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# Reaching high-risk young men with same-day ART in KwaZulu Natal

PEPFAR Best Practice Meeting  
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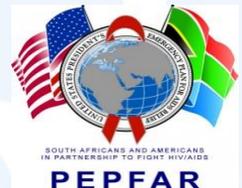
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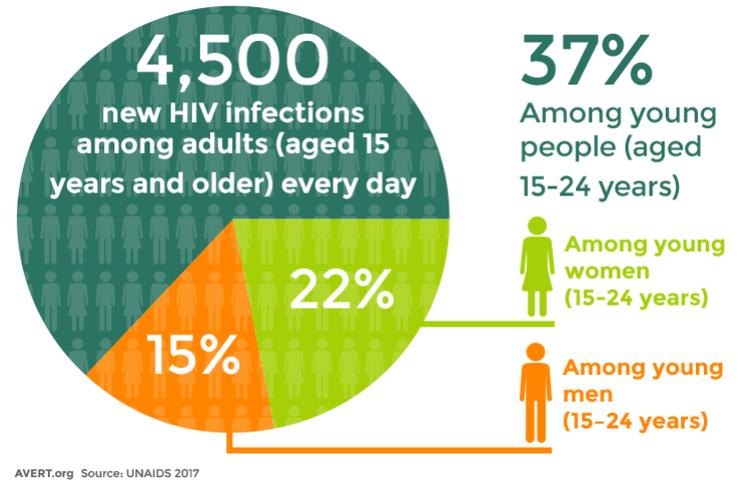
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# Agenda

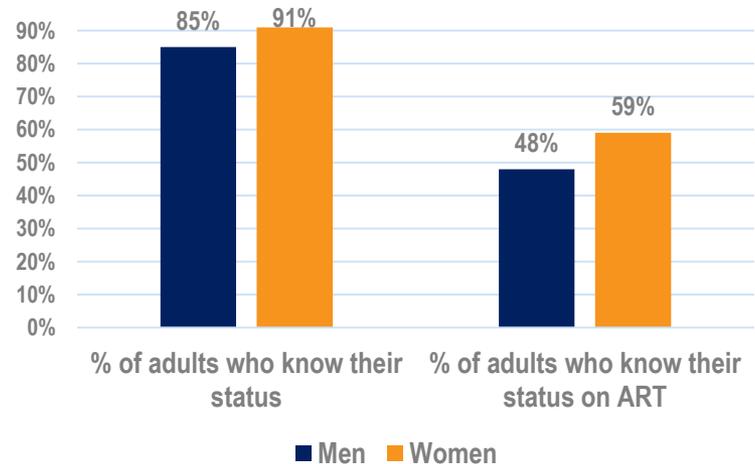
- Background: High-risk men in South Africa
- Methods
- Results
  - Scalability
- Discussion
- Costing implications
- Conclusions and recommendations

# Background

- Globally there are approximately 675 new HIV infections in young men 15-24 every day
- In South Africa, young men are less likely to:
  - get tested for HIV
  - start antiretroviral therapy (ART) or
  - remain on ART compared to women [1]
- In KwaZulu Natal:
  - ~ 85% of men knew their status (vs. 91% of women)
  - ~ 48% of men who know their status were on ART (vs. 59% of women) in 2015 [1]
- Interventions to increase access to and uptake of HIV testing and ART in HIV-infected young males are needed in South Africa



South Africa data from KwaZulu Natal (Thembisa 2015) [1]



[1] Johnson LF, Rehle TM, Jooste S, Bekker LG. [Rates of HIV testing and diagnosis in South Africa: successes and challenges.](#) AIDS. 2015 Jul 17;29(11)

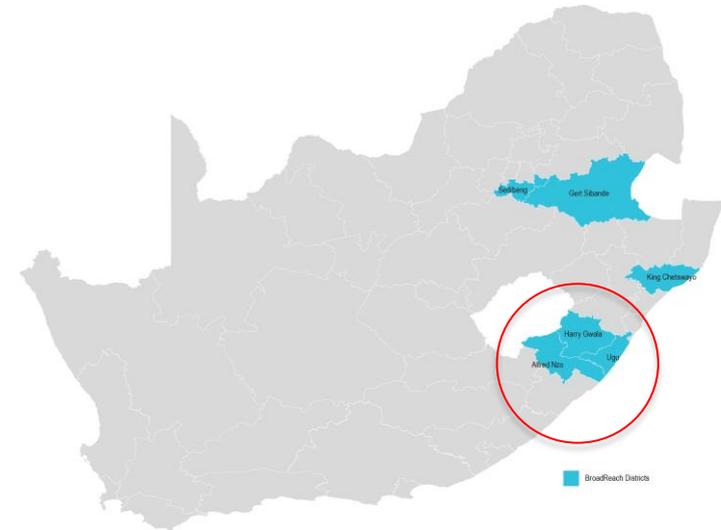
# Hypotheses

- Providing **same-day ART** may increase access to ART for young men who may not return for multiple pre-ART sessions, or for their lab results 2 or more days later
  - *What is the impact of same day ART on retention in care in young men?*
  - *What is the impact of same day ART on viral suppression in young men?*



# Methods

- BroadReach supports the Department of Health in KwaZulu Natal Districts of Harry Gwala, King Cetshwayo and Ugu to offer same-day ART with in-service training, mentorship and direct service delivery
- We evaluated the impact of same-day ART on improving access to ART for young men <35 years old by comparing:
  1. The proportion of young men initiating ART through same day ART vs. non-same day ART and
  2. The association between same-day ART and loss to follow-up (LTFU) and viral suppression (<400 copies/mL) in young men using multivariable regression models (controlling for *a priori* confounders)



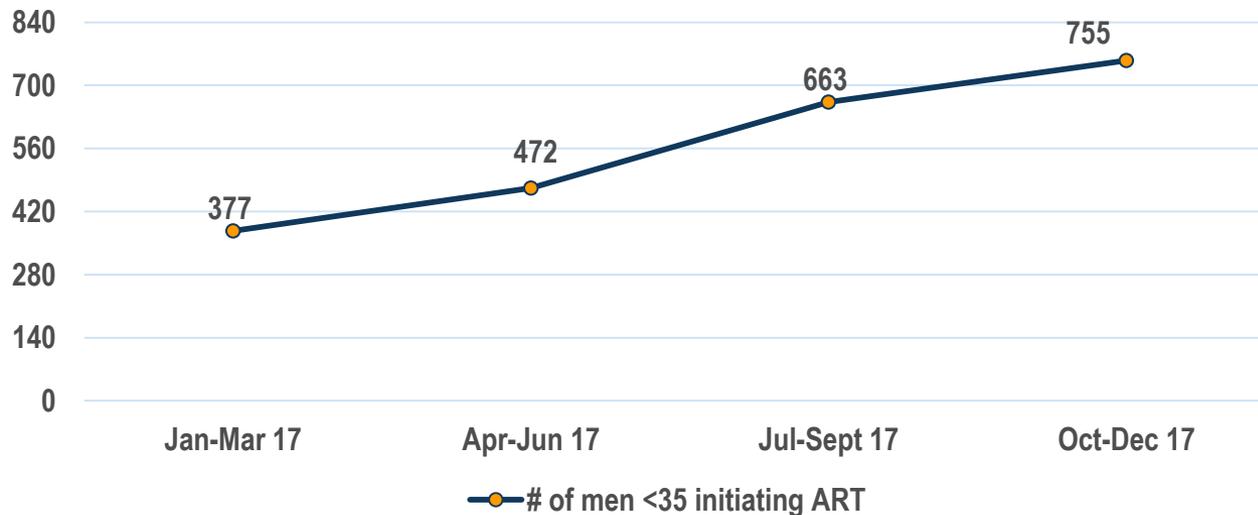
# Demographics of ART starters in 2017 in KZN

- We analysed HIV diagnosis dates and ART start dates for 11,892 patients from KZN Districts in 2017
  - 4138 men (35%) and 7754 women (65%) initiated ART in 2017
  - 2261 men were <35 years old (55% of men)
- 50% of ART initiators received same-day ART (n=5913)
  - 1780 men initiated on the same day as diagnosis (43%) vs. 4133 women (53%)

	Same-day ART	>1 day ART initiation
Female	4133 (53%)	3621 (47%)
<b>Male</b>	<b>1780 (43%)</b>	2358 (57%)
<i>M 0-14</i>	<b>59 (37%)</b>	99 (63%)
<i>M 15-24</i>	<b>154 (46%)</b>	181 (54%)
<i>M 24-34</i>	<b>759 (43%)</b>	1009 (57%)

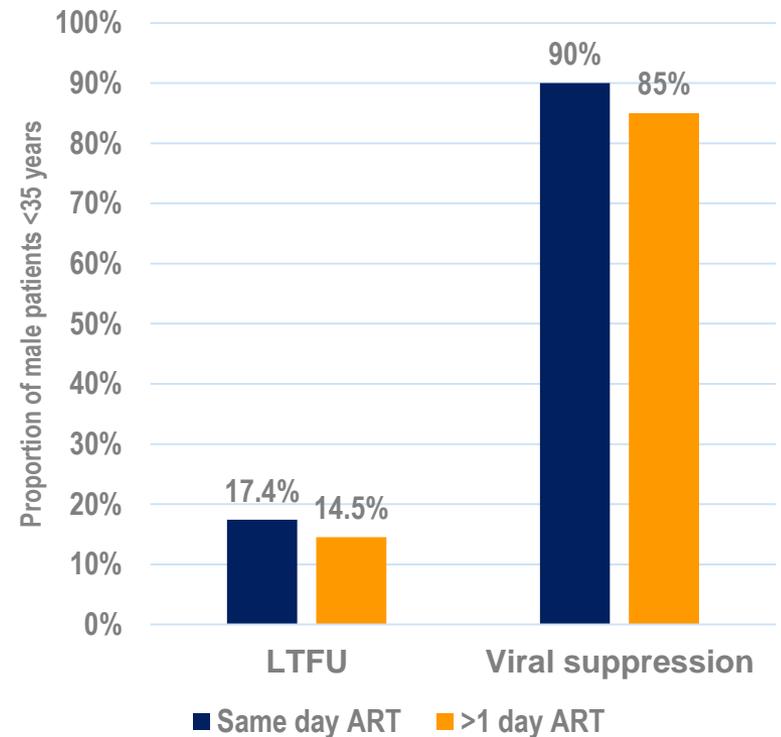
# Comparison with previous year

- When comparing with the previous year, more young men initiated ART following the introduction of same-day ART
  - In 2016, 1203 men <35 initiated ART compared with 22671 in 2017
    - 88% increase (vs. 52% in young females in same time-period)
  - Also increase quarter per quarter in 2017 from 377 to 755
    - 100% increase comparing Q4 vs. Q1



# Treatment outcomes in men <35 years by same day vs. >1 day ART start

1. Overall LTFU was significantly higher in men who started ART same day vs. >1 day
  - Adjusted odds ratio (aOR)=1.31 (95% CI=1.04-1.71) adjusting for age and months on ART
2. Viral suppression was also higher in the same-day ART group compared with the non-same day ART group
  - aOR=3.00 (95% CI=1.00-9.34) adjusting for baseline CD4 and # of months on ART
3. There was no difference in retention or VLS in young females with same day vs non-same day ART start



# Scalability

- Same-day ART increased access to treatment in HIV-infected young men, comparing with women and comparing between Q1 and Q4 2017
- Same day ART should be actively scaled in all other facilities in KwaZulu Natal and beyond.
- However, same-day ART also increased the odds of being lost to follow up.
- Targeted adherence counselling must be provided, especially to young men who may be students, employed or migrants

# Discussion

1. Is the benefit of starting ART same-day worth the increased risk of losing the men within the first 3-6 months of ART start?
  - LTFU may be increased, however, VLS was higher in men retained
  - Failure to initiate same day may increase the “pre-ART” pool of patients who don’t return to start ART and may be at larger risk of not achieving VLS and onward transmission of HIV
2. What are the implications of same-day ART on ART resistance and transmission of resistant strains?
  - How long to people take it before they default?
3. Why do some young men stay in care and achieve suppression quickly, when others do not?
  - Role of disclosure, family support?
  - Role of counsellor and clinician and structural barriers (e.g. extended hours or CCMDD)

# Costing implications

- BroadReach provided training, mentorship, and direct service delivery providing same-day ART, part of normal programme costs
- No additional costs were involved

# Conclusion and recommendations

- Same-day ART initiation was one of the key interventions that improved access to and initiation of ART in young men in KZN
  - Same-day ART was associated with increased viral suppression, but poorer retention in care
  - Failure to initiate same-day may increase the pool of patients who know their status, are not on ART and viremic
- Same-day ART should be rolled out to all patients who are clinically stable
- Additional interventions are needed to roll out same day ART, accompanied with counselling and structural interventions (e.g. extended hours, CCMDD, >1m prescription) to improve retention in young men

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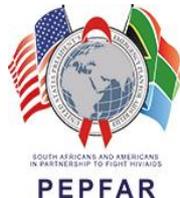
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