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Preventing HIV in young women – key to sustaining the successes of the Global Plan to eliminate HIV in children & keep mothers alive

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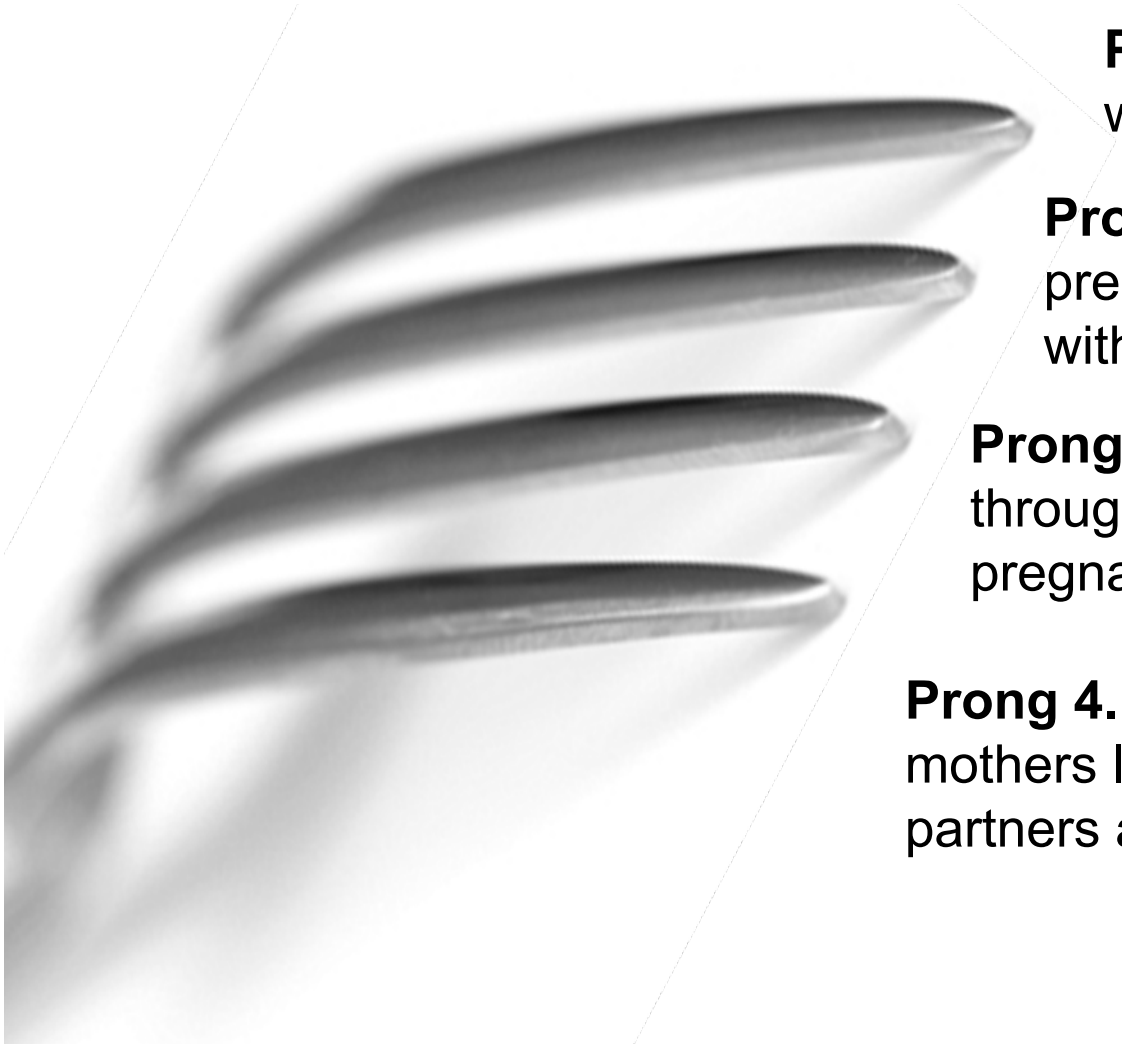
Children and HIV Symposium, Durban, July 2016

UNAIDS CAPRISA is the UNAIDS Collaborating Centre for HIV Research and Policy | science & technology Department: Science and Technology REPUBLIC OF SOUTH AFRICA | NRF National Research Foundation CAPRISA hosts a DST-NRF Centre of Excellence in HIV Prevention | MRC CAPRISA hosts a MRC HIV-TB Pathogenesis and Treatment Research Unit | Columbia University MAILMAN SCHOOL OF PUBLIC HEALTH | UNIVERSITY OF KWAZULU-NATAL INYUVESI YAKWAZULU-NATALI

A four-pronged approach to prevent new HIV infections among children and keep mothers alive



Prong 1: Prevent HIV among women of reproductive age

Prong 2. Prevent unintended pregnancies among women living with HIV

Prong 3. Prevent HIV transmission through antiretroviral drugs during pregnancy and breastfeeding

Prong 4. Treatment, care and support for mothers living with HIV, their children, partners and families

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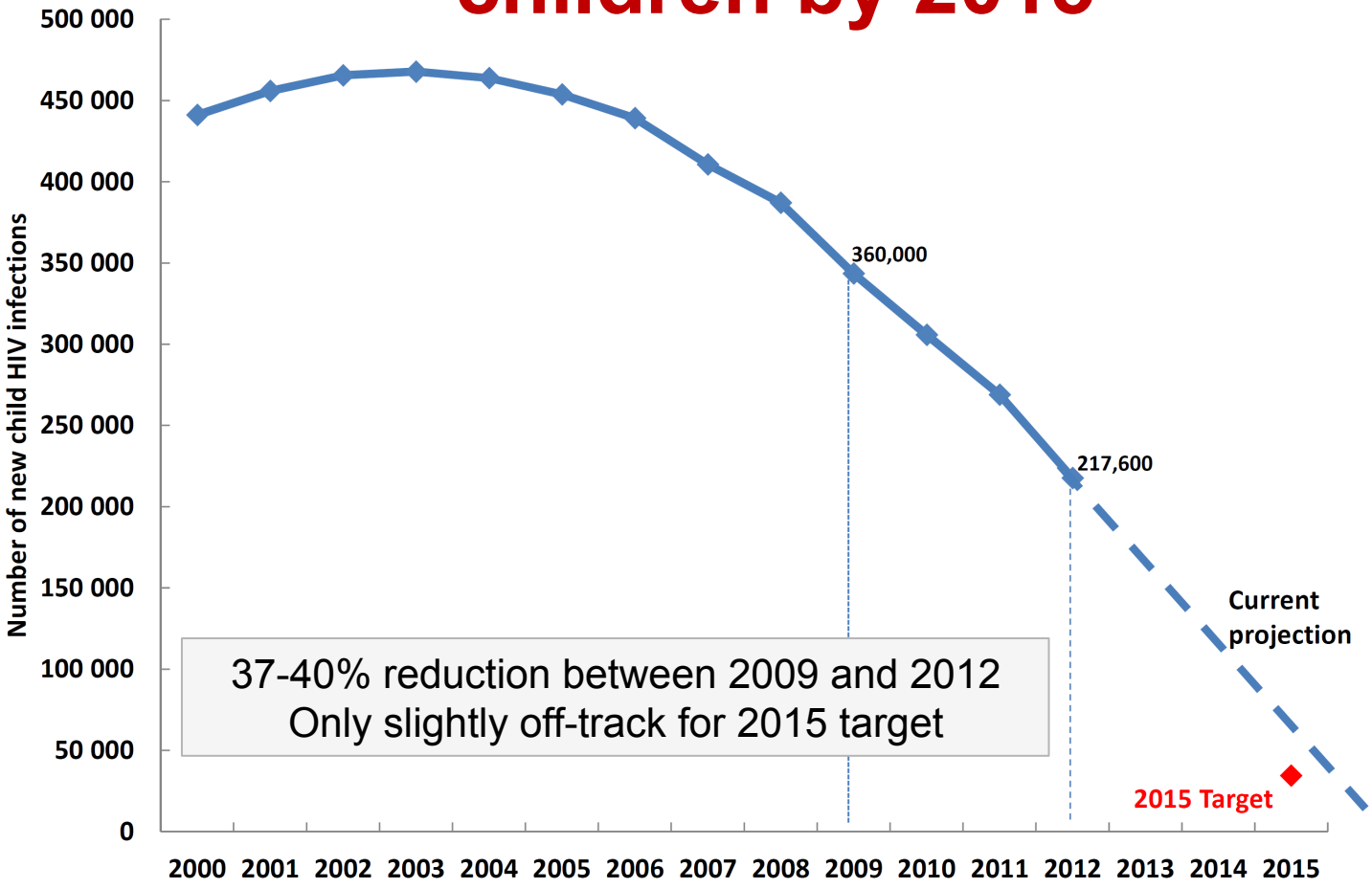
Building on the Global Plan towards the elimination of new HIV infections among children by 2015



Source: Kiragu K. UNAIDS 2013

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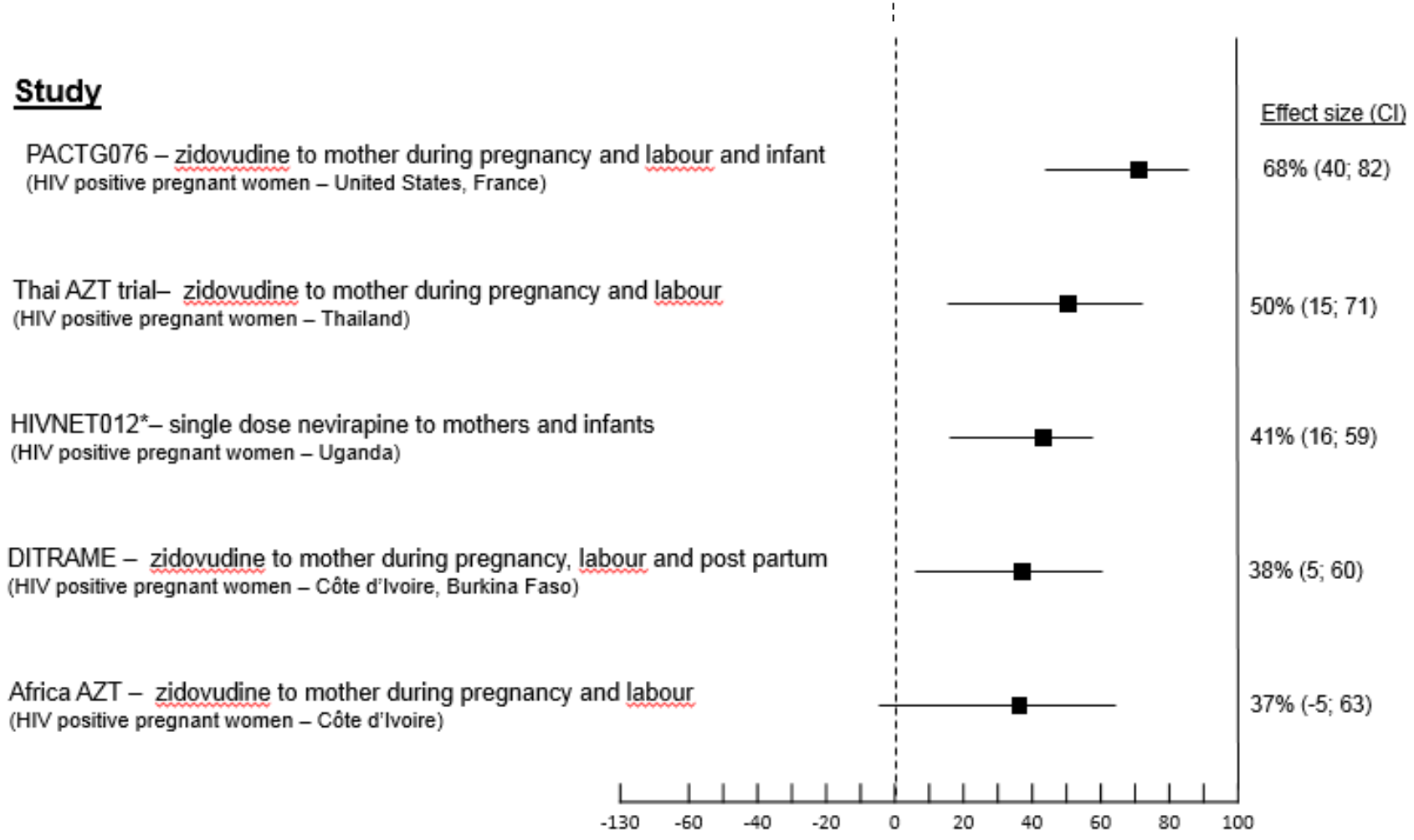
Prevention of Mother-to-Child Transmission
Success story in prevention



Adapted from : Abdool Karim SS, et al, Lancet 2013

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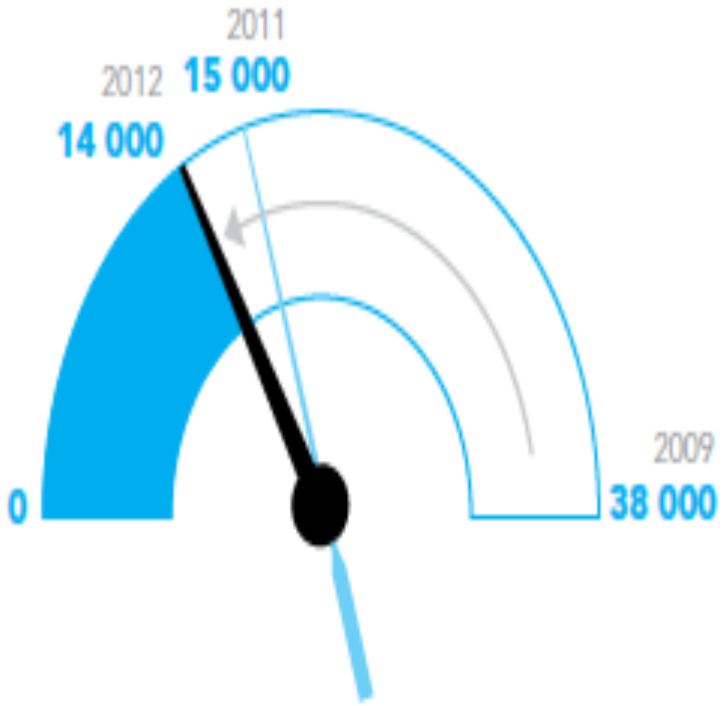
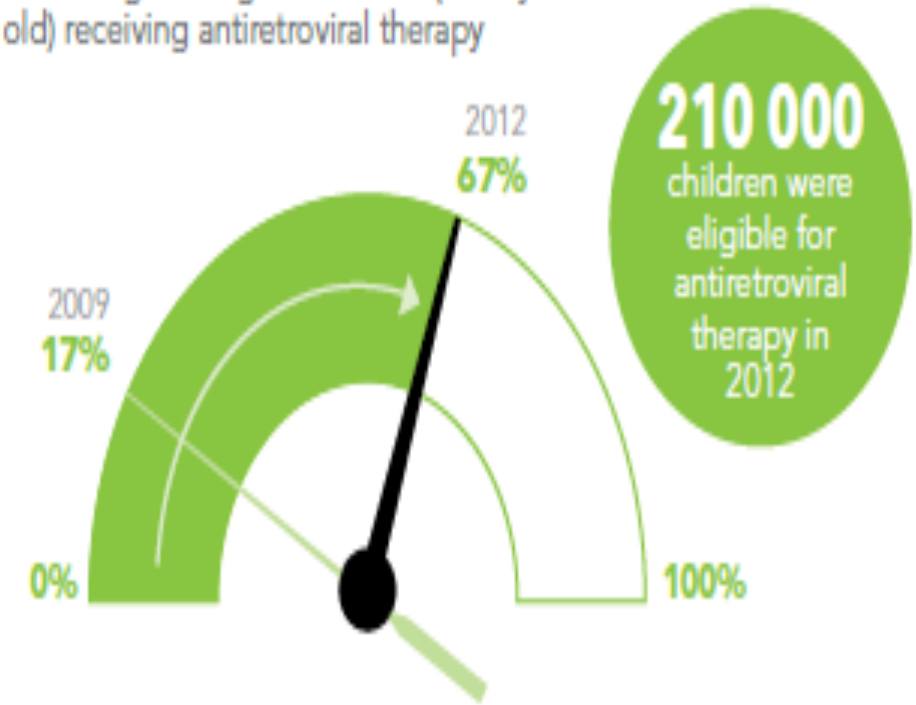
The number of new HIV infections among children continues to decline rapidly

New HIV infections among children (0–14 years old), 2009–2012



The number of eligible children who are receiving HIV treatment has increased rapidly, to nearly 7 out of 10

Percentage of eligible children (0–14 years old) receiving antiretroviral therapy



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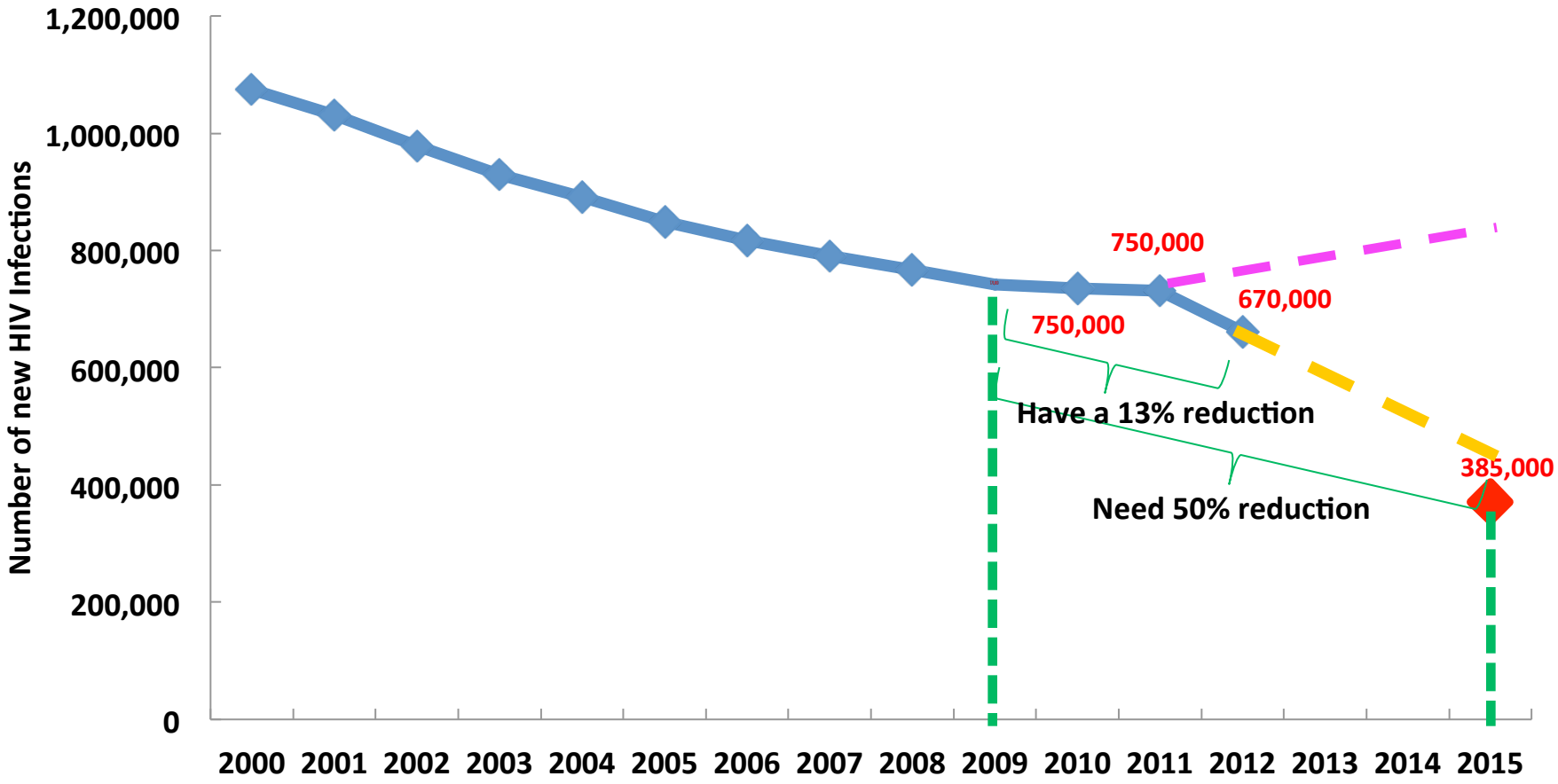
New Evidence in 2015

- **Good Evidence to prevent MTCT through 12 months of breast feeding; transmission 1.4%**
  ANRS 12174: RCT PREP; lopinavir-ritonavir (LPV/r) versus lamivudine (3TC) BD, in infants of women with CD4 counts > 350 cells/mm^3

- **Experience with Option B+: some good, some not good:**
  Malawi-uptake and duration of ART, reduced maternal mortality and infant HIV infections; but significant problems with adherence/retention

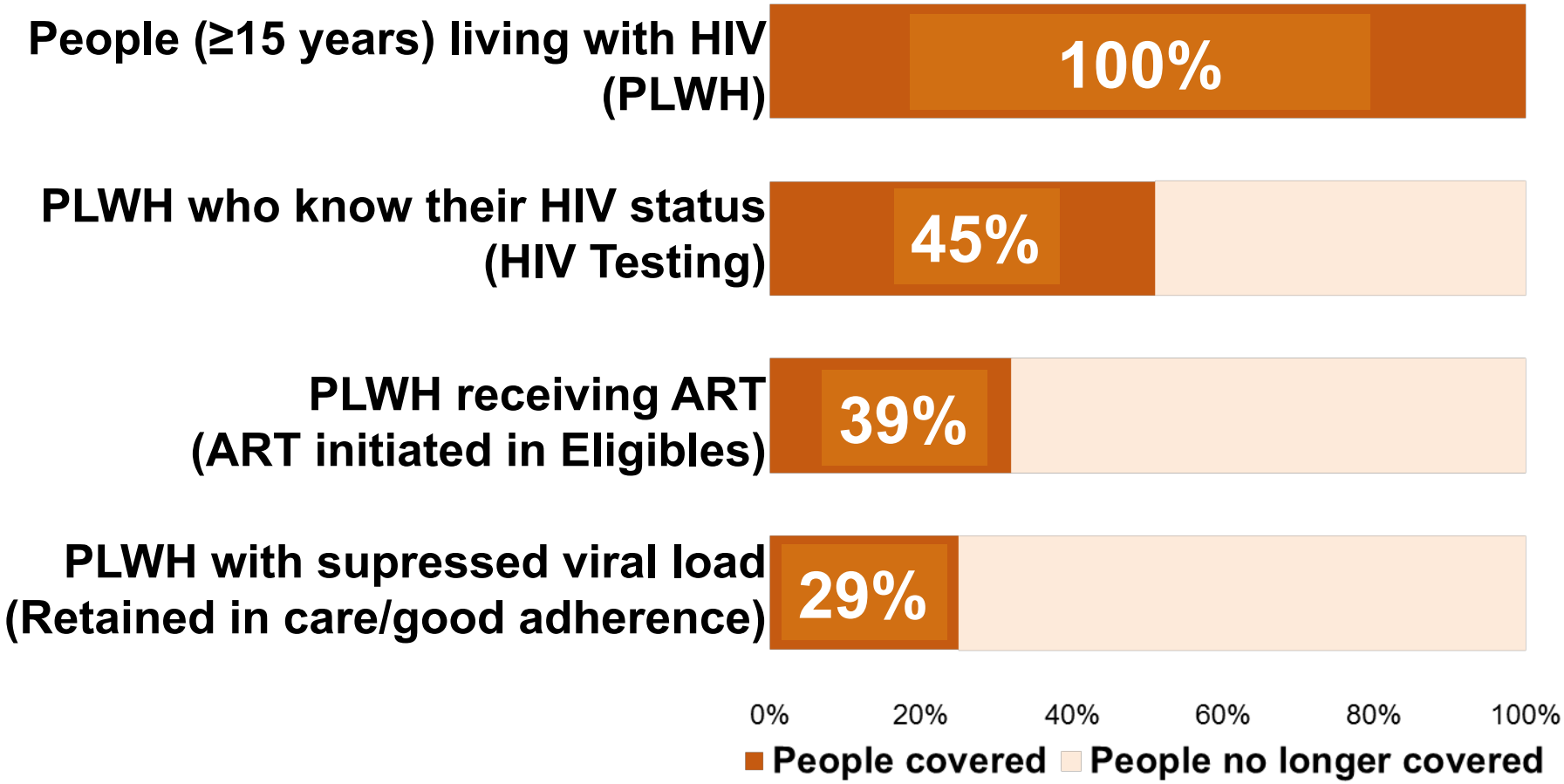
Prong 1 Target: 50% reduction in new HIV infections among women, 21 countries



UNAIDS estimates, Oct 2013

HIV care continuum: sub-Saharan Africa

71% of HIV+ in Africa are not virally suppressed

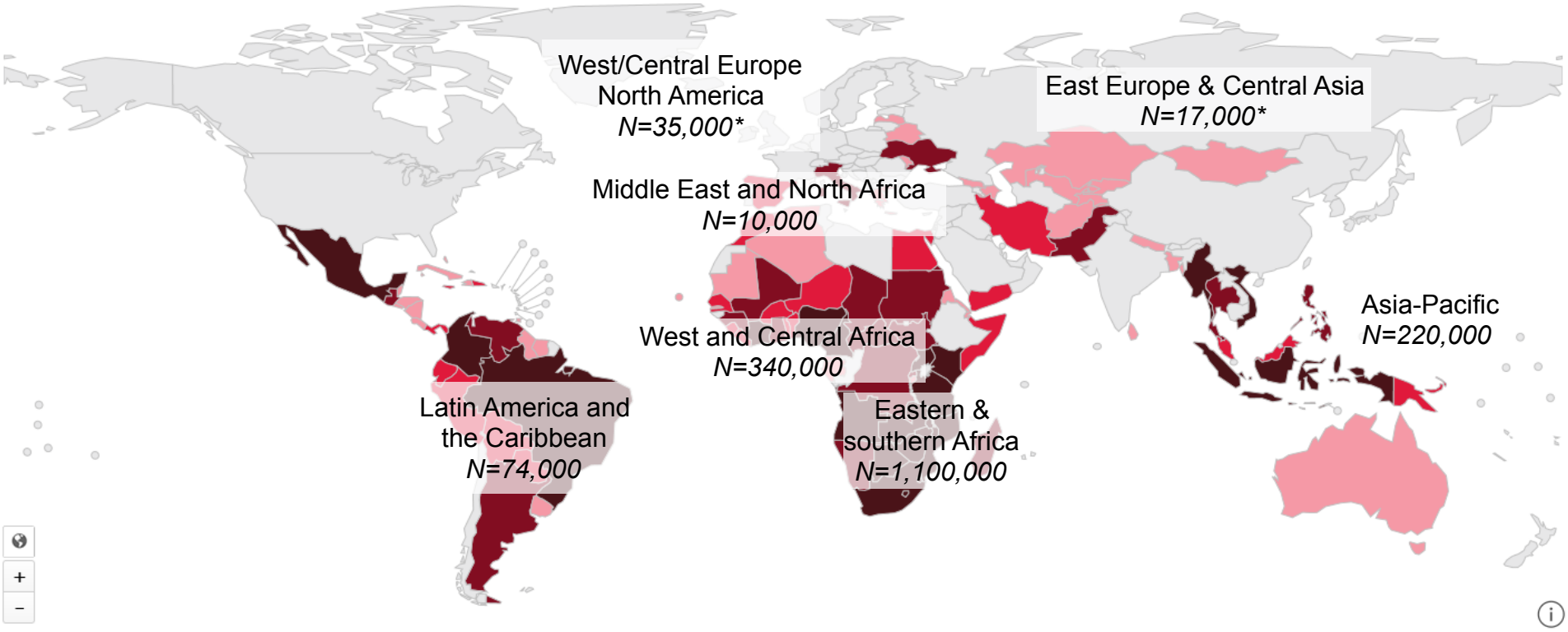


Source: Global AIDS report, 2014, UNAIDS

Global Epidemiology of HIV in Adolescents # Living with HIV 2015

Adolescents aged 10-19 years *living* with HIV, 2015

N=1,800,000



UNAIDS 2015 estimates. *2014 estimates

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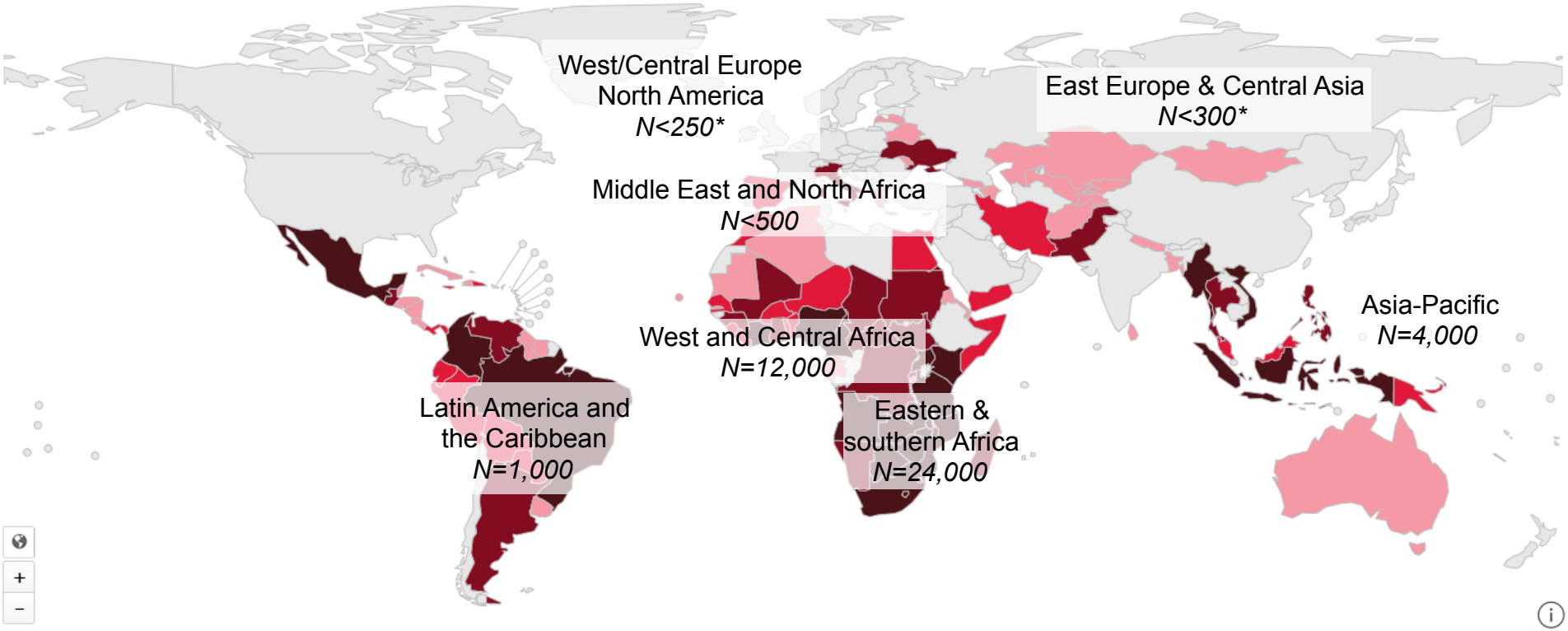
Global Epidemiology of HIV in Adolescents: # dying of HIV

Adolescents *dying* from HIV, 2015

N=41,000



UNAIDS 2015 estimates. *2014 data

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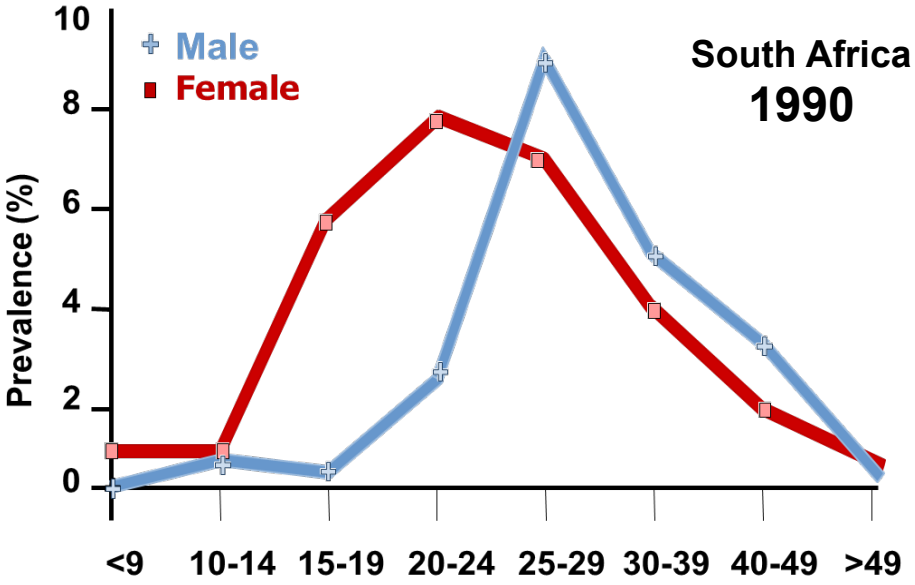
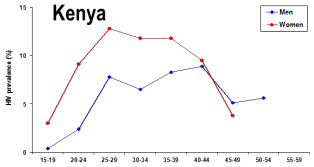
HIV in South Africa:
Disproportionate burden of HIV in young women

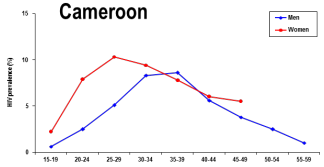
Seroprevalence of HIV infection in rural South Africa

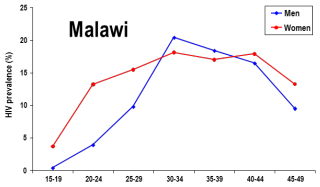
AIDS 1992, **6**:1535-1539

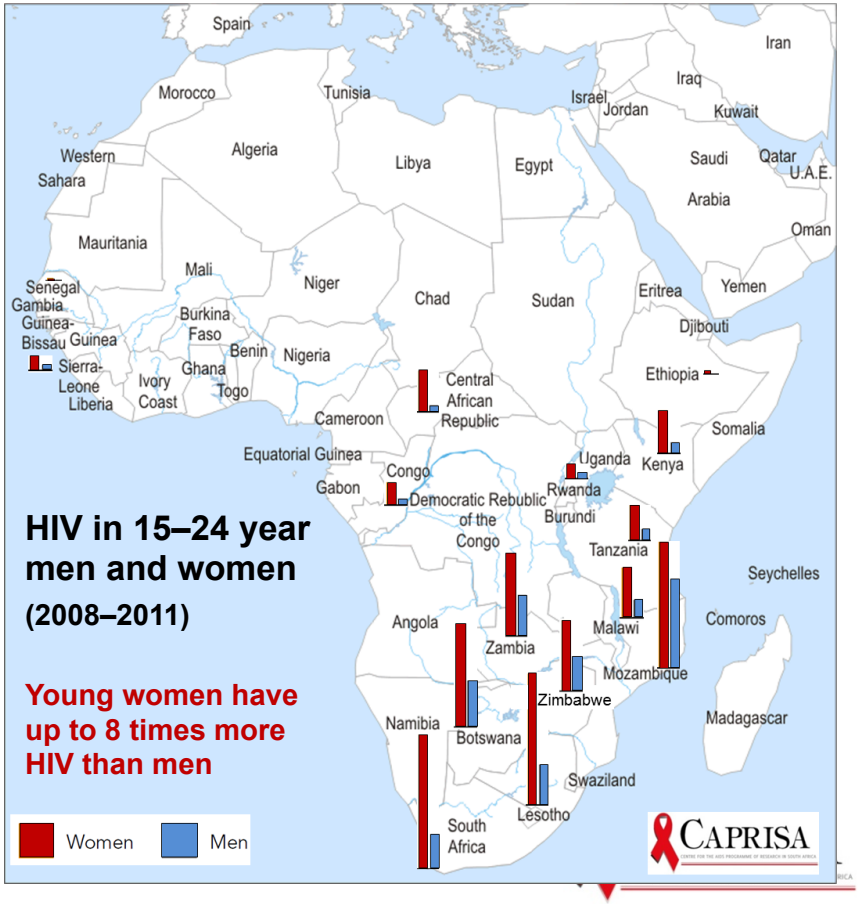
Quarraisha Abdool Karim, Salim S. Abdool Karim, Bipraj Singh*, Richard Short† and Sipho Ngxongo‡











HIV in pregnant women in rural South Africa (2001-2013)

Age Group (Years)	HIV Prevalence (N=4818)
≤16	**11.5%**
17-18	**21.3%**
19-20	**30.4%**
21-22	**39.4%**
23-24	**49.5%**
>25	**51.9%**

***Source**: Abdool Karim Q, 2014*

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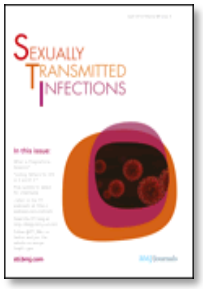
Highest Priority: Reducing HIV in young girls HIV in rural South Africa (Grade 9/10)



ORIGINAL ARTICLE

Prevalence of HIV, HSV-2 and pregnancy among high school students in rural KwaZulu-Natal, South Africa: a bio-behavioural cross-sectional survey

Quarraisha Abdool Karim,[1,2] Ayesha B M Kharsany,[1] Kerry Leask,[1] Fanelisibonge Ntombela,[1] Hilton Humphries,[1] Janet A Frohlich,[1] Natasha Samsunder,[1] Anneke Grobler [1] Rachael Dellar [1] Salim S Abdool Karim[1,2]

Age Group (years)	HIV Prevalence (2010) % (95% Confidence Interval)	
	Male (n=1252)	Female (n= 1423)
≤15	**1.0** (0.0 - 2.2)	**2.6** (1.2 - 4.0)
16-17	**1.1** (0.2 - 2.0)	**6.1** (2.6 - 9.6)
18-19	**1.5** (0 - 3.7)	**13.6** (9.0 - 18.1)
≥20	**1.8** (0 - 3.9)	**24.7** (6.3 - 43.1)

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HIV prevalence in grade 9/10 students who have experienced death of a parent in the past year

Adult deaths in household in last year	HIV prev % (n/N)	Odds Ratio (95% CI)	p-value
0	3.0% (43/1460)	1.00	
1	3.3% (17/511)	1.14 (0.61 - 2.12)	0.690
2	6.7% (45/669)	2.40 (1.72 - 3.37)	<0.001

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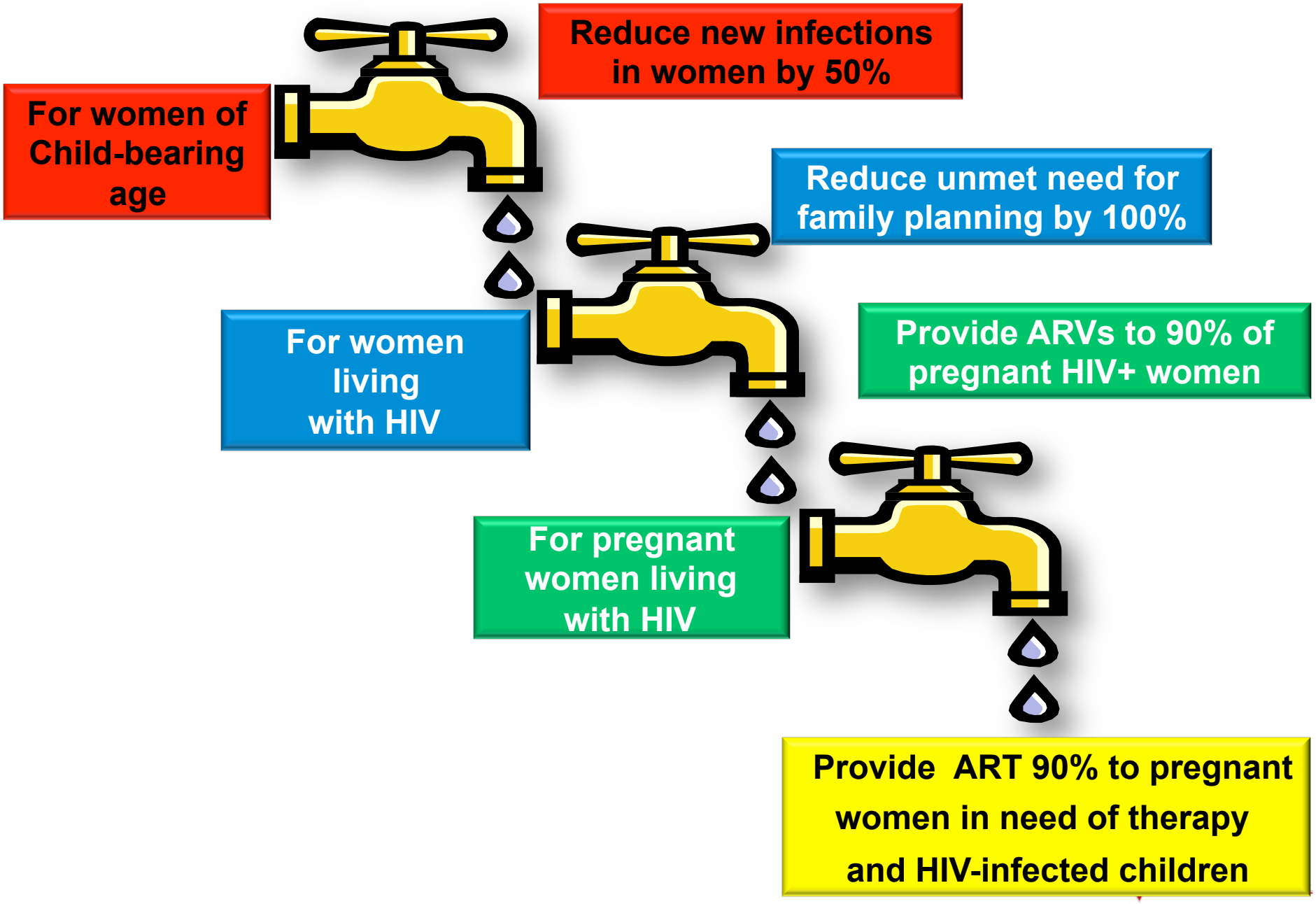
Global Plan Targets to eliminate MTCT



Conclusion

- Impressive progress towards elimination of HIV in infants (that needs continued investments)
  - but, still high HIV infection rates in mothers, especially young women in Africa
- Preventing HIV in mothers is a complex challenge - no quick fix, no magic bullets, no one size fits all
- Major gap is HIV prevention technologies for young women and meeting fertility control needs
- Preventing HIV in AGYW and stronger SRH services has to be a critical part of our goal for eliminating HIV in children and keeping mothers alive

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Acknowledgements

- **CAPRISA is funded by:**
  - **DAIDS, NIAID, National Institutes of Health**
  - **US Agency for International Development (USAID)**
  - **President's Emergency fund for AIDS Relief (PEPFAR)**
  - **US Centers for Disease Control and Prevention (CDC)**
  - **South African Department of Science and Technology (DST)**
  - **National Research Foundation (NRF)**
  - **Fogarty International Center, NIH**
  - **Gilead Sciences (tenofovir API)**
  - **MACAIDS Fund (via Tides Foundation)**
  - **Medical Research Council (MRC)**
  - **CONRAD**

- **CAPRISA hosts a DST-NRF Centre of Excellence in HIV Prevention (jointly with the University of KwaZulu-Natal)**