

VMMC Age and Geographic Prioritization

Dr. Katharine Kripke
Avenir Health

**Satellite Session AIDS 2016: Voluntary Medical Male Circumcision
(VMMC) as Primary HIV Prevention: Maximizing Our Investment and
Considerations for Sustainability**

Durban, South Africa

18 July 2016

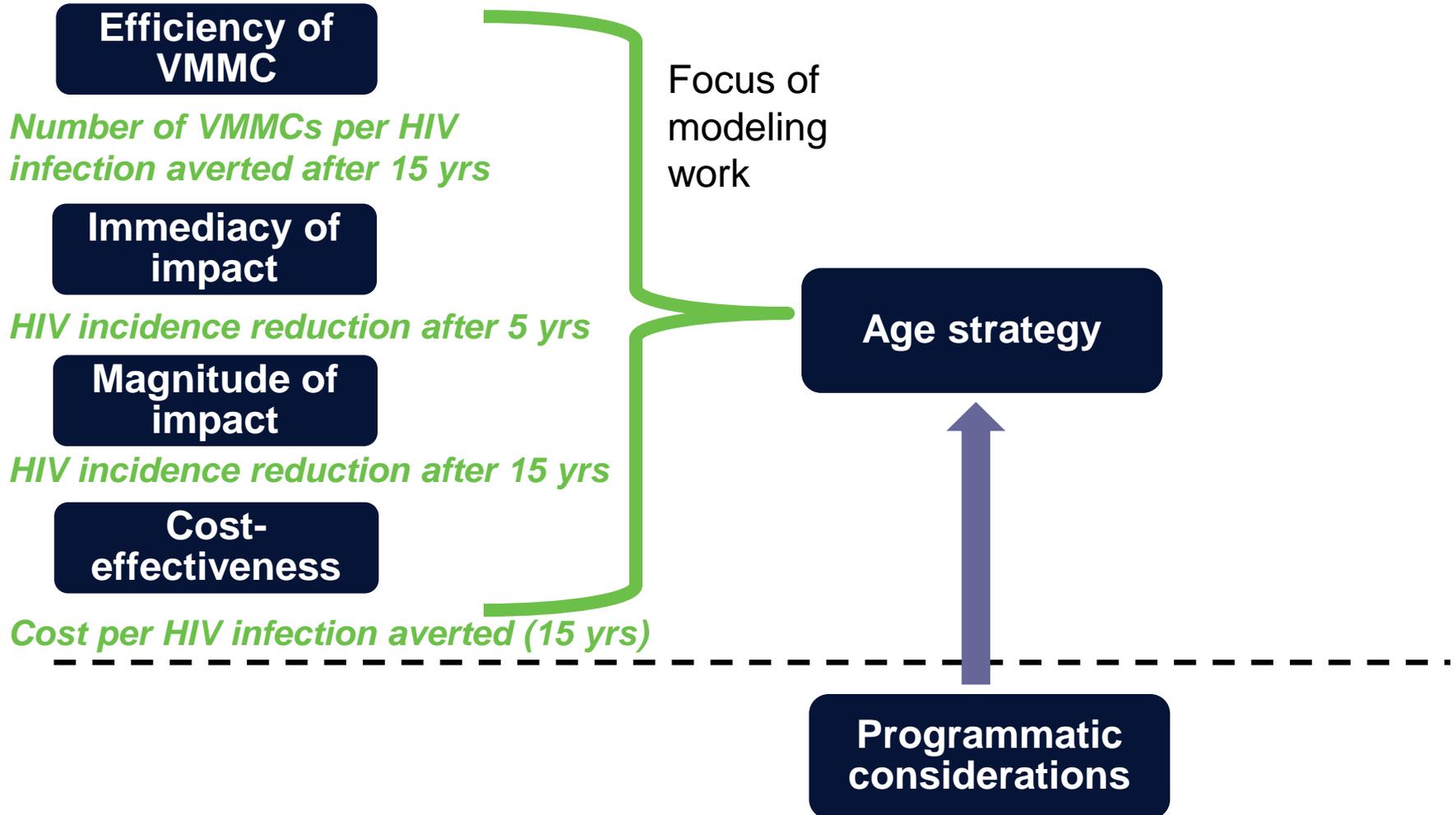


USAID
FROM THE AMERICAN PEOPLE



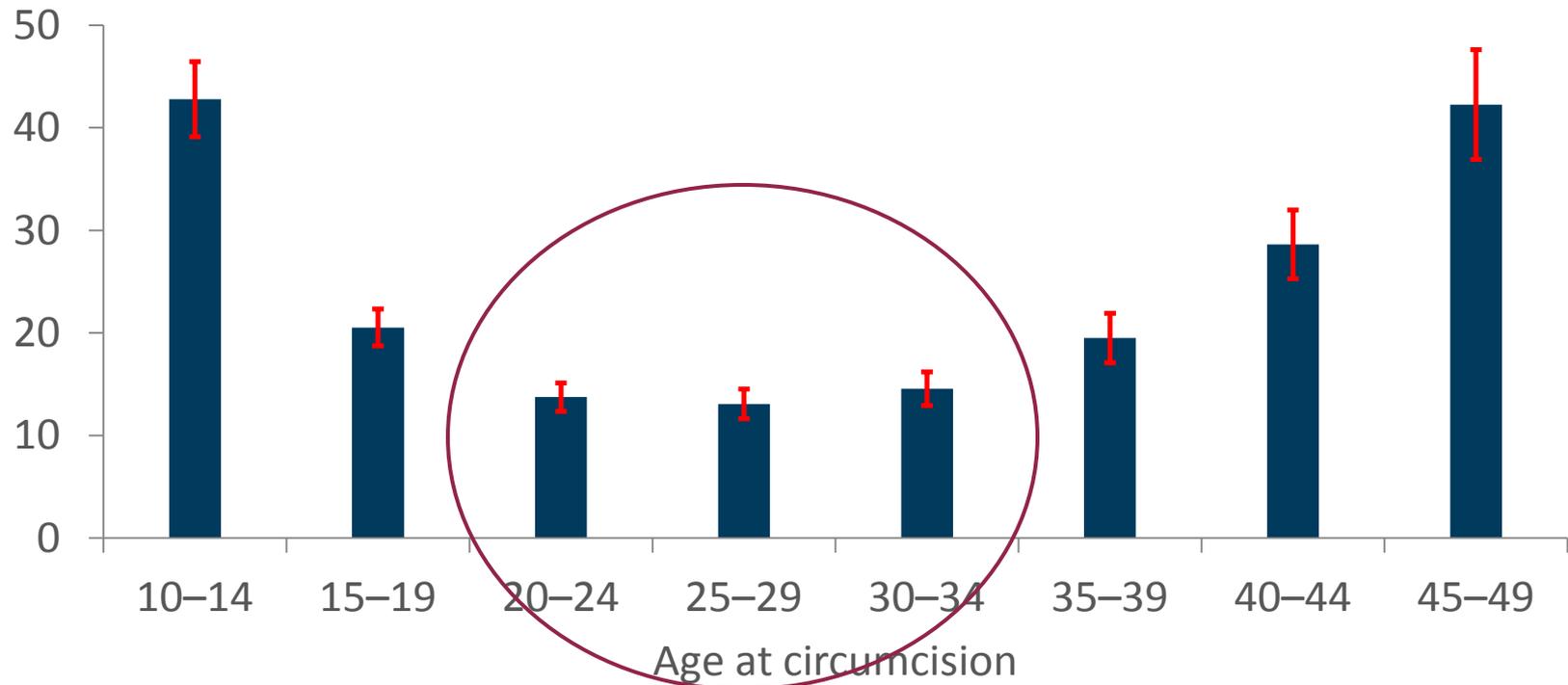
AGE PRIORITIZATION

Logic-tree applied to address the value of age-specific targeting

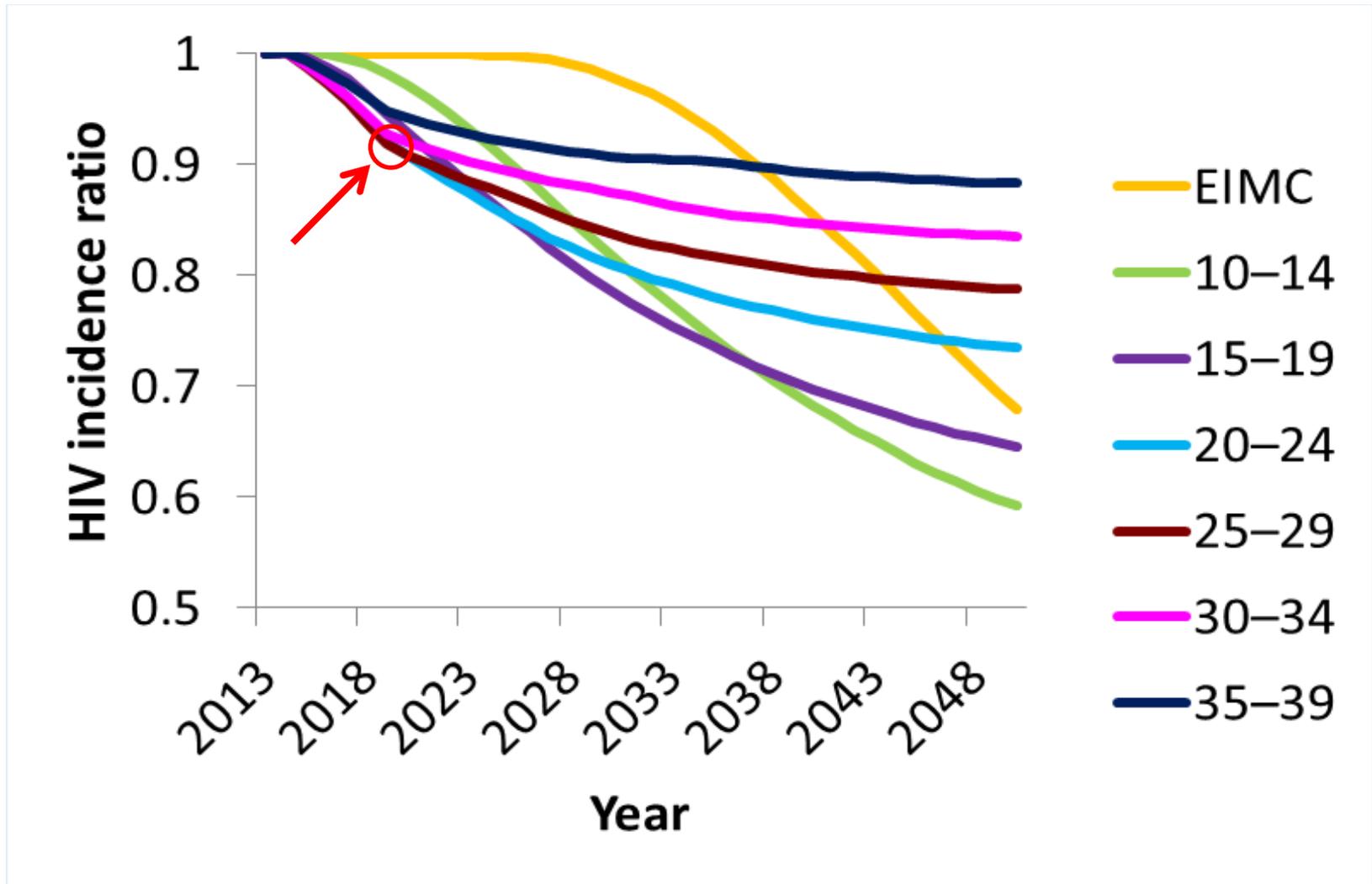


South Africa: Efficiency of VMMC, age-specific targeting

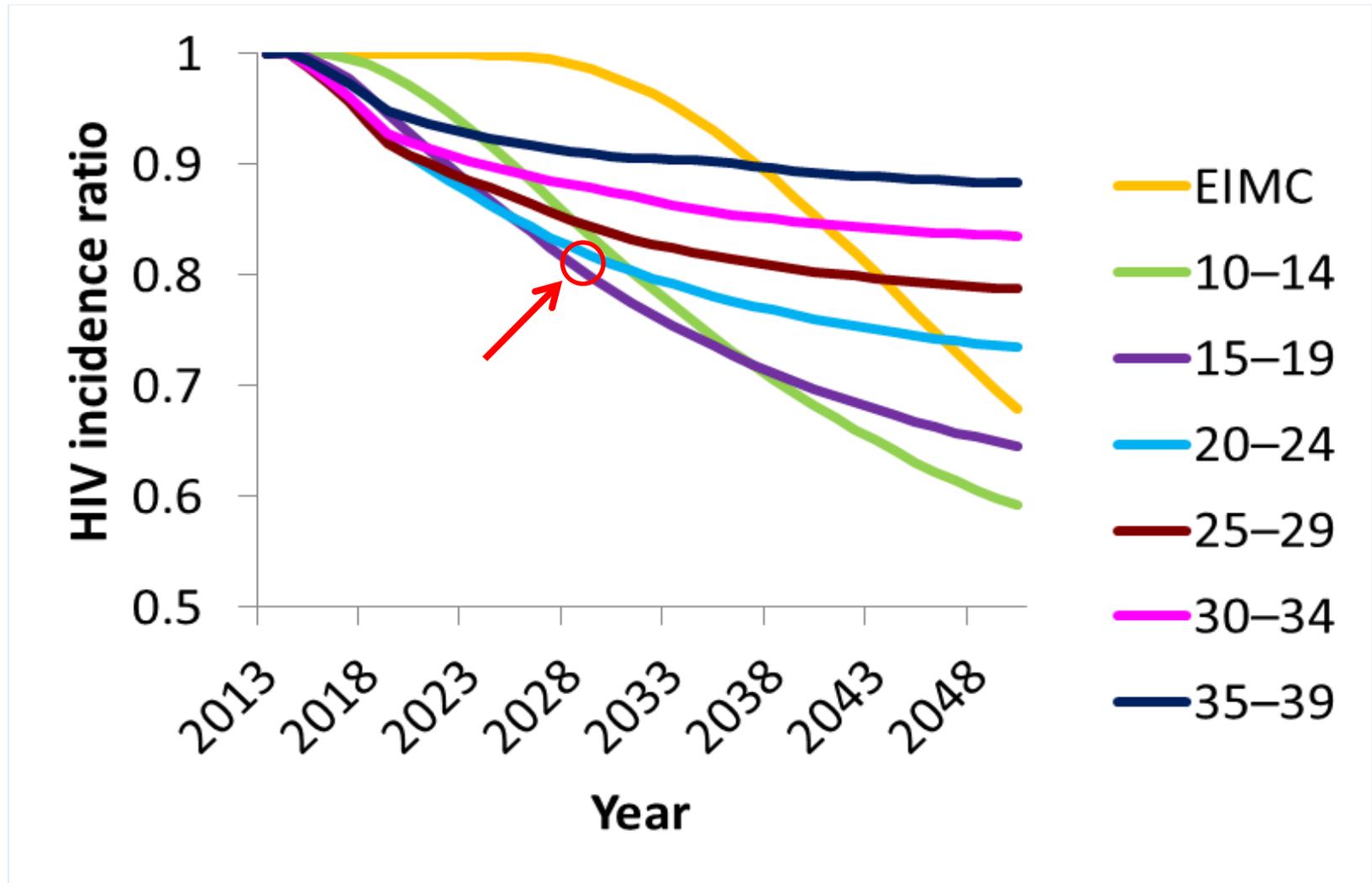
VMMC per infection averted, 2013–2028



South Africa: Fastest incidence rate reductions (IRR) achieved by circumcising the 20–34 age group

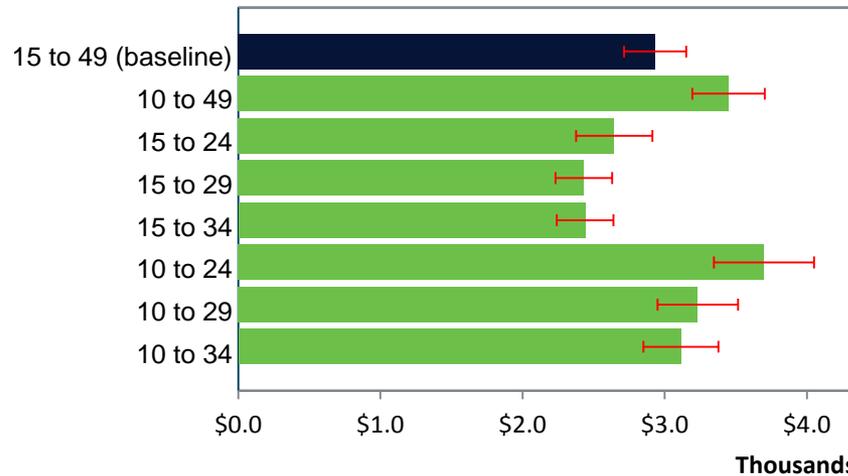


South Africa: Highest magnitude reductions are achieved by circumcising the 15–24 age group

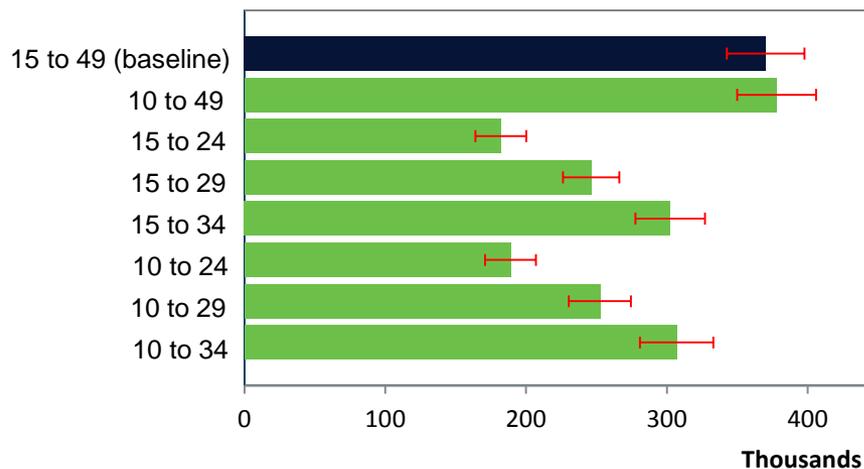


VMMC impact and program cost, South Africa

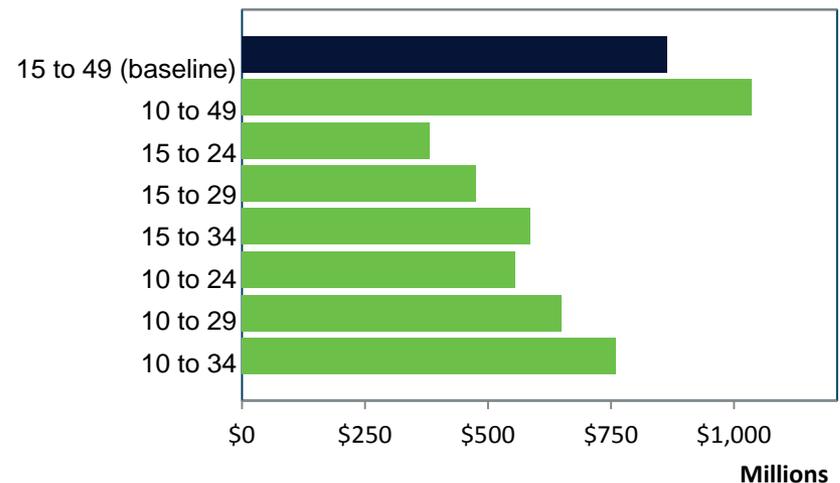
Cost per HIV Infection Averted



HIV Infections Averted

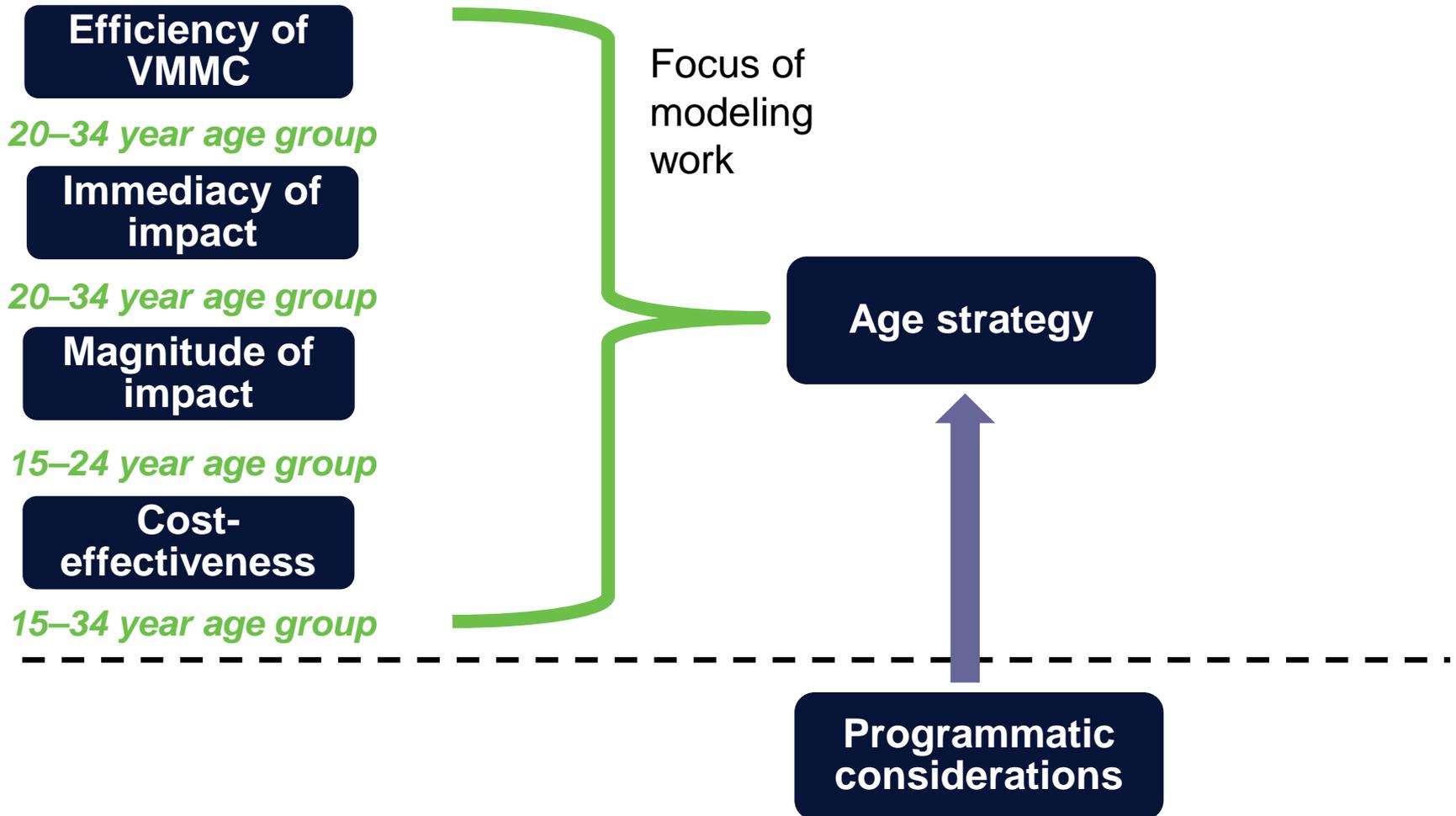


Total Cost (2014–2028)

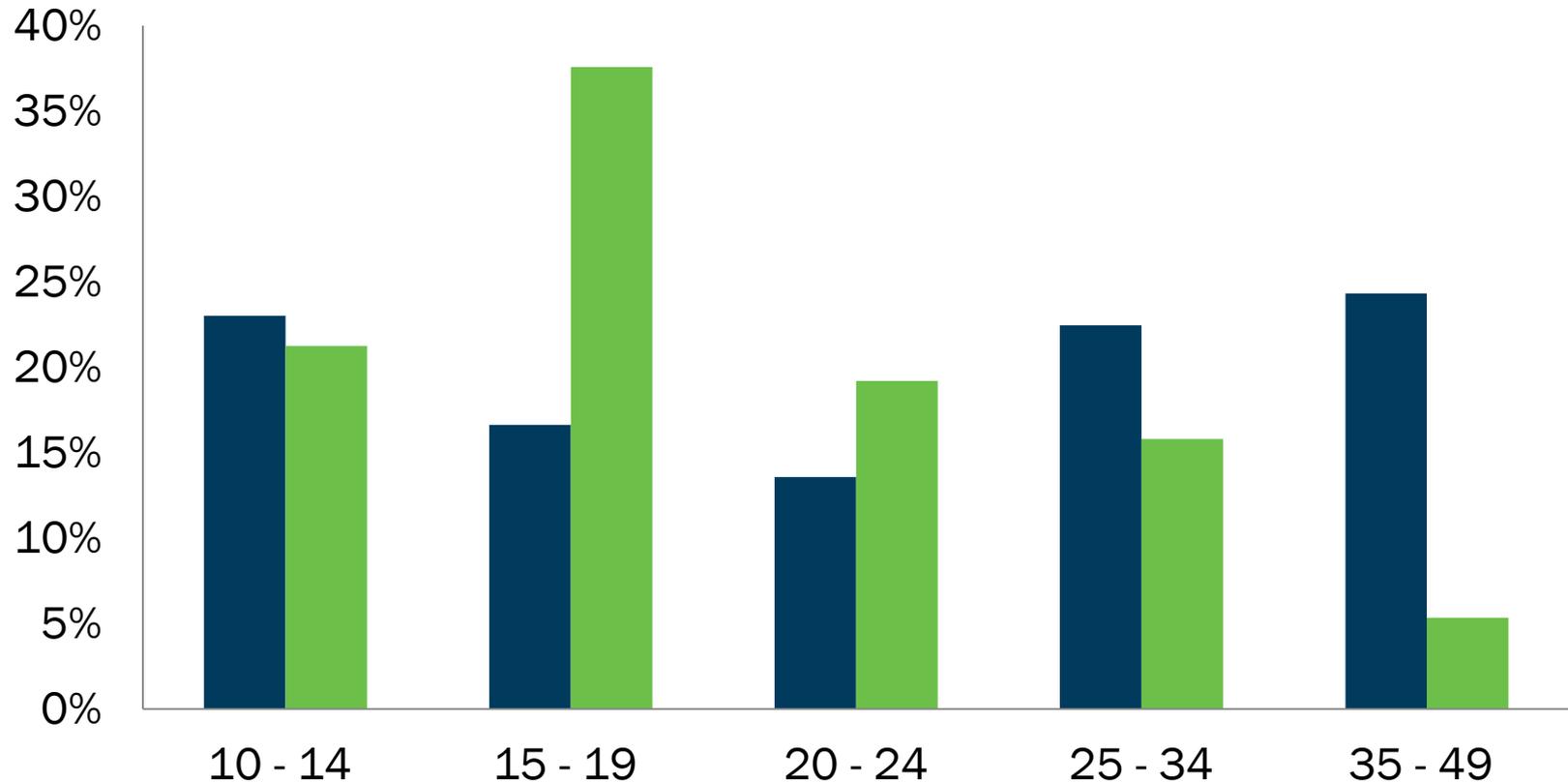


Source: DMPPT 2.0 modeling

Logic-tree applied to address the value of age-specific targeting



Adolescents represent a large percentage of the clients circumcised (PEPFAR 2010–2014 data, South Africa)



- percent in age group among uncircumcised men ages 10-49
- percent of clients in age group among those reached in 2012

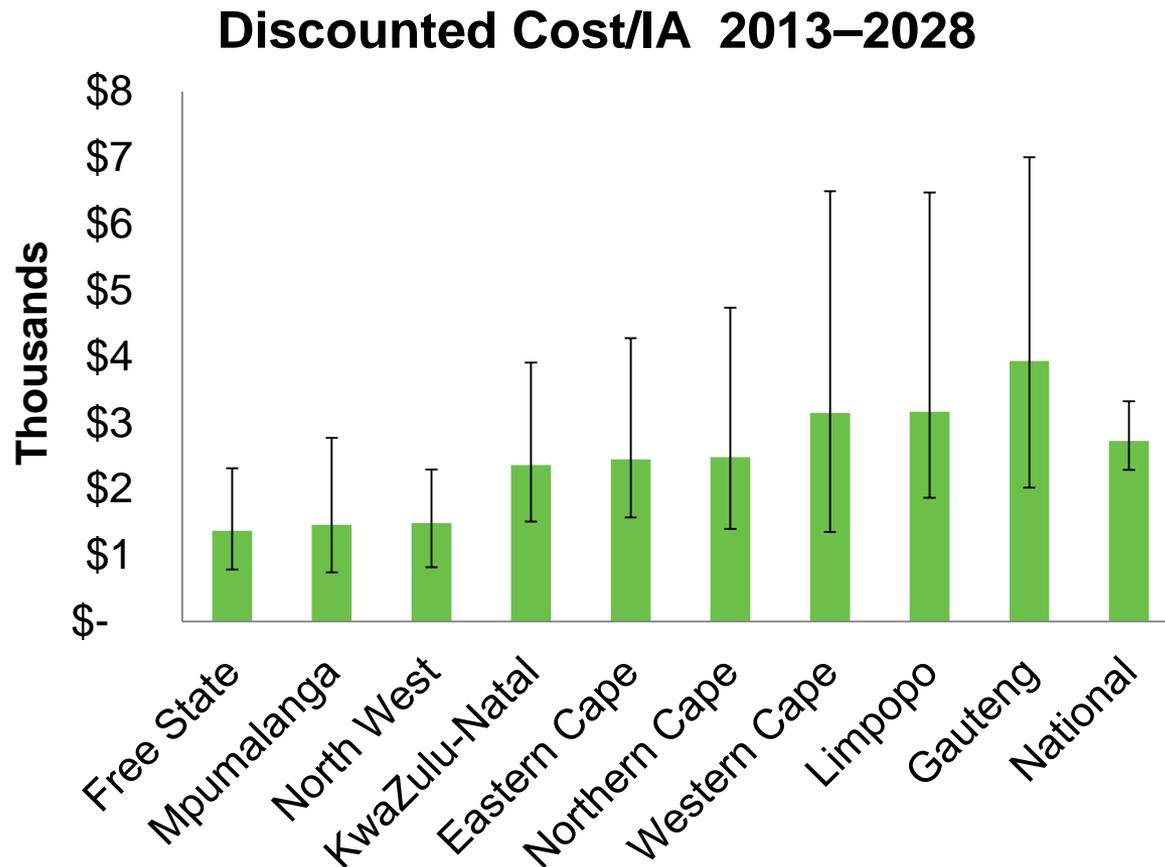
Age prioritization across countries

INDICATOR	LESOTHO	MALAWI	MOZAMBIQUE	TANZANIA	SWAZILAND	SOUTH AFRICA	UGANDA
VMMC/IA	20–34	20–34	20–34	20–34	15–34	20–34	20–34
Immediacy of impact	20–29	20–34	20–24	20–34	20–29	20–34	20–34
Magnitude of impact	15–24	15–24	10–24	10–24	15–29	15–24	10–19
Cost-effectiveness	15–34	15–34	15–34	15–34	15–34	15–34	15–34
New country age target	TBD	10–34	TBD	10–34	10–34*	TBD	10–34

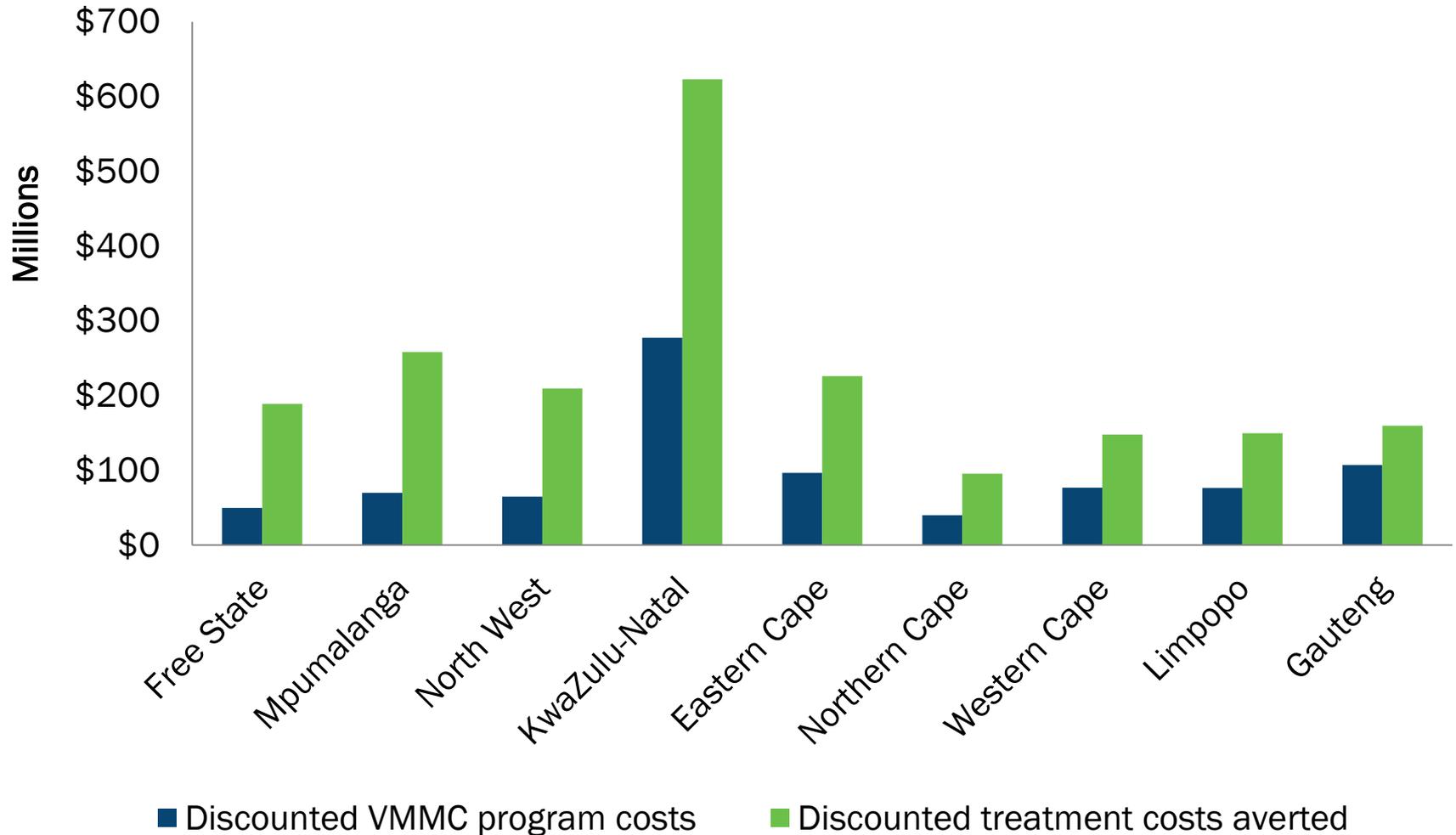
*50% coverage for neonates, 80% among males ages 10–29, and 55% among males ages 30–34

GEOGRAPHIC PRIORITIZATION

Discounted cost/infection averted, South Africa, 2013–2028



VMMC program in South Africa is cost-saving in all provinces



Source: DMPPT 2.0 modeling

Summary

- Age analyses
 - Greatest immediate (5 year) impact is achieved by circumcising males ages 20–29 or 20–34
 - Greatest impact over 15 years is achieved by circumcising males 10–19, 10–24, 15–24, or 15–29, depending on the country. Most common were 10–24 and 15–24.
 - Greatest cost-effectiveness after 15 years is achieved by circumcising males ages 15–34. If costs progressively increase by client age, this changes to 15–29.
- Geographic analyses
 - VMMC is projected to be cost-saving across all regions in Uganda, South Africa, and Tanzania.
 - In Malawi, VMMC is projected to be cost-saving in the South Western and South Eastern Zones and much more cost-effective in urban than in rural areas.

Acknowledgements

- The figures in this presentation are from several manuscripts published in PLOS One as part of a collection on VMMC modeling and costing.
- Katharine Kripke, Avenir Health, conducted these analyses in collaboration with the Ministries of Health and PEPFAR country teams of each country.
- This work was supported by PEPFAR through USAID under the Health Policy Project and Project SOAR.
- The DMPPT 2.0 model was developed by John Stover, Avenir Health, with the support of PEPFAR through USAID under the Health Policy Project



Thank You

Project SOAR (Cooperative Agreement AID-OAA-14-00060) is made possible by the generous support of the American people through the United States President's Emergency Plan for AIDS Relief and the United States Agency for International Development (USAID). The contents of this presentation are the sole responsibility of the SOAR Project and Population Council and do not necessarily reflect the views of USAID or the United States Government.

Through operations research, Project SOAR will determine how best to address challenges and gaps that remain in the delivery of HIV and AIDS care and support, treatment, and prevention services. Project SOAR will produce a large, multifaceted body of high-quality evidence to guide the planning and implementation of HIV and AIDS programs and policies. Led by the Population Council, Project SOAR is implemented in collaboration with Avenir Health, Elizabeth Glaser Pediatric AIDS Foundation, Johns Hopkins University, Palladium, and The University of North Carolina.

