

HIV control in Rwanda: Lessons and challenges

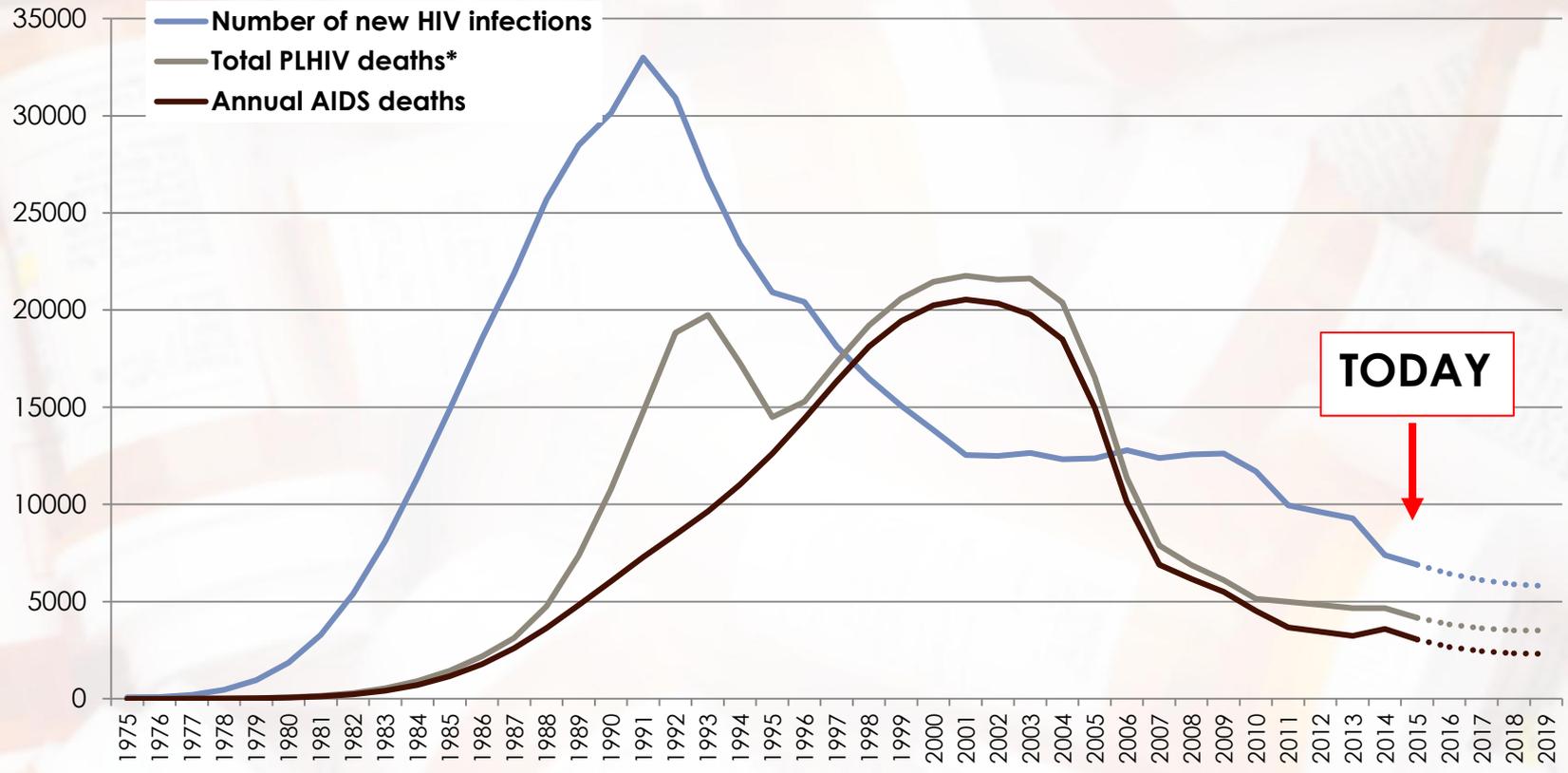
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New HIV infection & AIDS related deaths in Rwanda

Source: UNAIDS epi spectrum & RBC annual reports



HIV incidence (2004 to 2014)
New infections reduced by 50%.

HIV Related deaths (2014)
78% decline in overall AIDS related deaths (2004 to 2014)



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Few years ago ...

Saving lives with Free Treatment for HIV Infection and Tuberculosis

Before

After



March 2003



September 2003

Kim JY, Farmer P. N Engl J Med 2006;355:645-647.



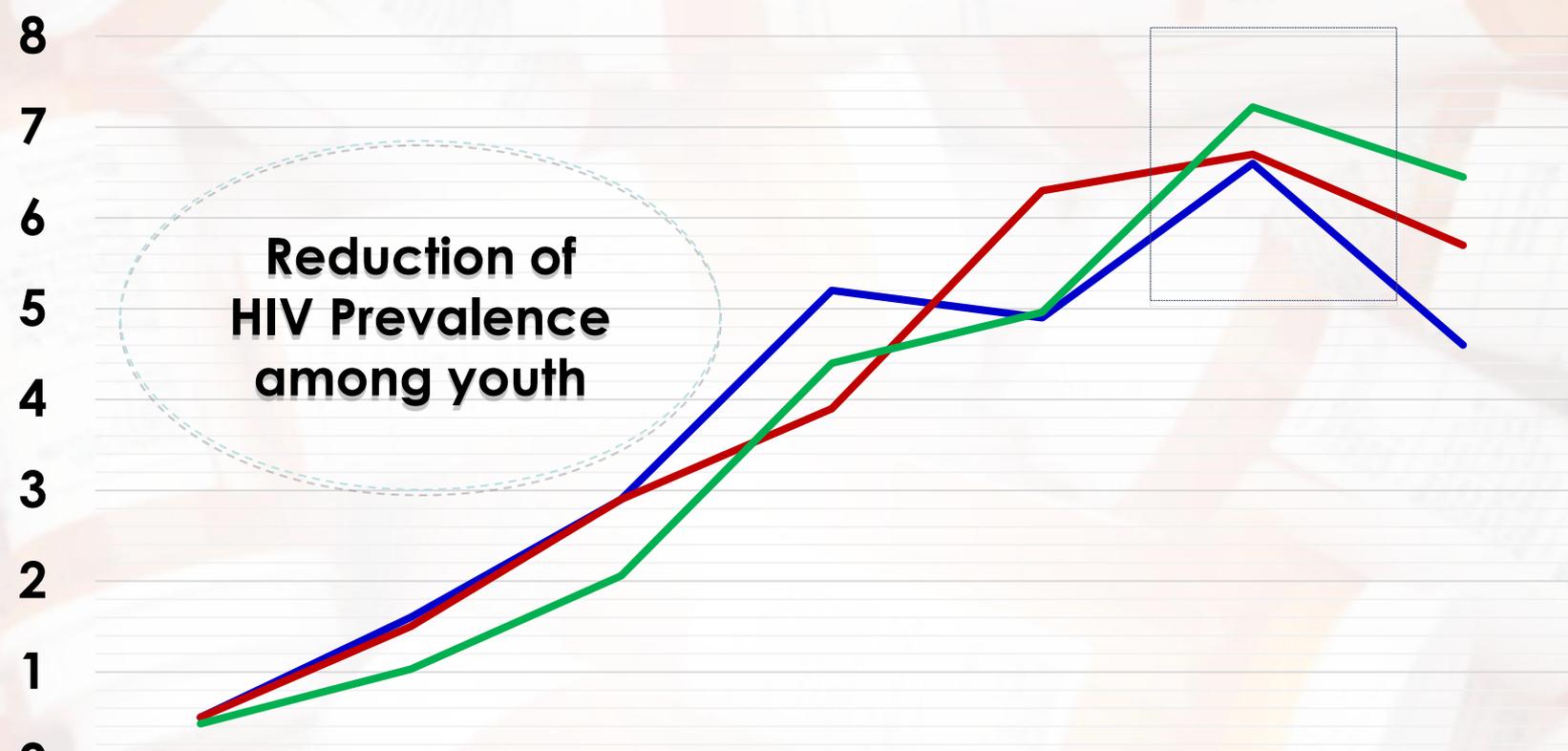
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— DHS 2005 — DHS 2010 — RAIHIS 2013 Peak prevalence

PERCENT HIV PREVALENCE



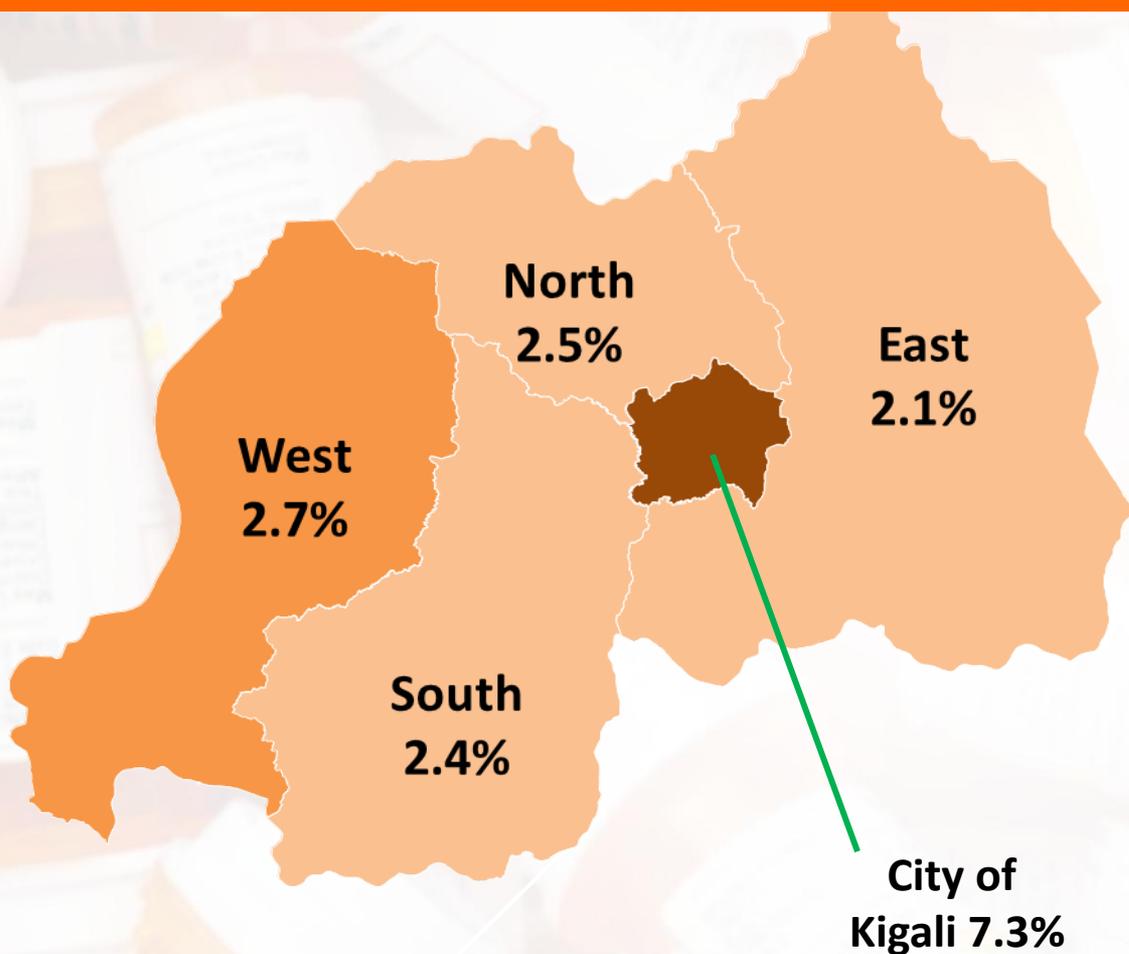
	15-19	20-24	25-29	30-34	35-39	40-44	45-49
DHS 2005	0.5	1.6	2.9	5.2	4.9	6.6	4.6
DHS 2010	0.5	1.5	2.9	3.9	6.3	6.7	5.7
RAIHIS 2013	0.4	1.0	2.1	4.4	5.0	7.2	6.5

RAIHIS : Rwanda AIDS Indicators and HIV Incidence survey



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HIV prevalence in Rwanda is 3% , **BUT...**



National Average: 3%

Male: 2.3%

Female: 3.6%

- Even in Kigali, disparity of prevalence
- High pockets of HIV prevalence: FSWs: 51% (BSS2010)

Source: Rwanda Demography Health Survey (DHS), 2010



FSW: HIV Core Transmitters in Rwanda

**Core transmitters
(Highest prevalence)**

51%

Bridging Population
(Moderate
prevalence)

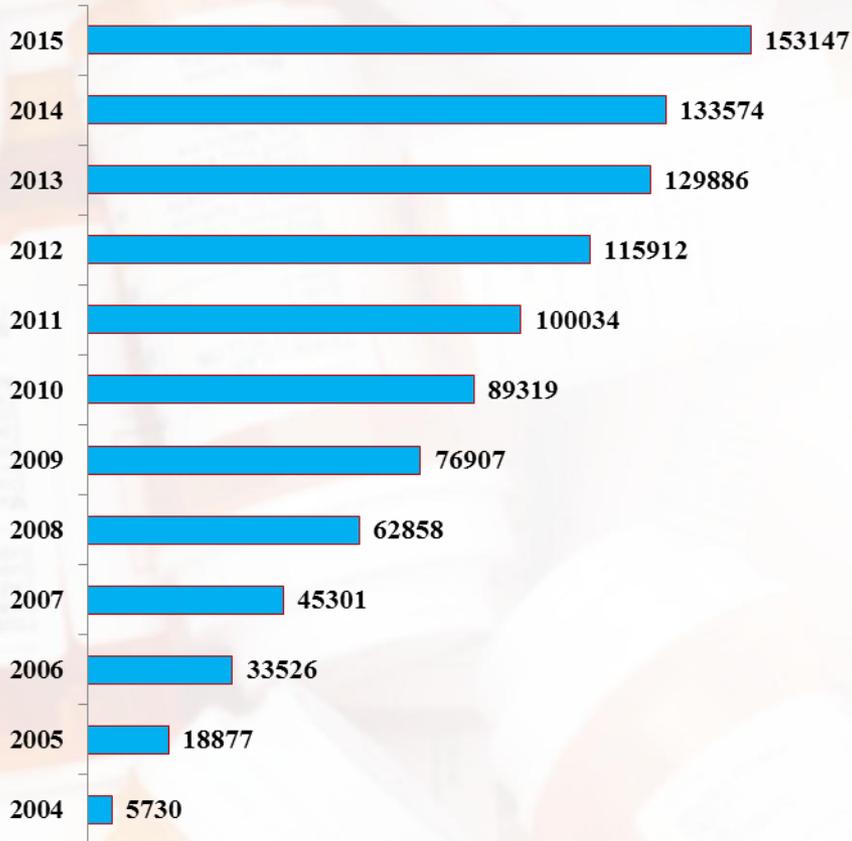
General
Population
(Lowest
prevalence)



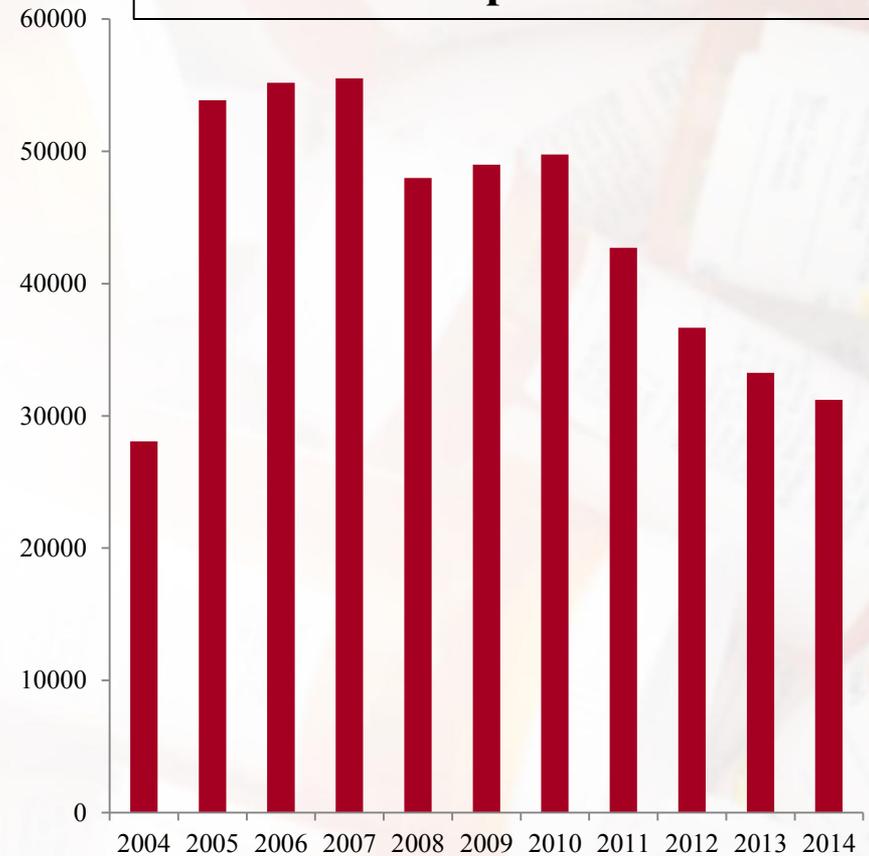
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Patients on ART & Patients tested HIV+

Patients on ART



New HIV positive cases

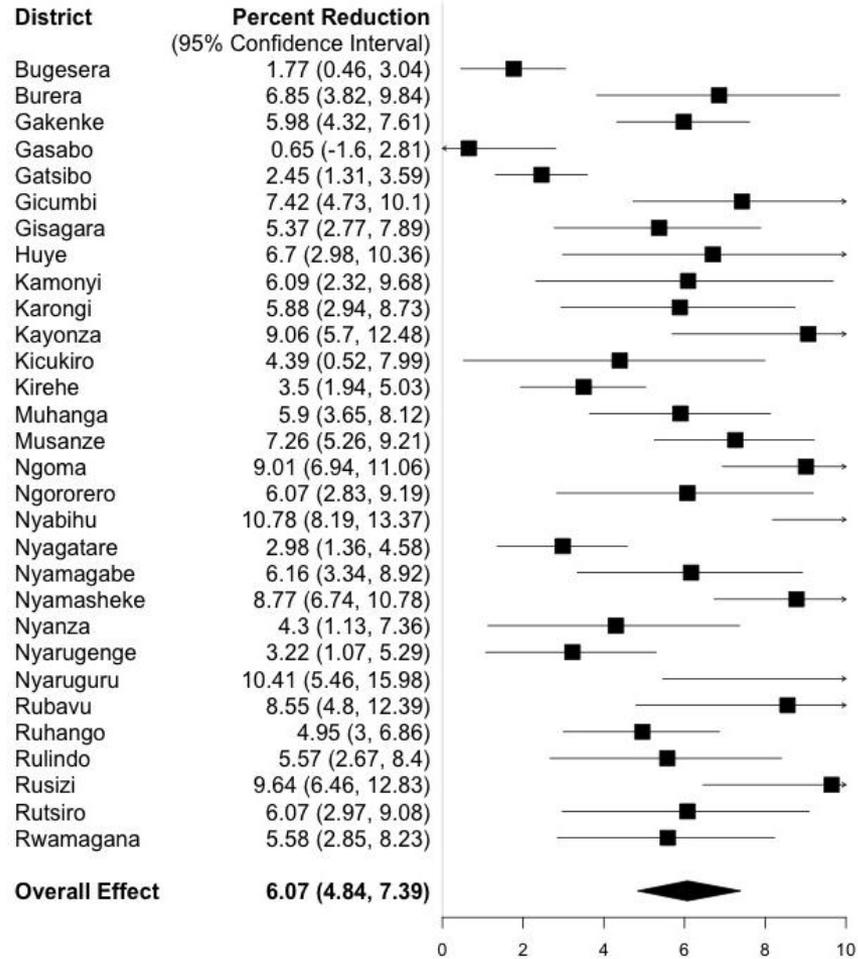


Source: RBC, HMIS 2015



Effect of ART coverage on HIV prevention

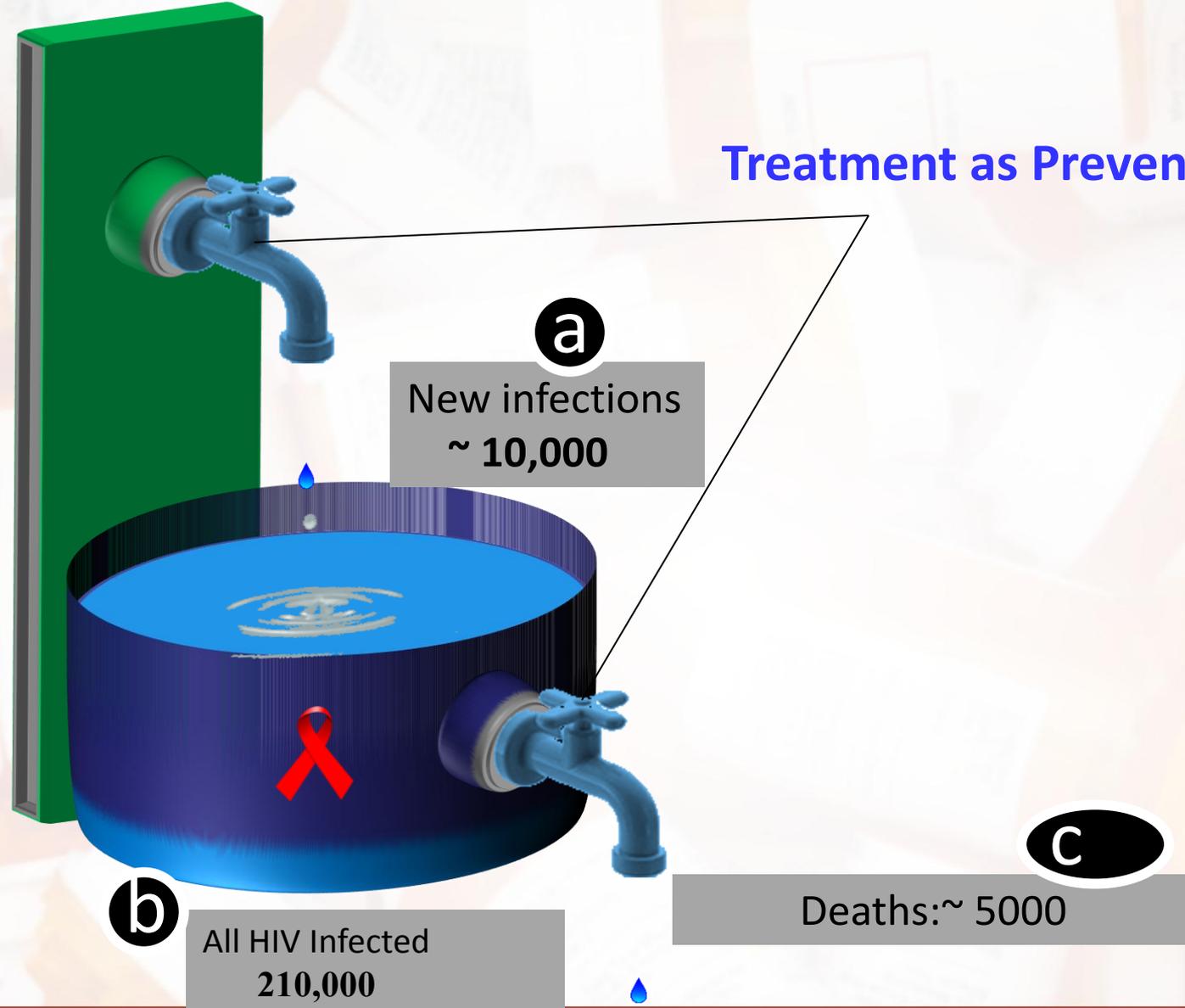
Year over year reduction associated with every 10% increase in ART coverage results into 6% incidence reduction



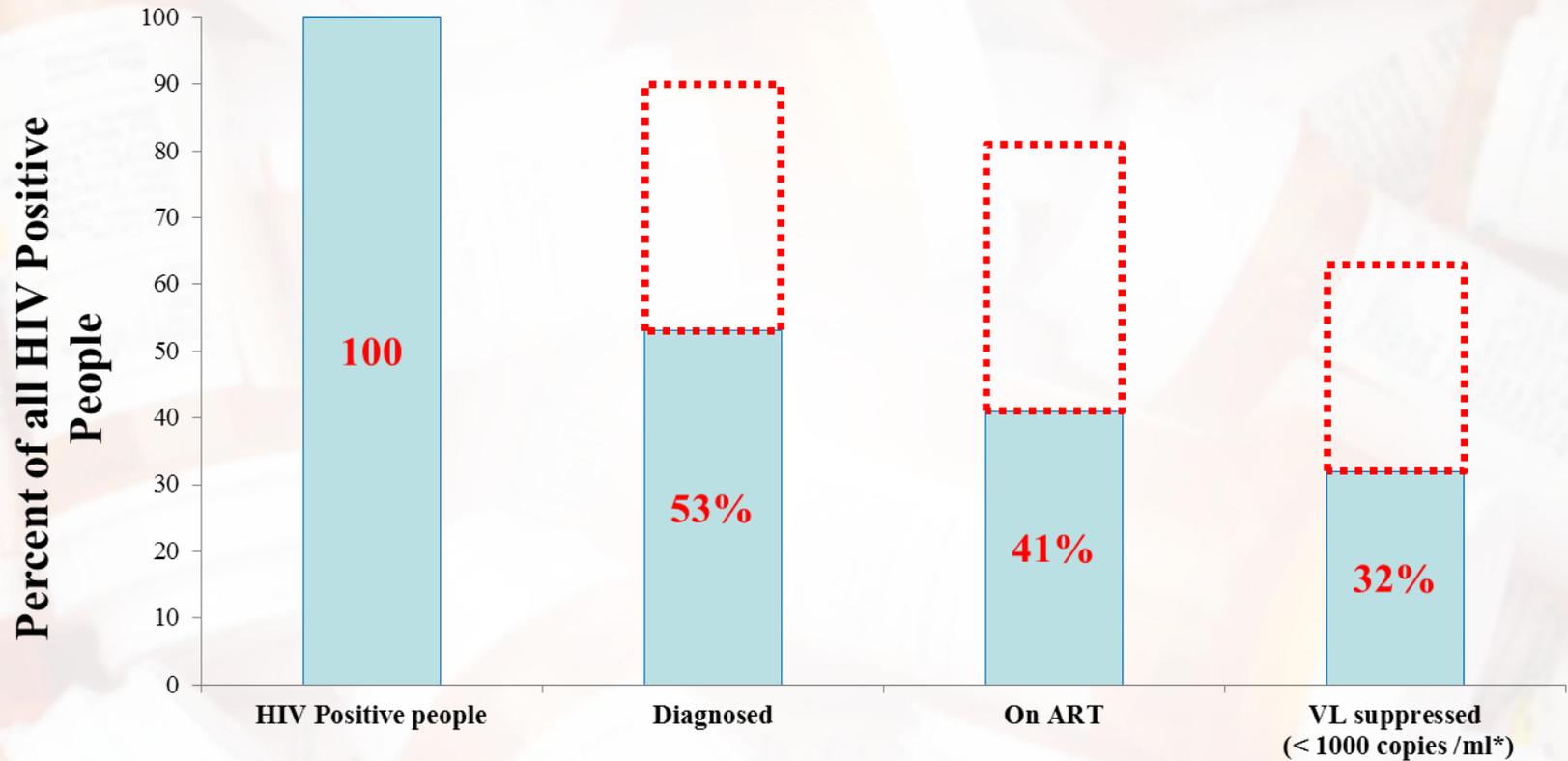
Source: S. sanszimana, E. mills & al. abstract, feb. CROI 2015, Seattle ,USA



Treatment as Prevention (TasP)



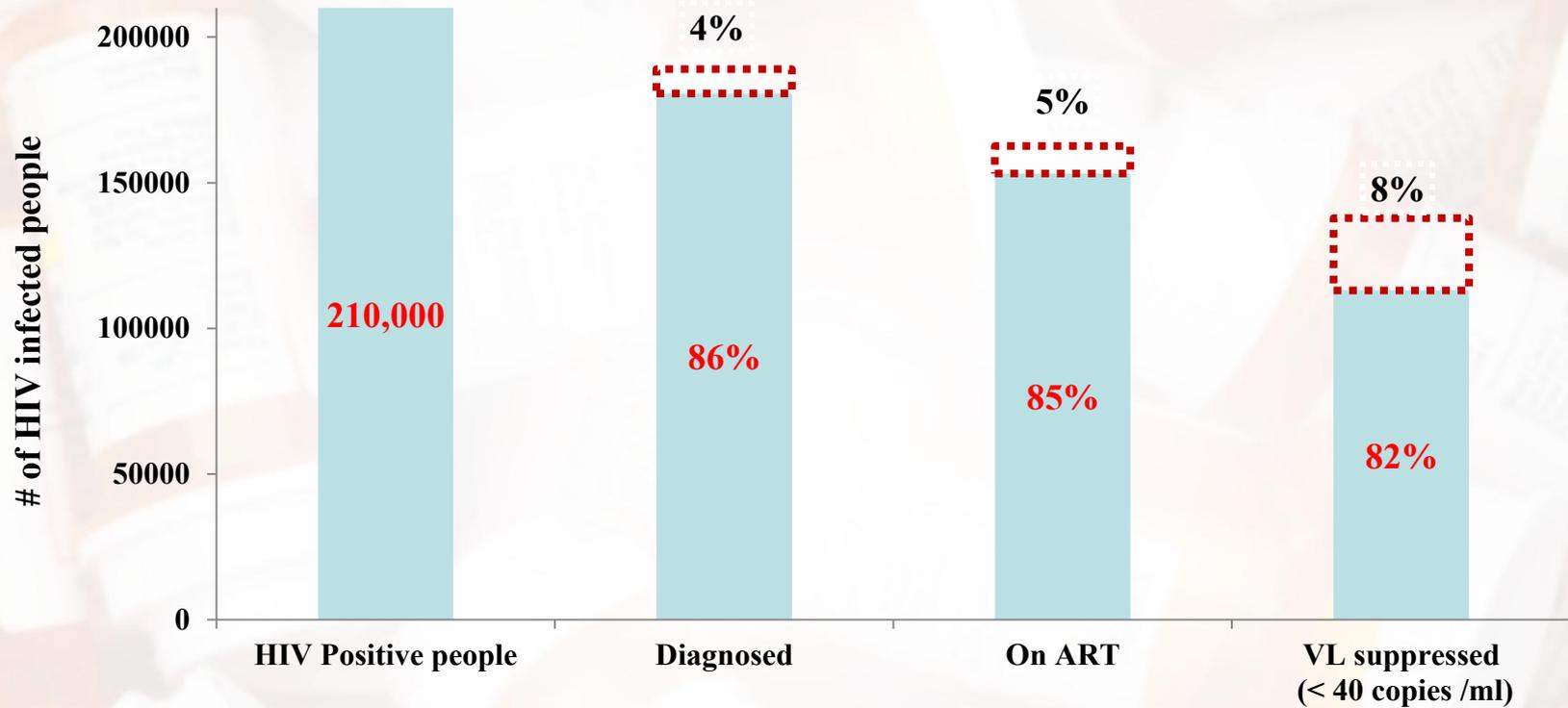
Global 90-90-90 Targets & Current Status



*McMahon et al. 2015, estimates for LMIC for intention-to-treat



Rwanda's Progress Towards 90-90-90



¹ Nsanzimana et al, *The Lancet HIV* feb 2015

² Drug Resistance Monitoring in selected sites, 2013

³ HMIS, June 2015

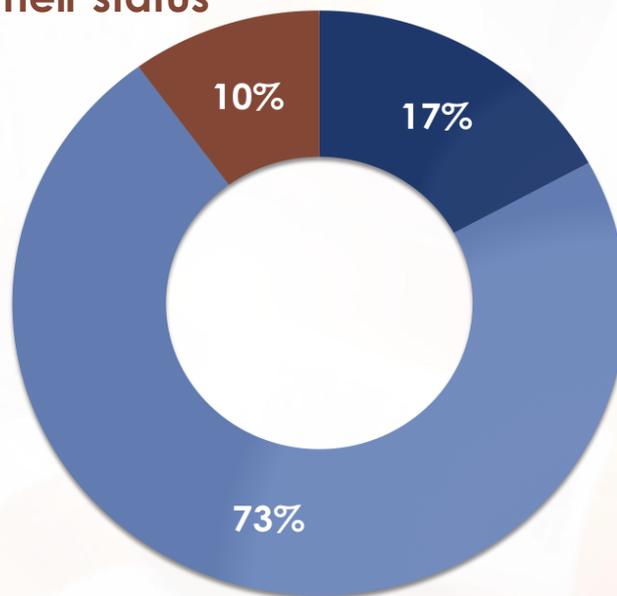


Target coverage in HIV program

Under **test and treat**

90-90-90 Target of 90% of PLHIV know their status

Aim to enroll ~36,000 people on ART, mainly from current Pre-ART patients¹



■ Enroll on ART ■ Already on ART ■ HIV+, not enrolled

Sources: ¹TracNET data on current program enrollment



WHO recommends to treat all HIV+

What next ?

- How much?
- Can we afford?
- How can we operationalize the new recommendations?
- How can we retain patients in care (especially healthy patients)?
- How can we measure the benefits and impact?



Can Rwanda afford Test and Treat ?

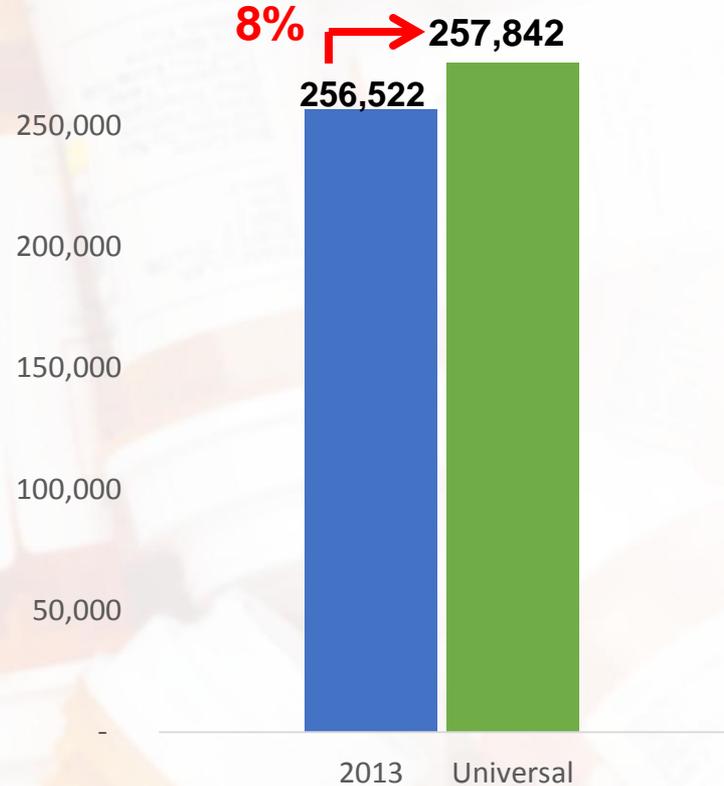
What are the benefits?



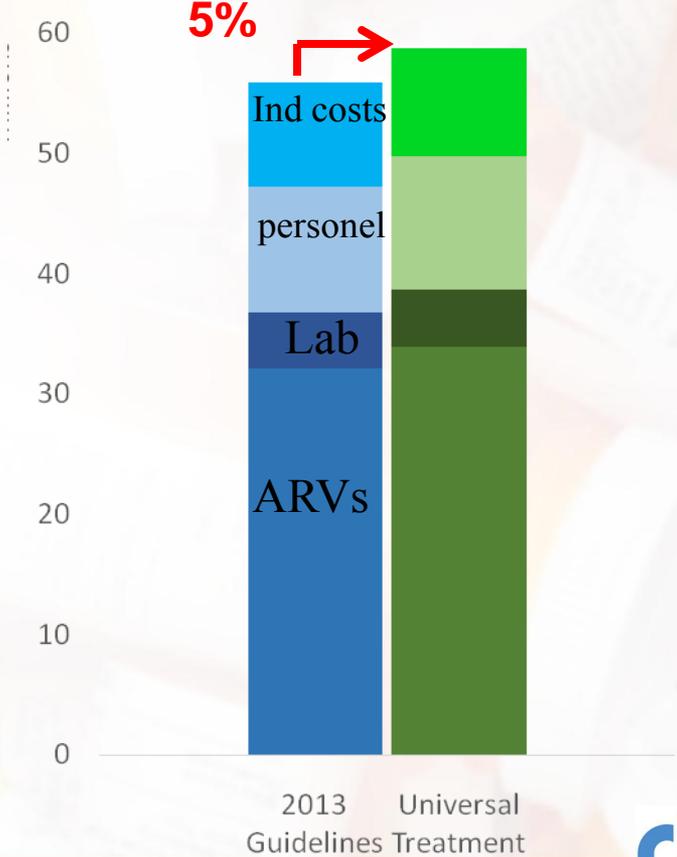
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Early analysis shows in Rwanda, Test & Treat could bring an additional 8% of patients on treatment, with a 5% increase in funding need

Patient Numbers in 2020 at 95% coverage



Cost of ART in 2020 at 95% coverage



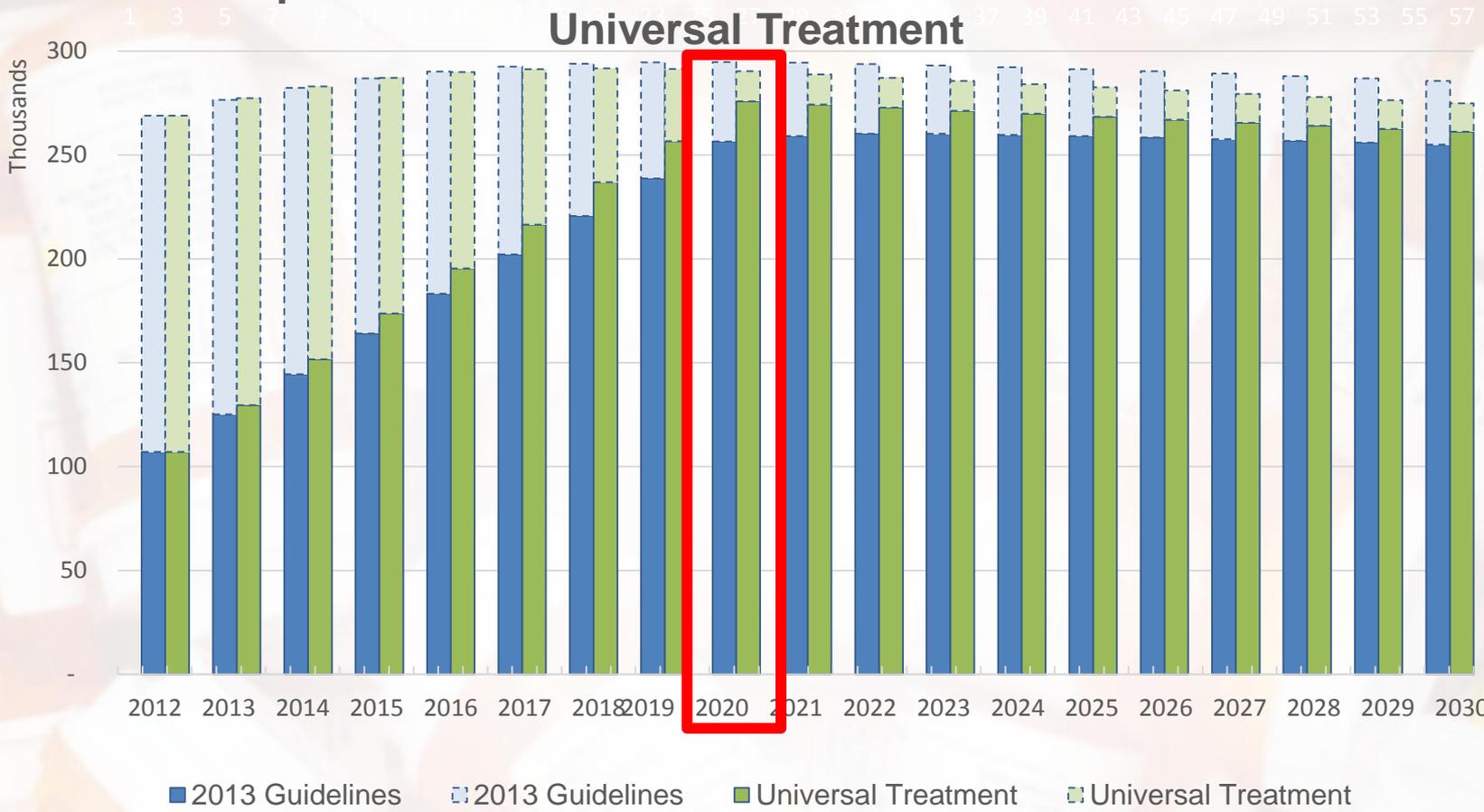
Source: ¹Epi Estimate RBC, 2014



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Early analysis into Universal Treatment in Rwanda suggests a reduction in the number of PLHIV by 2020

Epi Estimates of PLHIV under 2013 Guidelines vs Universal Treatment



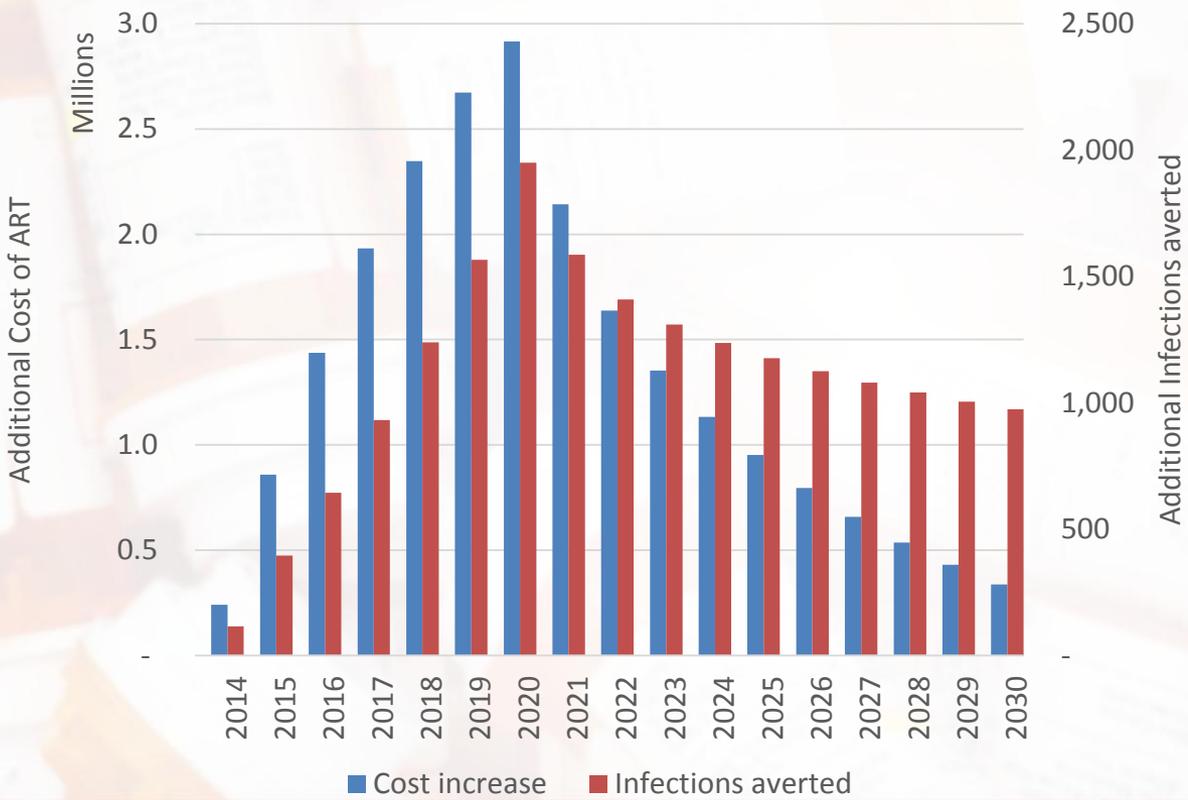
Source: ¹Epi Estimates RBC, 2014



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By adopting Test and Treat, Rwanda may be able to avert 17,800 more infections than under the 2013 Guidelines

Incremental Cost and Impact of Moving from 2013 Guidelines to Universal Treatment



Average additional annual costs for ARVs and labs = \$ 1.4 million p.a

Additional Infections Averted by Scaling Up 17,800

SAVING: 1st line ARV costs for 17,800 people = \$3.5 million a year



Challenges remaining

Funding reduction to support programs:

~40% of external HIV funding declined in 4 years
mainly from the GF and PEPFAR is a major barrier
to end AIDS



Conclusion

It is possible to see the end of AIDS from Rwanda



- With strategic use of resources
 - Simplifications of models of care
 - Ending AIDS is no longer dream
- “La bataille n ‘est pas encore finie”**

Acknowledgements

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The courage of our convictions

