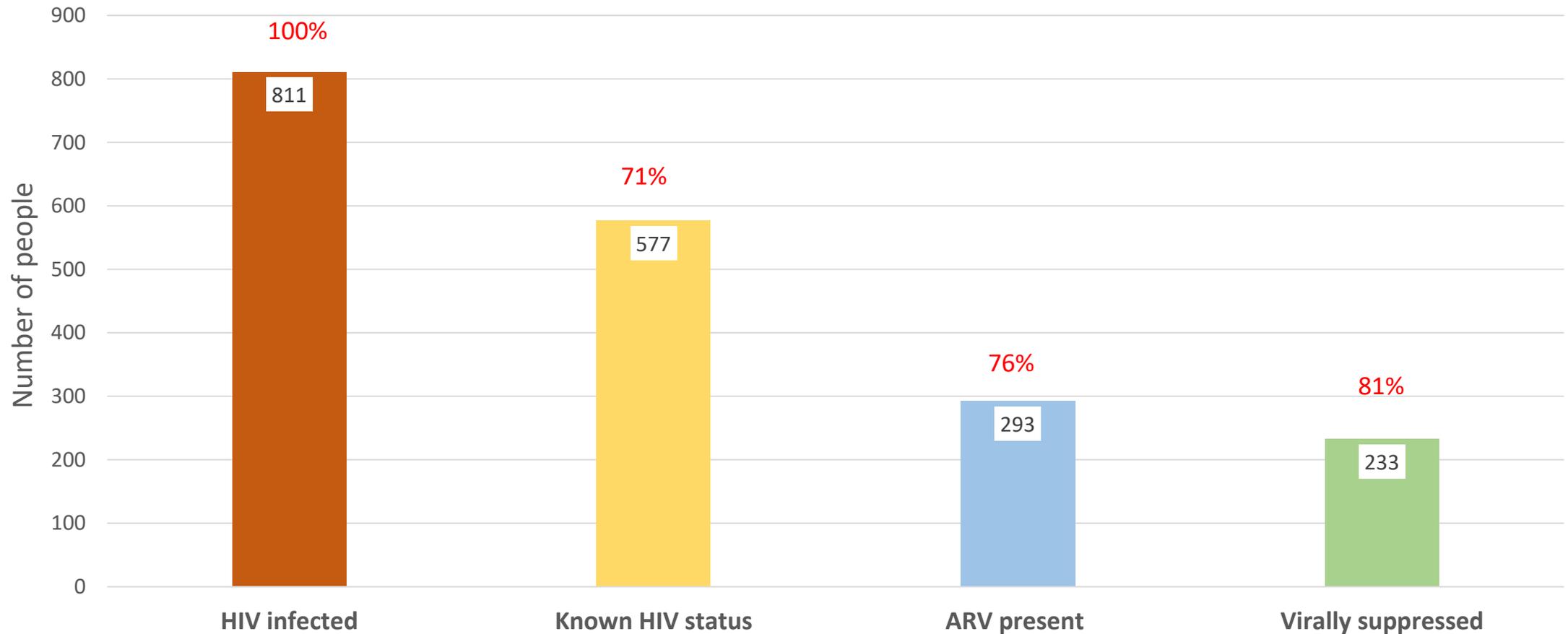


HIV Incidence testing

Site	MAA incidence	LAg+vI incidence
Livingstone	2.4 (1.0, 3.8)	2.2 (0.4, 4.0)
Mthatha	3.6 (1.6, 5.6)	2.5 (0.3 , 4.7)
Nelson Mandela	0.6 (0.0, 1.7)	1.1 (0.0, 3.1)
All three sites	2.8 (1.7, 3.9)	2.1 (0.9, 3.4)
Men	1.5 (0.5, 2.5)	1.5 (0.2, 2.9)
Women	4.5 (2.4, 6.5)	2.9 (0.7, 5.0)
<25	2.5 (0.6, 4.4)	1.8 (0.0, 3.9)
26-40	4.3 (2.0, 6.6)	4.0 (1.0, 6.9)
40+	1.8 (0.5, 3.1)	0.8 (0.0, 2.0)

(National estimate
incidence for 15-49
years = 1.72)

Care cascade of HIV infected ED patients (PE & Mthatha)



Conclusions

- Emergency Departments in the Eastern Cape carry a high burden of HIV disease (>20%)
- The patient profile was slightly male predominant and younger
- There was a high up take of HCT (80% of those unsure of status)
- 1 in 12 tested revealed a new diagnosis of HIV
- HIV prevalence peaks in females 30-39 years
- The overall HIV incidence is higher than national estimates
- The biggest gap in the HIV care cascade among ED population is being tested

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