Early lessons from DREAMS impact evaluations

@ The DREAMS Learning Event

By the Center for Global Development and Population Council

Washington DC

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Isolde Birdthistle (LSHTM)

Isolde.Birdthistle@lshtm.ac.uk

On behalf of the BMGF-funded impact evaluation of DREAMS

The BMGF-funded impact evaluation

1. Why? How? Where? When?

2. What have we learned so far?
   - The coverage of DREAMS: who is being reached and with what services?
   - Early effects of DREAMS

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Part 1.

The BMGF funded impact evaluation

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As part of its contribution to the DREAMS Partnership, BMGF is supporting impact evaluation in 4 settings, to generate lessons on:

1. What is the impact of the **combined DREAMS package** on HIV **infection rates** and other key outcomes among AGYW and their male partners?

2. What is the impact of a DREAMS package which also includes an offer of oral PrEP to the **highest risk AGYW**?

3. Through what **pathways** does DREAMS affect the health, education and social well-being of AGYW?

4. What was **implemented** and **how**? With what coverage and fidelity?

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Where and how we are evaluating the impact of DREAMS

Through community-wide cohorts {for population-level change} and in-depth cohorts {individual-level change among AGYW} followed over time before, during and after roll-out

Population-based studies

Gem, Siaya, western Kenya

- The CDC/KEMRI HDSS with HIV, demographic & behavioural surveillance and nested DREAMS cohorts of AGYW
  [Partners: LSTM & KEMRI]

Nairobi, Kenya

- The Nairobi Urban HDSS with demographic & behavioural surveillance and nested DREAMS cohorts, including 10-14 yr olds
  [Partner: APHRC]

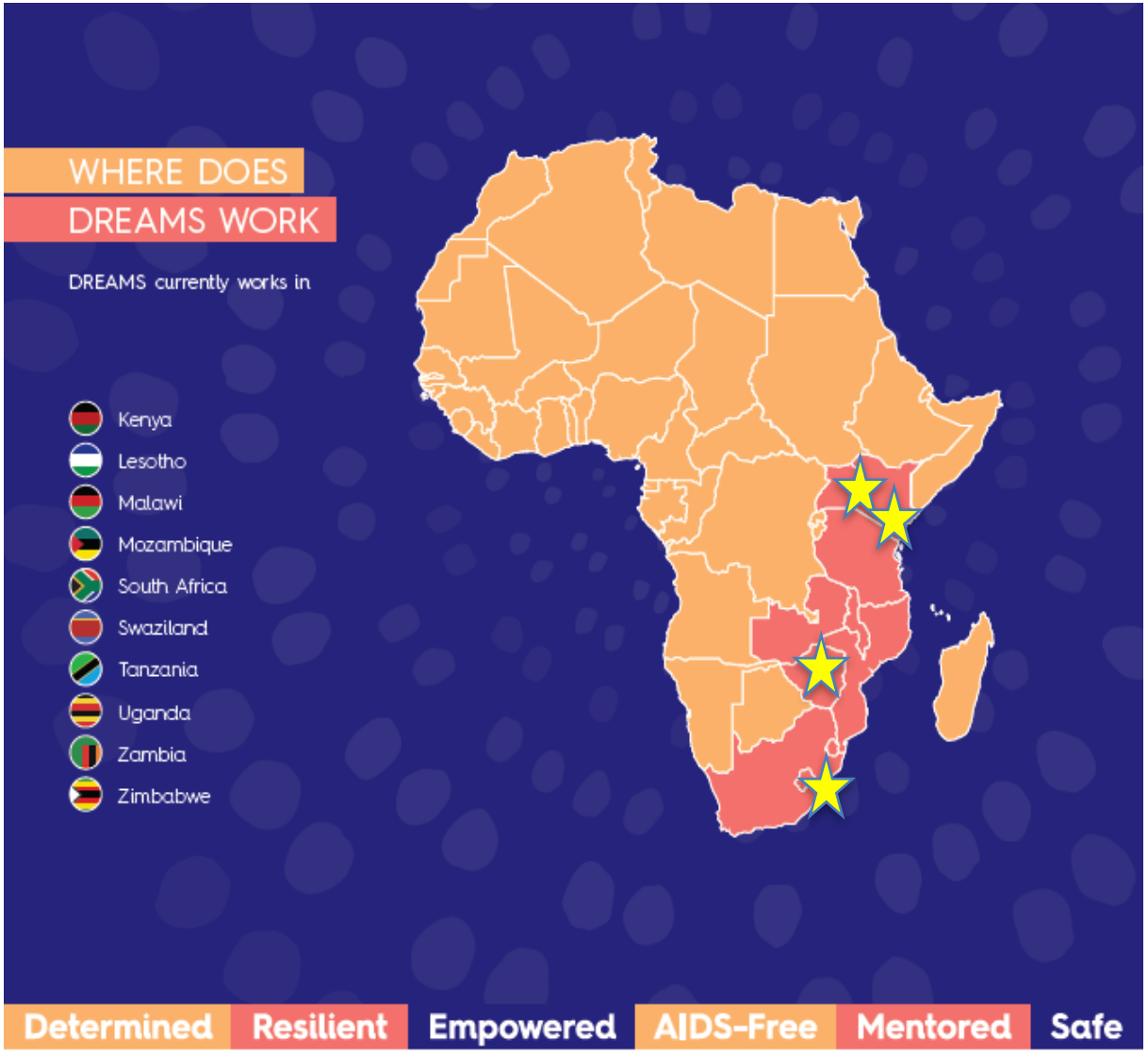
uMkhanyakude, S Africa

- The HDSS in KZN with HIV, HSV2, demographic, behavioural and phylogenetic surveillance and nested DREAMS cohorts
  [Partner: AHRI]

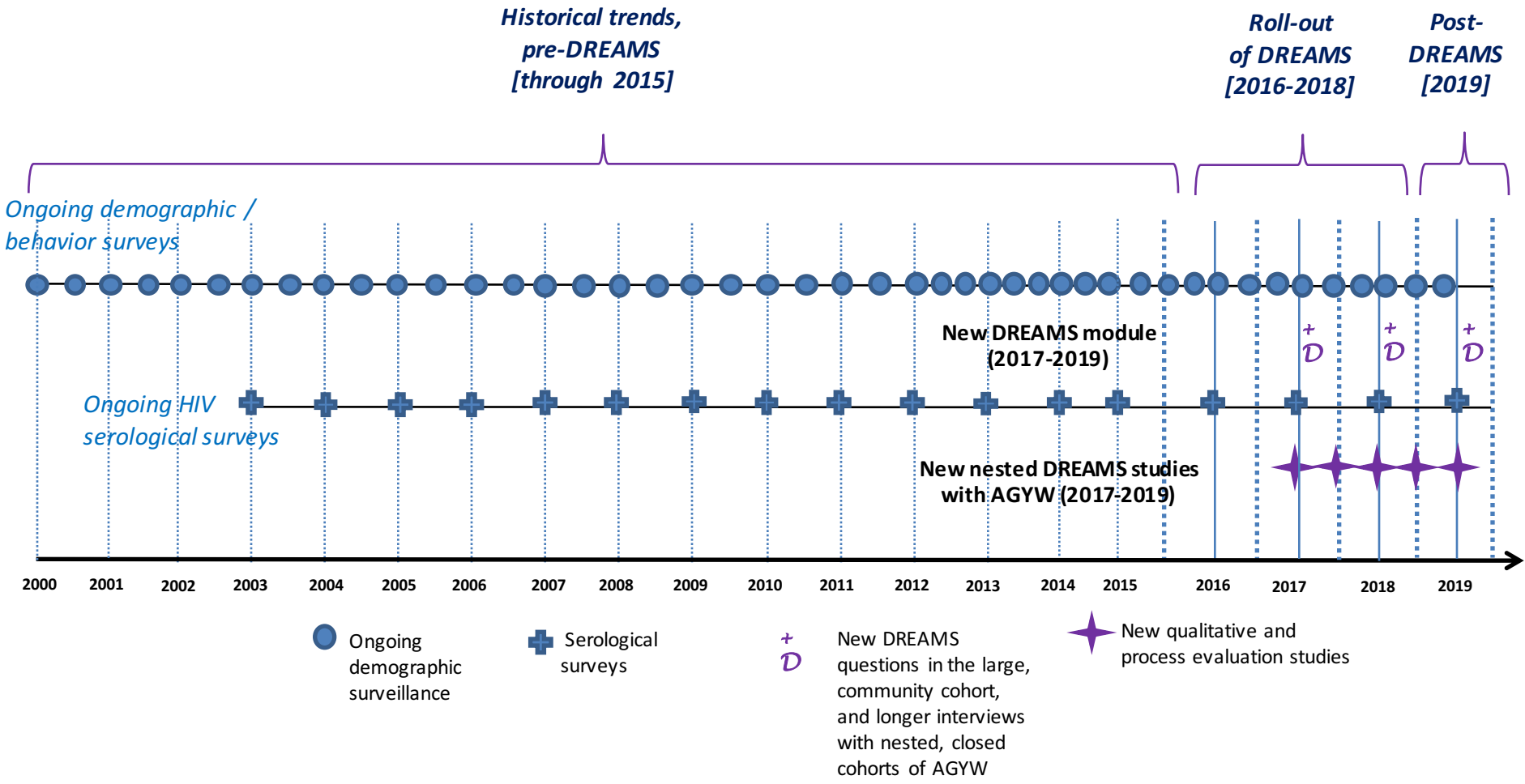
Key population studies

Zimbabwe

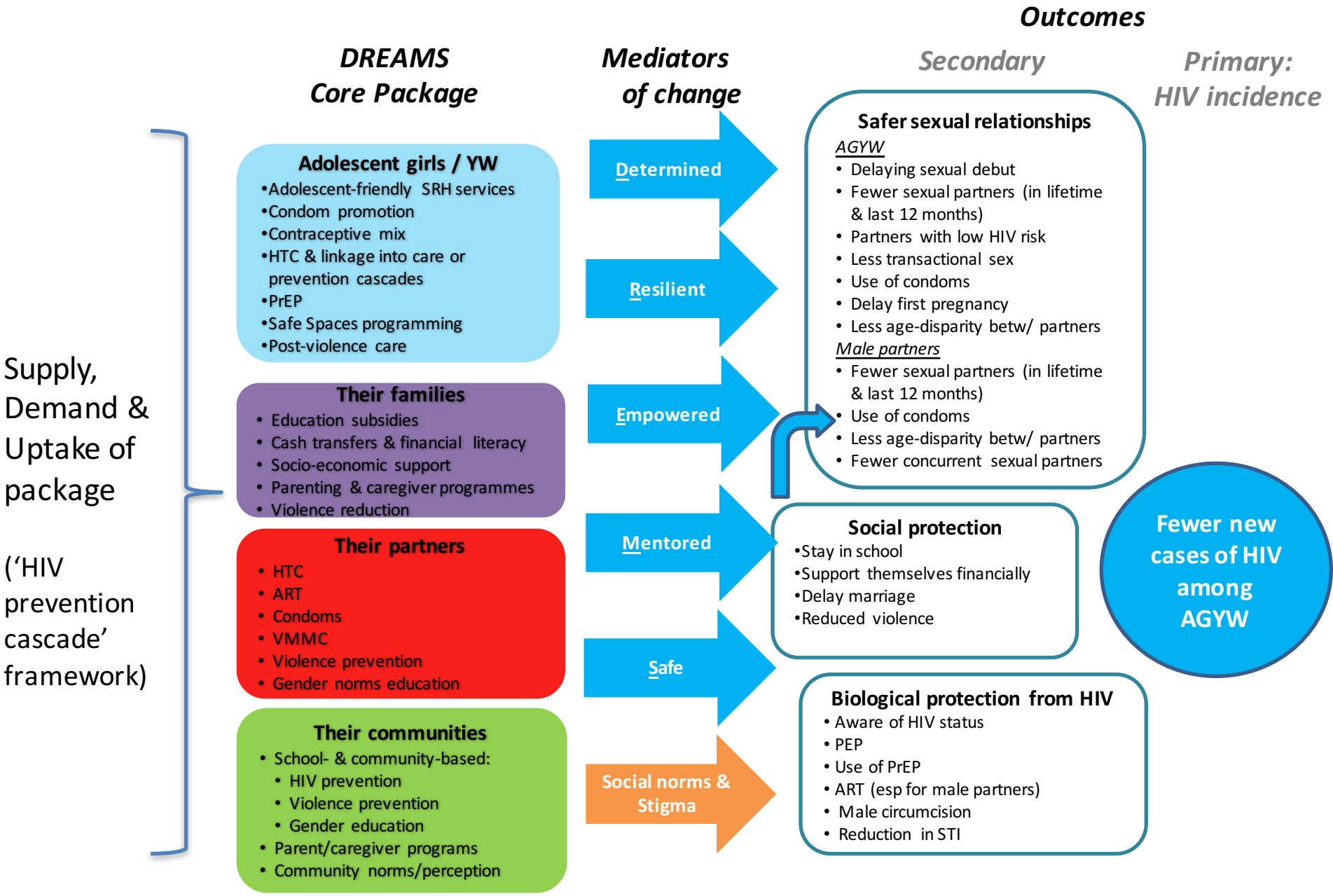
- Evaluation of DREAMS+PrEP among most vulnerable AGYW, using the *Sisters* programme as a platform for cohorts of YWSS and HIV testing in 2 DREAMS & 4 comparison sites
  [Partners: LSTM & CeSHHAR]



***Example**. Timing and components of data collection (ongoing and new) in an existing population platform: uMkhanyakude, KZN, South Africa*



DREAMS – theory of change to guide impact evaluation



Part 2.

DREAMS' reach so far

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DREAMS' reach: Sample findings to-date (1)

In **general populations** (with large, representative samples), by mid-2017…

- There is **high** awareness and participation in DREAMS, especially among young women, more so among adolescent girls (10-17y) than young women (18-22y)
- **HIV testing services** and **school-based prevention education** are the most accessed interventions
- Among those invited into DREAMS, good penetration of 'newer' interventions, like **social asset building** including safe spaces (although not yet among a majority of DREAMS beneficiaries)
- Most AGYW invited into DREAMS have accessed multiple services, including "**layered**" services (>1 category in the Core Package) in last 12 months
- "Individual"-level **interventions often combined** with "contextual" (community- / family-level interventions)

DREAMS' reach: Sample findings to-date (2)

- Very **few** AGYW accessed **all 'primary interventions'** intended for their age / need
- AGYW were more likely to be **invited** to participate in DREAMS if they were:
  - **in school**, had **never had sex**, **never married** (Kenya), were **never pregnant/gave birth**
  - had **socio-economic vulnerabilities ('very poor'** or **food insecure** [Kenya] or **received Govt grant** [SA]**)**
- Among **older women**, **low** usage of community- /family-level DREAMS interventions including parent/caregiver, violence prevention and social norms programs
- Among **men**, usage of DREAMS services is generally **low**, apart from HIV testing in some settings

DREAMS' reach: Sample findings to-date (3)

In a high-risk **key population**, of young women who sell sex (YWSS) …

- By mid-2017, there was very **low uptake** of DREAMS interventions
- Few YWSS in the evaluation were reached by DREAMS, or referred when targets were already full

Examples of supporting data…

Awareness and uptake of DREAMS in 2 informal settlement areas of Nairobi [1 Imp Partner per area]

In Nairobi, high awareness of DREAMS programme among AGYW (less so among other groups, esp/ men); half of AGYW invited to participate in DREAMS

N=10,874	AGYW nested cohorts						General population females		General population males			
	Age 10-14 (N=606)		Age 15-17 (N=547)		Age 18-22 (N=534)		Age 25-49 (N=4426)		Age 15-29 (N=2561)		Age 30-49 (N=2200)	
	n	%	n	%	n	%	n	%	n	%	n	%
Heard of a programme called DREAMS	482	**80%**	489	**89%**	414	**78%**	2838	**64%**	1044	**41%**	727	**33%**
Invited to participate in any DREAMS activity	290	**48%**	322	**59%**	214	**40%**	420	**9%**	75	**3%**	56	**3%**

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Comparison with uMkhanyakude, KZN, South Africa

[10 IPs covering same geographic area with different interventions]

Awareness of DREAMS highest among adolescent girls, versus young women, in South Africa as in Kenya (Lower awareness & participation in SA relative to Kenya)

Overall AGYW awareness of and participation in DREAMS by age group and setting

	AGYW nested cohorts Nairobi						AGYW nested cohorts uMkhanyakude, South Africa			
	Age 10-14 (N=606)		**Age 15-17** (N=547)		**Age 18-22** (N=534)		**Age 13-17** (N=1148)		**Age 18-22** (N=1036)	
	n	%	n	%	n	%	n	%	n	%
Heard of a programme called DREAMS	482	**80%**	489	**89%**	414	**78%**	627	**55%**	324	**31%**
Invited to participate in any DREAMS activity	290	**48%**	322	**59%**	214	**40%**	463	**40%**	176	**17%**

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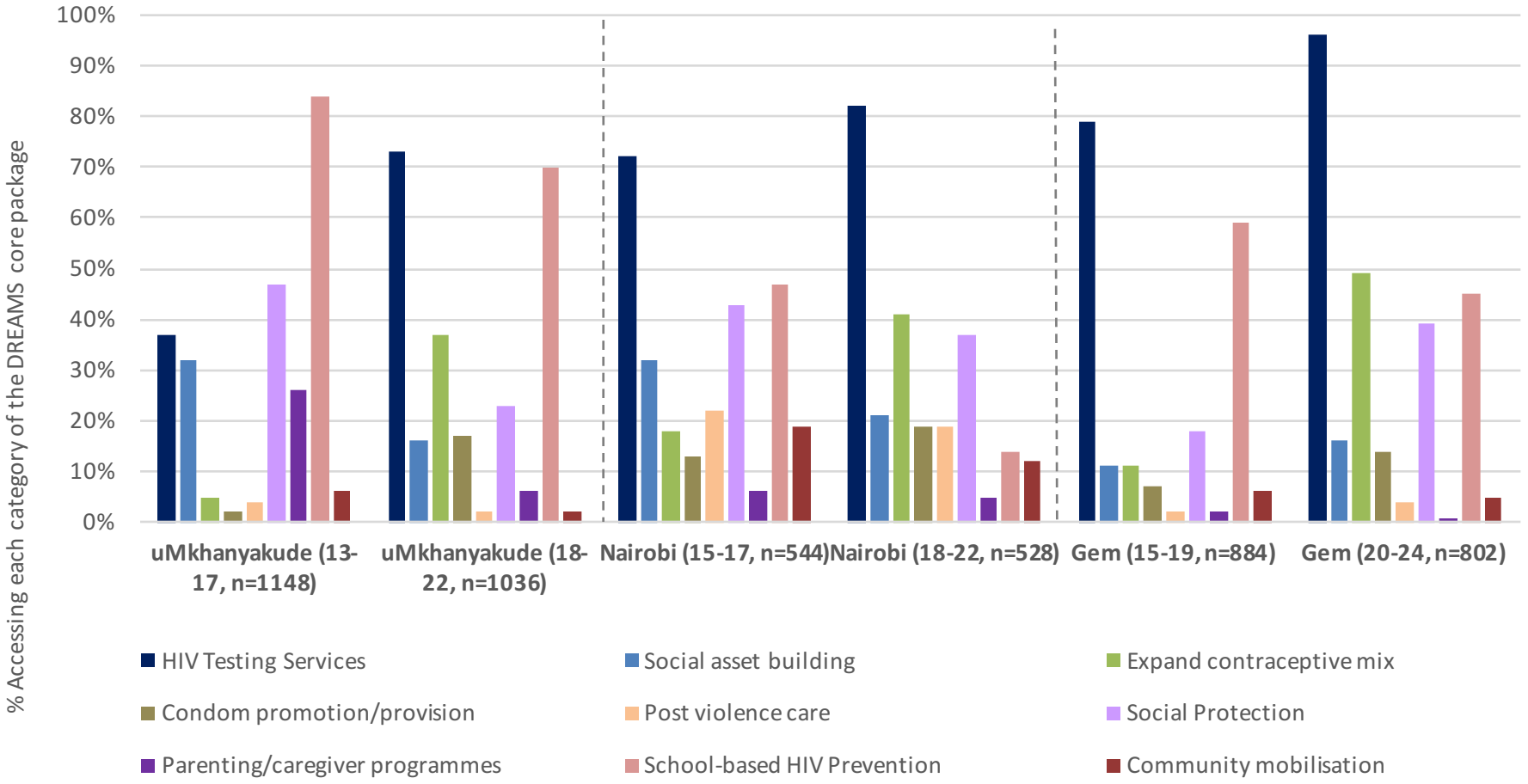
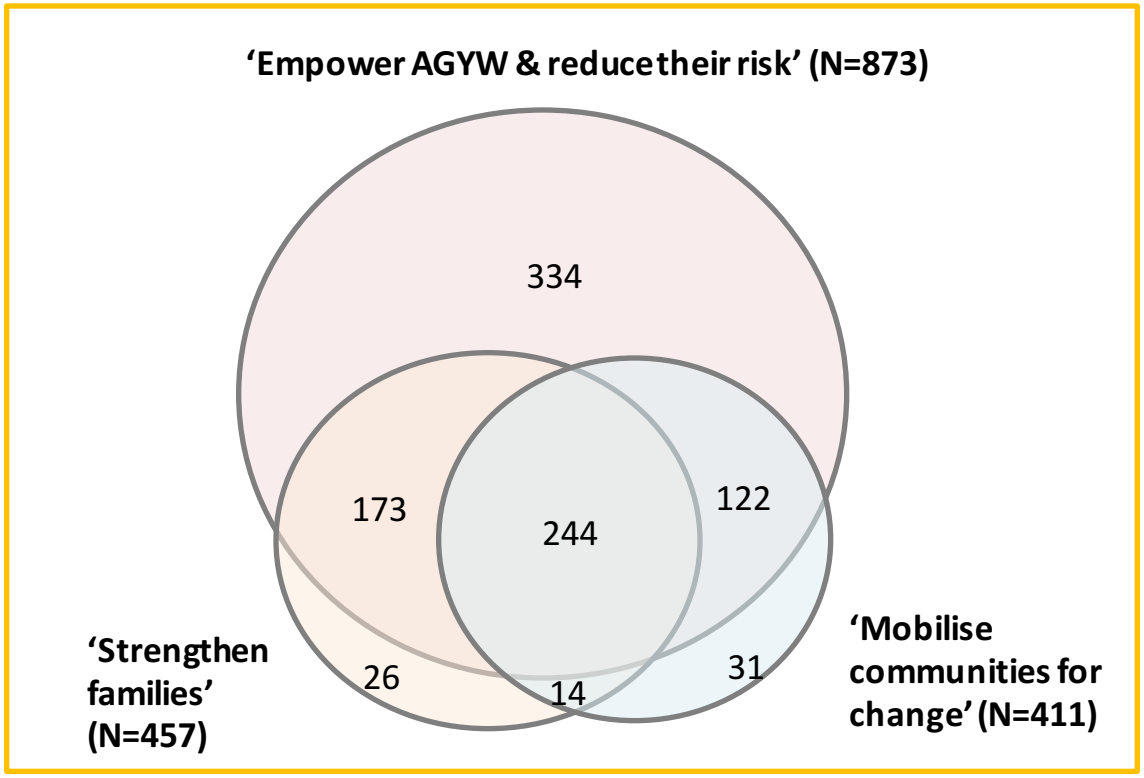
Of the interventions in the Core Package, we saw similar patterns across sites… High uptake of HIV testing [navy bars] and school-based HIV prevention [pink bars] in three settings. Lower levels of caregiving [purple] and community mobilisation [red]



*uMkhanyakude and Nairobi: Participated in the last 12 months (datasets from 2017); Gem: ever participated (dataset from 2016); Uptake regardless whether or not the intervention was identified as a 'DREAMS programme' **Interventions aligned with PEPFAR Core Package guidance to countries in 2015

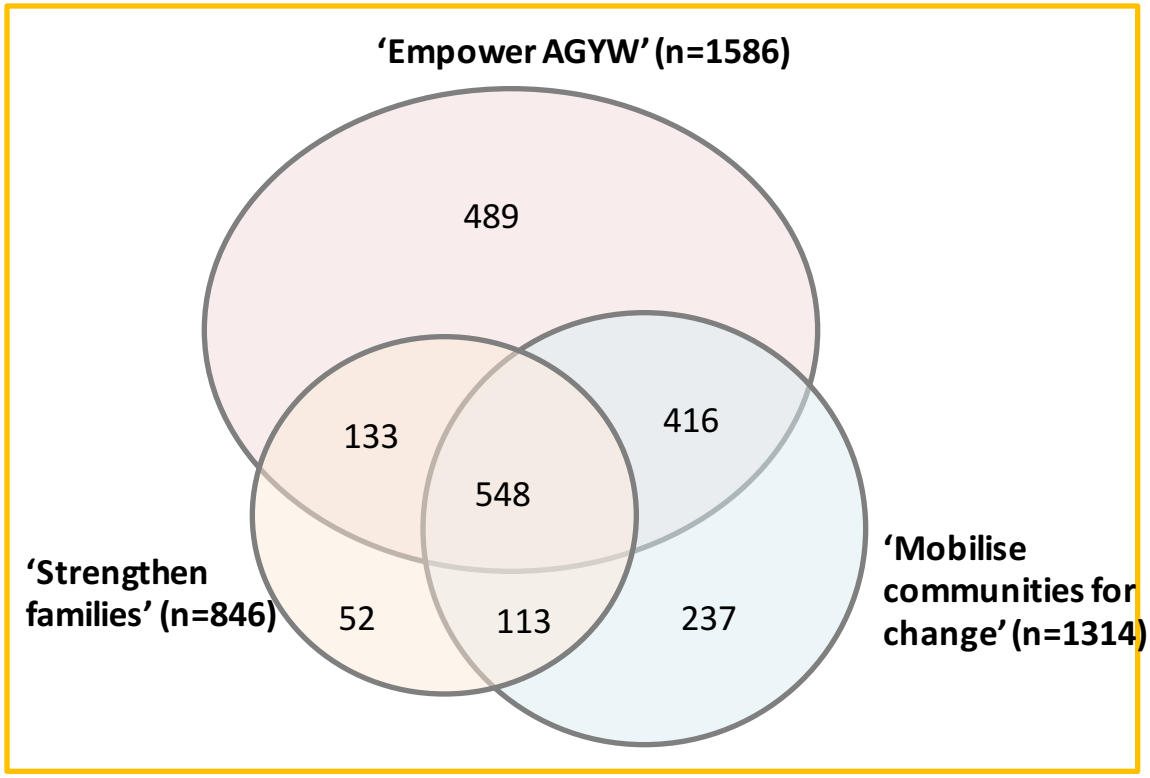
In Nairobi, the majority of AGYW who accessed interventions at the "individual" level did so **in combination** with contextual interventions from the family/ community levels

Combinations of intervention domain levels (number who used any service within each level in last 12 months): **AGYW cohorts aged 15-22**

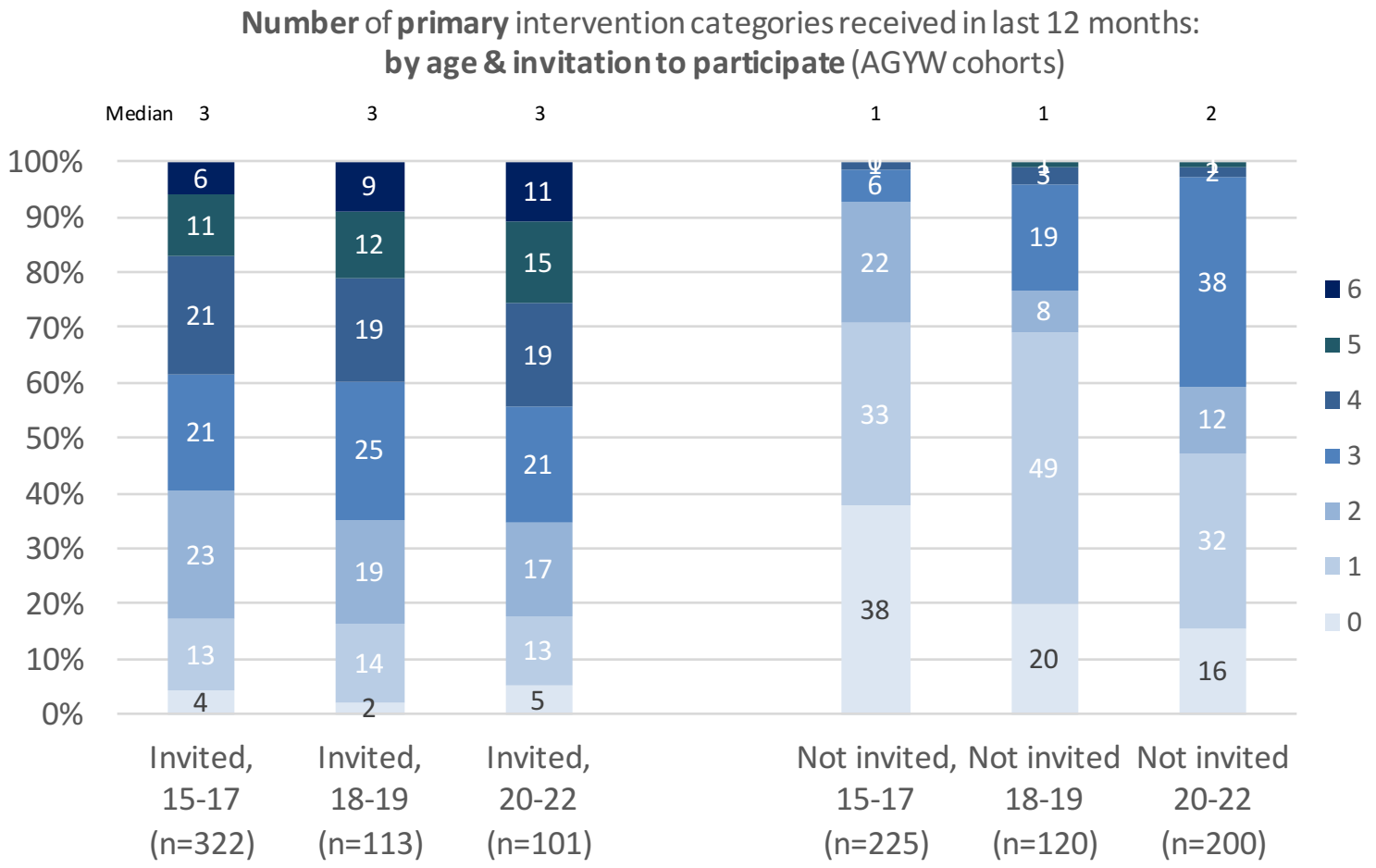


And similarly in uMkhanyakude, KZN, South Africa, most AGYW received both individual and contextual interventions

Combinations of intervention framework levels (number who used any service within each level in last 12 months): **AGYW cohorts aged 13-22 South Africa**



Most AGYW invited to participate in DREAMS in Nairobi accessed **multiple** interventions (median 3 of the 'primary' interventions). Very few AGYW invited to DREAMS received all **primary** interventions for their age group.



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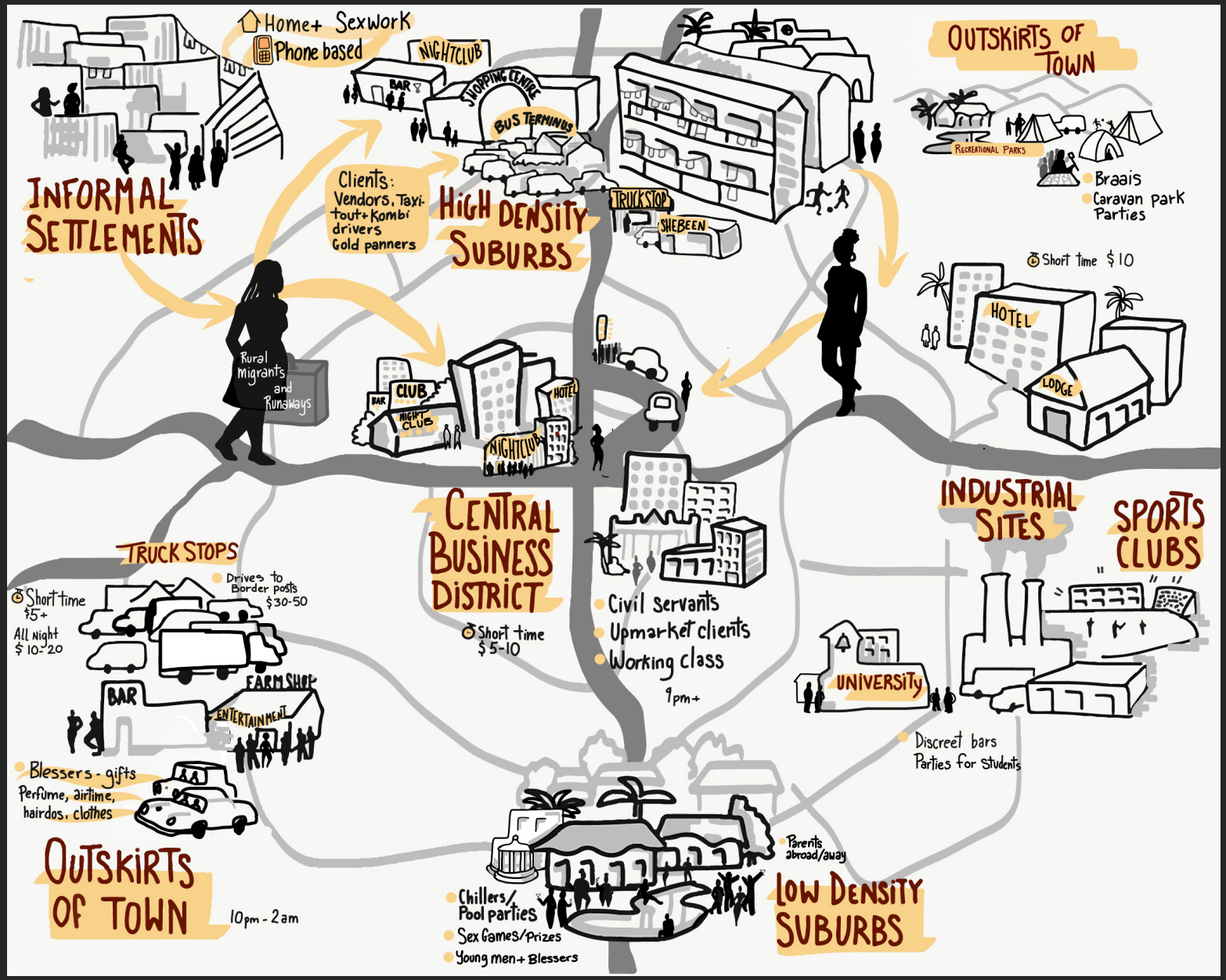
ZIMBABWE – Evaluation with a key population

Community mapping before network-based recruitment of young women who sell sex in Zimbabwe:

those who do and do not self-identify as sex workers



Program uptake among YWSS was low by July 2017 (>1yr of implementation)

	DREAMS sites N=1204	Non DREAMS sites N=1228
Ever heard of DREAMS?	450 (36%)	51 (3.2%)
Has a DREAMS ID number?	40 (3%)	3 (0.2%)
Ever been to a Sisters clinic?	320 (27%)	290 (24%)
Ever heard of PSI New Start Ctr?	929 (75%)	523 (40%)
Ever been to a PSI New Start Ctr?	521 (43%)	226 (18%)
Been to PSI New Start Centre in the past 12 months?	383 (32%)	135 (11%)
Ever heard of education subsidies or cash transfers?	346 (29%)	168 (12%)
Ever received an education subsidy or cash transfer?	78 (6%)	42 (3%)
Received an education / cash transfer in past year?	58 (5%)	20 (1.6%)
Ever received vocational or job training?	50 (4%)	21 (2%)
Received vocational / job training in past year?	35 (3%)	12 (0.1%)
Participated in savings & loan training in past year?	44 (4%)	19 (1.5%)
Currently taking PrEP?	36 (2.6%)	2 (0.3%)

'KP_Prev' package for key populations can help in Year 3+

CeSHHAR Zimbabwe

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Part 3.

Effects of DREAMS so far

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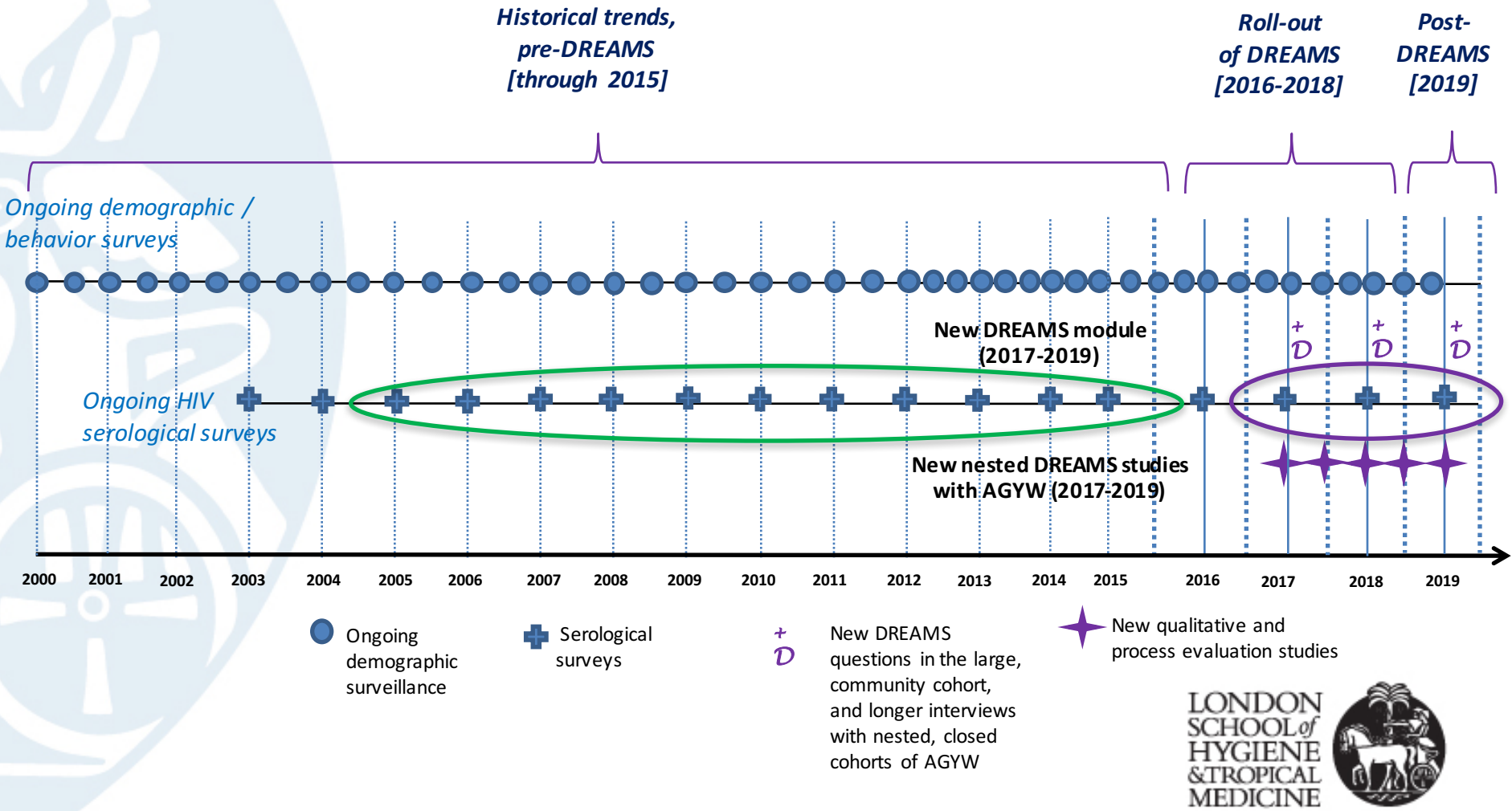
Primary outcome: HIV incidence measured through direct observation

Example *: uMkhanyakude, KZN, South Africa*



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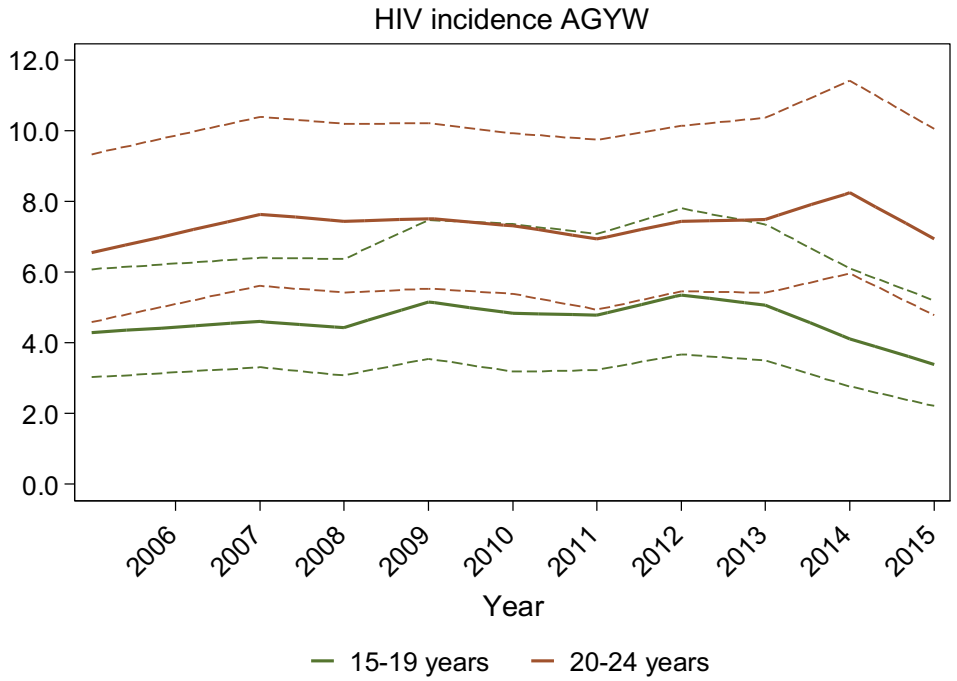
Baseline HIV incidence

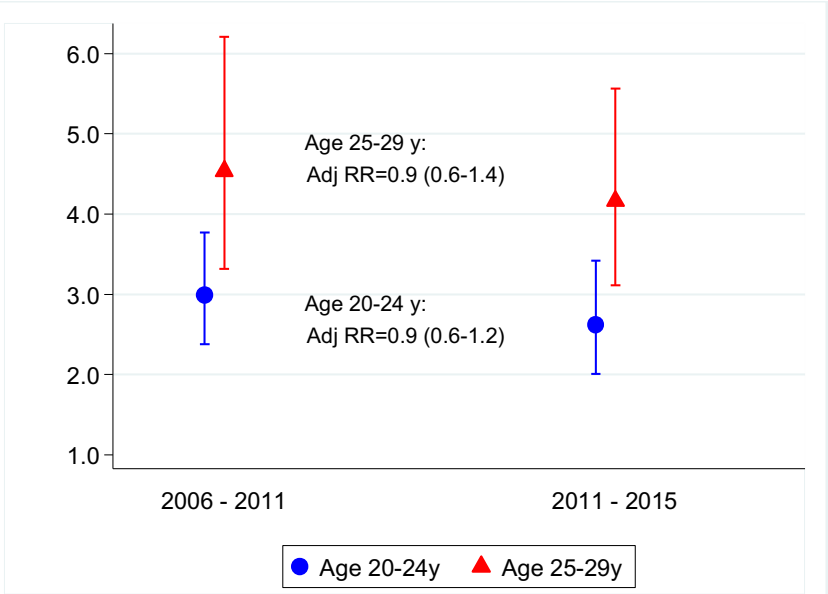
- *pre-DREAMS* in uMkhanyakude, KZN

Trend pre-DREAMS:
Persistently high incidence in 10 years prior to DREAMS; no evidence of rise or decline.

Adolescent girls and women



Young men (20-29 yrs)



Despite a suggestion of overall decline in HIV, incidence in adolescents and young adults has not declined significantly over the past decade in this setting: **a steady baseline for DREAMS evaluation.**

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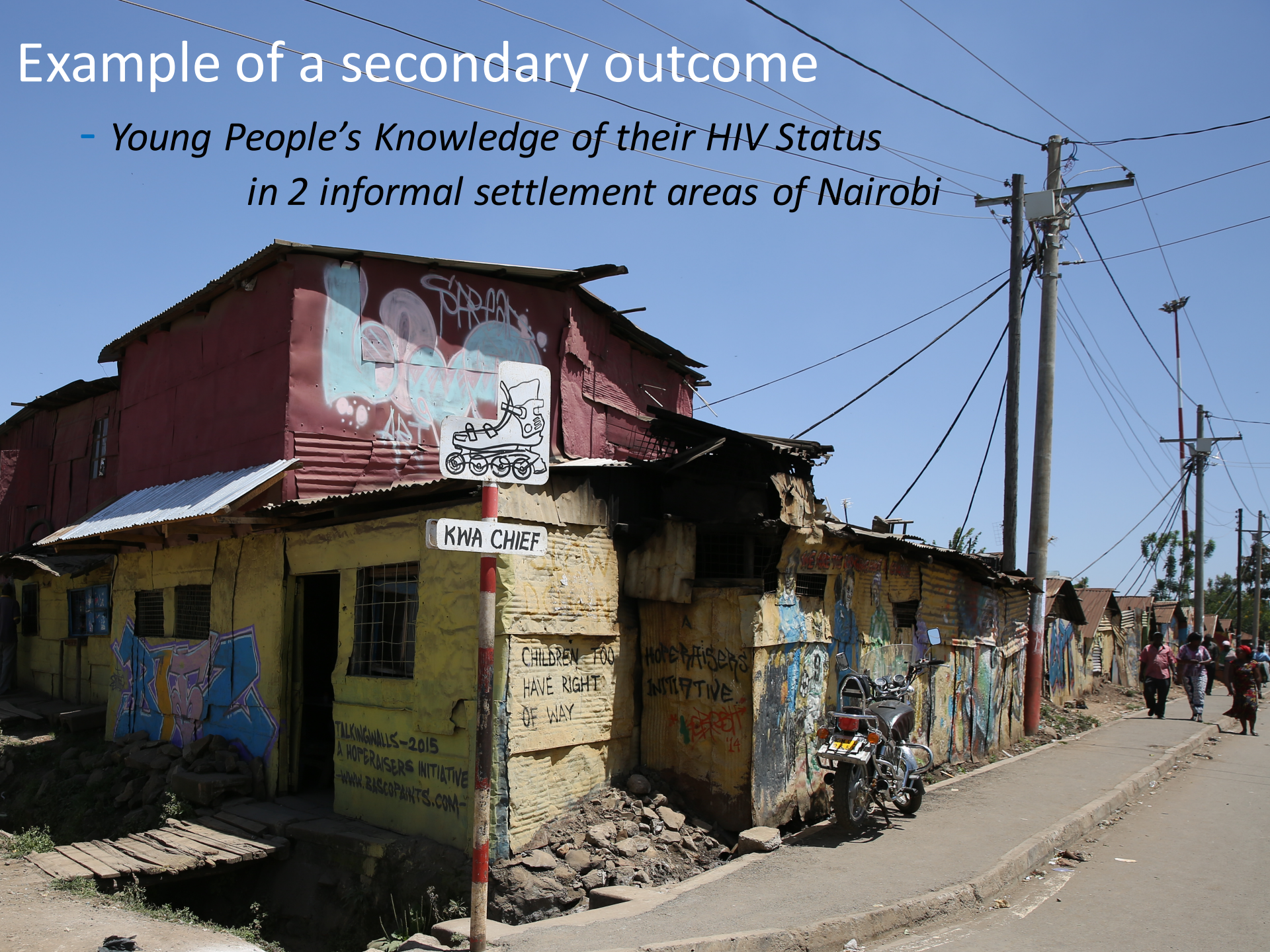
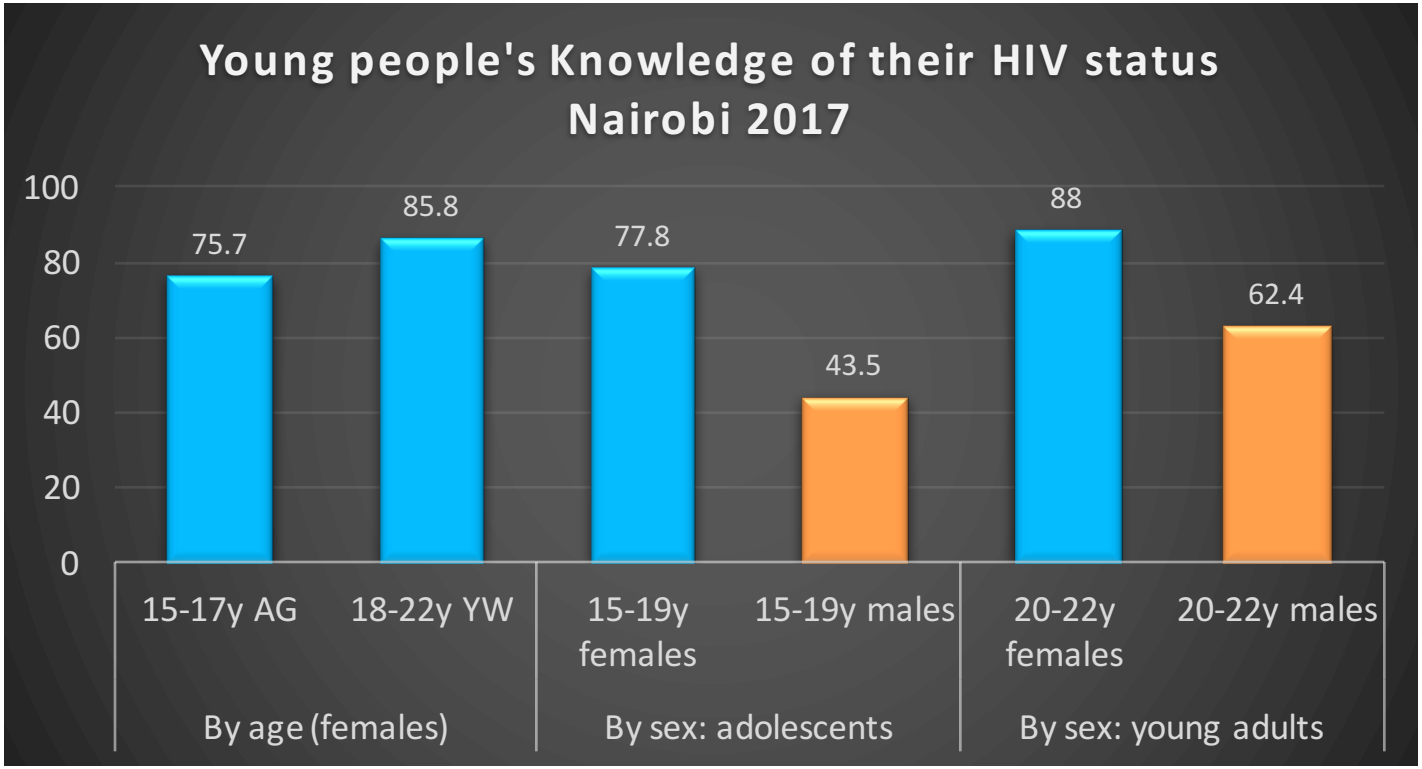
Example of a secondary outcome

- *Young People's Knowledge of their HIV Status in 2 informal settlement areas of Nairobi*



Young people's knowledge of their HIV status

Looking by age and sex, among random samples of young people in Nairobi 2017…



- Levels among females are quite high (>75%), and increase with age (to 86%)
- Lower levels among male peers, in both 15-19y and 20-22yr groups

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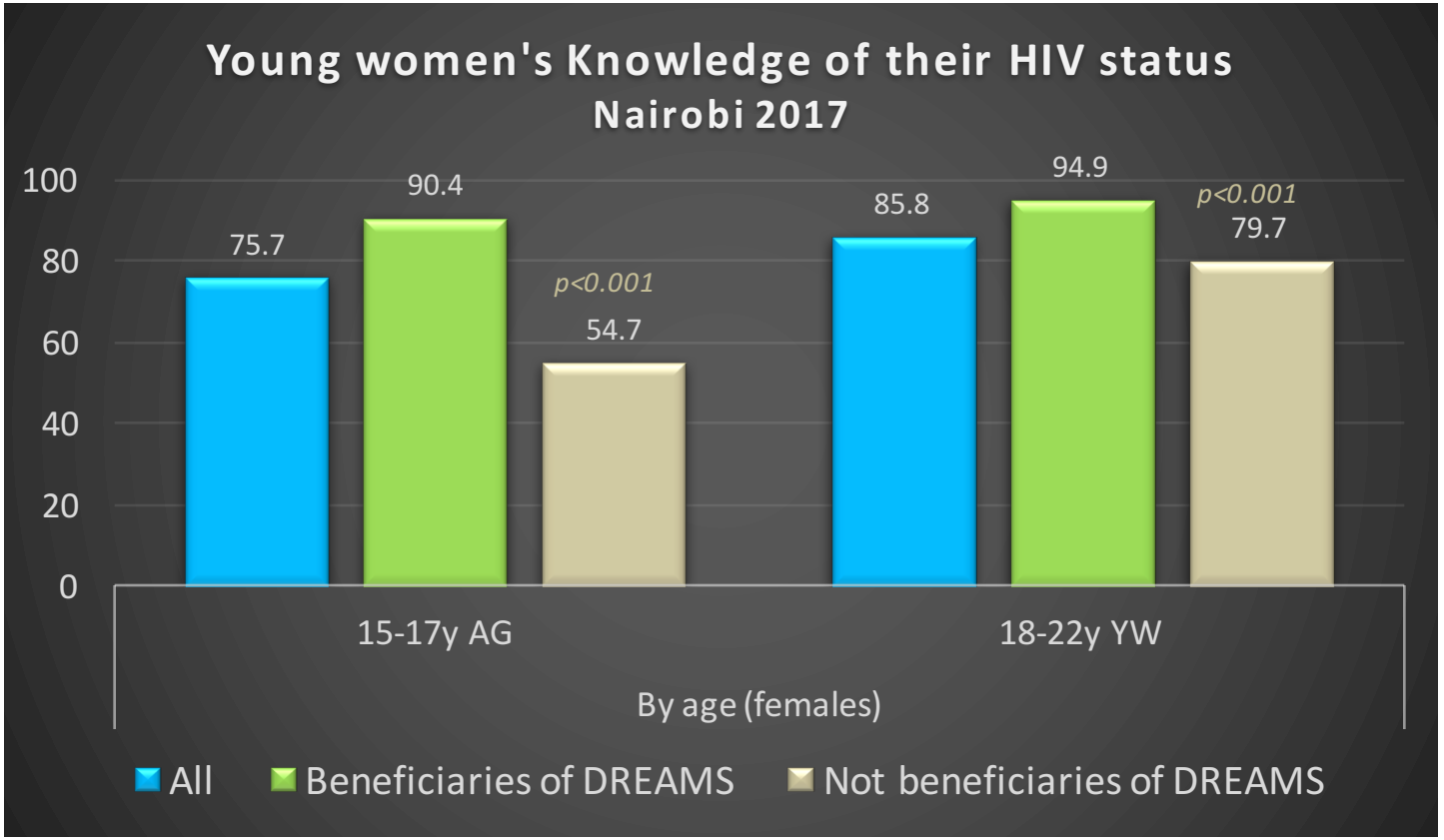
Young people's knowledge of their HIV status

Looking by whether AGYW were beneficiaries of DREAMS in past 12 months…



- Levels among DREAMS beneficiaries are significantly higher in both age groups
- Larger % difference among the younger AG, 15-17yr-olds

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Can link this to high uptake of HTS in past 12 months

HIV testing is higher among DREAMS beneficiaries, especially for 15-17yr olds (90% vs 48% HTS among DREAMS v non-DREAMS)

Categorisation of core package interventions: **by age and invitation to participate** in DREAMS (AGYW nested cohorts)

	Core package intervention category/ level	Not invited to DREAMS (n*, %)		Invited to DREAMS (n*, %)	
		Age 15-17 (N=225)	Age 18-22 (N=320)	Age 15-17 (N=322)	Age 18-22 (N=214)
Individual	***Empower AGYW and reduce their risk***	***113 (51%)***	***255 (81%)***	***295 (92%)***	***202 (95%)***
	HIV Testing Services [1]	107 (48%)	239 (75%)	289 (90%)	197 (92%)
	Expand contraceptive mix [2]	14 (6%)	115 (36%)	87 (27%)	103 (48%)
	Social asset building [3]	**6 (3%)**	**13 (4%)**	**172 (53%)**	**101 (47%)**
	Post-violence care [4]	15 (7%)	24 (8%)	107 (33%)	78 (36%)
	Condom promotion [5]	8 (4%)	35 (11%)	61 (19%)	68 (32%)
Contextual	***Strengthen families***	***43 (19%)***	***81 (25%)***	***198 (62%)***	***130 (61%)***
	Social protection [6]	41 (18%)	74 (23%)	193 (60%)	125 (58%)
	Parenting/caregiver programmes [7]	3 (1%)	10 (3%)	29 (9%)	19 (9%)
	Mobilise communities for change	***75 (34%)***	***23 (7%)***	***217 (68%)***	***94 (44%)***
	School-based HIV prevention [8]	68 (30%)	18 (6%)	190 (59%)	58 (27%)
	Community mobilisation & norms change [9]	16 (7%)	6 (2%)	90 (28%)	58 (27%)

* Number who used any service within each intervention category within the last 12 months

1. HIV testing & counselling, Partner testing, Linkage to ART; 2. Counselling on & provision of contraception; 3. Safe spaces; 4. Post-violence care services, HIV/STI testing after violence, other post-violence services, PEP; 5. Condom provision; 6. Cash transfers, educational subsidies, microfinance programme, financial literacy training, savings group, vocational/business skills training; 7. Parent/caregiver programmes; 8. School-based HIV education; 9. Violence prevention & gender norms training in the community

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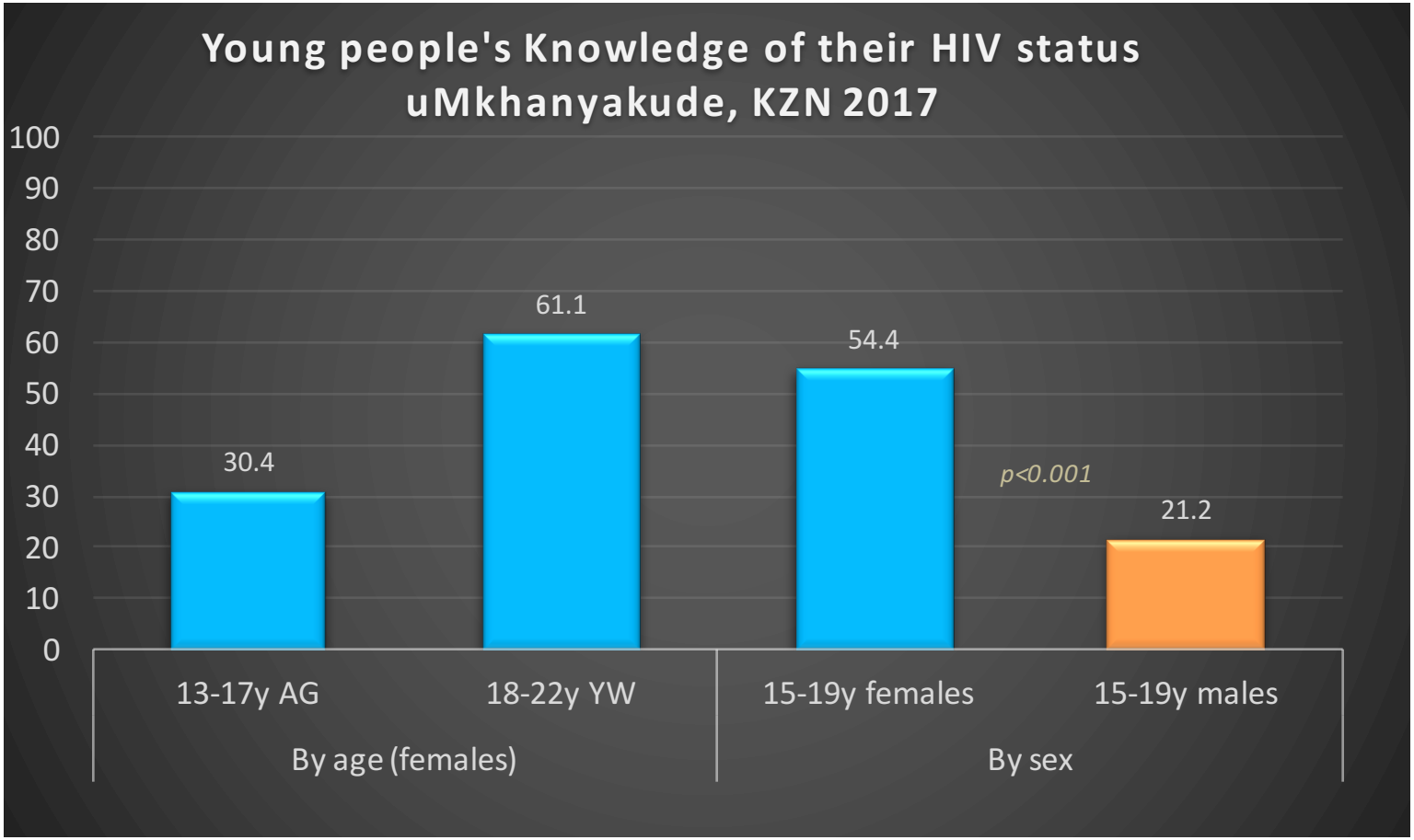
High Knowledge of HIV Status in Nairobi

- A reflection of the model used for DREAMS delivery in Kenya?
  i.e., Enrolment into DREAMS usually includes HIV testing
  All DREAMS interventions are coordinated by one IP

Comparison with KZN, South Africa

Looking by age and sex, among random samples of young people…



- Knowledge of HIV status is much lower overall than seen in Nairobi (reflecting a history of relatively few HIV prevention programs targeting young people in this area)
- Again, higher levels among females than males (15-19y): 54% v 21%
- Among females, it's higher (double) among older YW than younger AG

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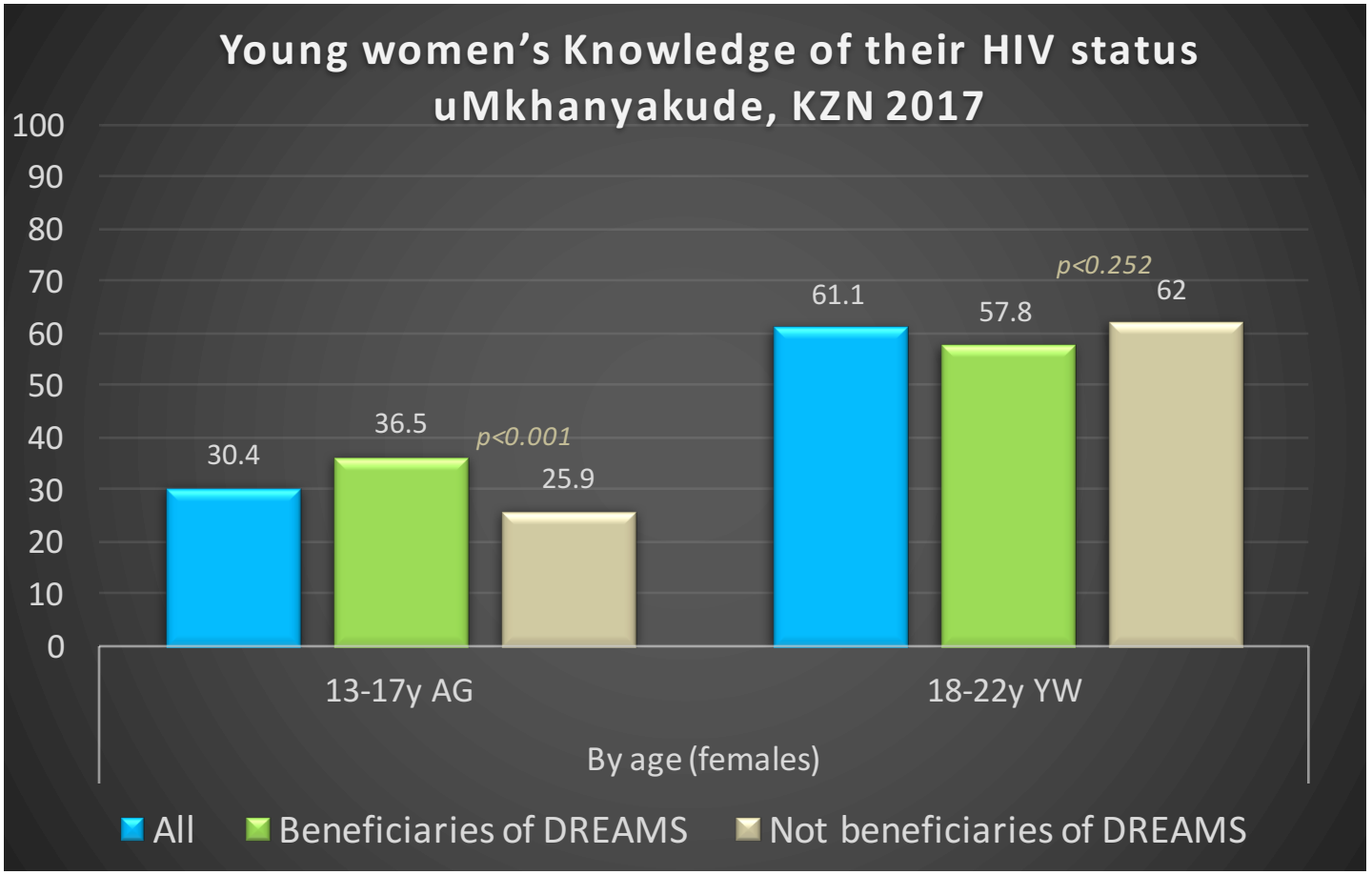
Looking by whether AGYW were beneficiaries of DREAMS in past 12 months…



- Differences by DREAMS are also evident but not as great as Kenya (HIV testing not delivered as systematically?)
- And they are only significant among the younger AG (13-17y), not the older YW (18-22y)
- Levels remain sub-optimal but promising signs that DREAMS can reach adolescent girls

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Young People's Knowledge of their HIV status

Reflections so far

- Knowledge of HIV status is the gateway to HIV prevention and treatment services, but typically low among young people (big gap to 95:95:95)

- DREAMS is helping to quickly increase young women's knowledge of their HIV status:
  - especially in Kenya, where DREAMS enrolment was usually accompanied by an HIV test
  - but also in KwaZulu-Natal, SA, where levels were very low pre-DREAMS
  - in both settings, DREAMS is boosting knowledge of status among adolescent girls 13-17yrs (more so than young women 18+), showing that adolescent girls can be reached before ANC / pregnancy-related services.

- The DREAMS model can be expanded to reach young males, whose knowledge of their status remains very low in most settings, over time and relative to females.

Conclusions

- DREAMS has **mobilised** communities and governments to deliver a complex program **across sectors** introducing **new services** (e.g., social asset building, PrEP) and **new ways of working**
- DREAMS offers a model that – with commitment and resources – can be **adapted to diverse contexts**, with these lessons so far:

DREAMS has shown it is possible to…	And may take longer to…
• quickly reach AGYW, especially younger adolescent girls, and economically vulnerable AGYW	• it's slower to reach out-of-school and sexually active / formerly pregnant AGYW. • re-prioritisation is needed to reach key populations (young women who sell sex) and men. KP_Prev & tackling stigma can help.
• provide layering of individual and contextual interventions for AGYW	• delivering all 'primary' interventions together is a challenge
• boost HIV testing and school-based programming relatively quickly	• the more resource/time-intensive programs need more time to deliver and to track, and attrition may become a factor.
• demonstrate quick increases in % of AGYW who know their HIV status, reaching adolescent girls before ANC services (before first pregnancy?)	• need to understand whether they link from testing into prevention and treatment cascades.

- For impact on HIV incidence, we will observe sero-conversions through 2019

With thanks to colleagues & partners

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