

Appendix S1 – Reflexivity Statement

1. How does this study address local research and policy priorities?

HIV/AIDS is an issue of urgent importance in Eswatini, which has one of the highest HIV prevalence in the world. New HIV infections amongst young women is of particular concern: this study addresses a new way in which HIV infections in this most vulnerable population can be overcome. Preventing HIV infections amongst young women and adolescent girls is a national HIV priority for the Government, and researching new ways to avoid new infections in this population, is a national research priority for Eswatini.

2. How were local researchers involved in study design?

As one integrated research team led by 3 co Principal Investigators, one of whom was from Eswatini, local researchers were involved from the start in literature review and brainstorming research design options, as well as the selection of and amendments to the research design.

3. How has funding been used to support the local research team?

This was a joint research project of ‘real-life’ impact (i.e. intervention implementation in typical real-life settings through the implementation mechanisms that would typically be deployed): the research partners were the World Bank, and staff from the Eswatini National Emergency Response Council on HIV/AIDS and the Eswatini Ministry of Education and Training. The local research teams from the Eswatini National Emergency Response Council on HIV/AIDS and the Eswatini Ministry of Education and Training – already employed by these two institutions -- were supported through training and capacity building opportunities on topics such as local research design, research implementation management, ethics and informed consent statements, and data analytics. When they travelled, their travel expenses were covered on a reimbursable basis.

The local research team at the Institute for Health Metrics (IHM) were financed through their institutions (regular salary cost) to participate in all aspects of study implementation.

4. How are research staff who conducted data collection acknowledged?

Research staff who conducted the data collection are mentioned in the acknowledgements section of the paper.

5. Do all members of the research partnership have access to study data?

Yes, all members of the partnership have access to data.

6. How was data used to develop analytical skills within the partnership?

Two workshops were held where the research team was given a biostatistics refresher course and a STATA skills building course to ensure that researchers would all be able to participate in data analysis. Furthermore, a list of secondary analysis / research questions was brainstormed and researchers were each invited to be a first author of one academic paper. Data analysis capacity building was offered on an individual basis for those who wanted to lead writing academic papers.

7. How have research partners collaborated in interpreting study data?

Once the endline data were collected, a five-day workshop was held in Eswatini where the data cleaning strategy was discussed, data were cleaned, the data analysis strategy was discussed and agreed on, and dummy data tables were developed. Once data were cleaned, further workshops and technical discussions were held in Eswatini to analyse and interpret data together, to form conclusions about the study outputs.

8. How were research partners supported to develop writing skills?

More senior members of the research team supported more junior members. A specialist writing expert also came to support the team through ongoing capacity building to ensure that research writing skills were developed. A writing workshop was held in Eswatini to support local partners on writing scientific research papers.

9. How will research products be shared to address local needs?

Once the research results have been published academically, a research dissemination plan – which was developed early on in the study – will be implemented. It will include policy briefs, technical reports and program recommendations. At that time, study results would also have even been shared with Eswatini's Prime Minister and cabinet and other government ministries, and recommendations on implementation made.

10. How is the leadership, contribution and ownership of this work by LMIC researchers recognised within the authorship?

Of the 16 co-authors, 11 are based in LMIC countries. One of the three study Principal Investigators is from Eswatini. All contributions from LMIC researchers are recognized through their involvement in study implementation (weekly implementation meetings), their involvement in and analysis of data, and their co authorship of the paper.

11. How have early career researchers across the partnership been included within the authorship team?

We have included early career researchers (TC, VT and LS) within the authorship team. They supported different aspects of study design and implementation, attended all the workshops, contributed to the literature review and evidence synthesis, supported data analysis and interpretation, and the development of study of conclusions.

12. How has gender balance been addressed within the authorship?

Six authors, including the first author, are female (MG, TD, TC, WH, LD, GM) and the other 10 authors are male.

13. How has the project contributed to training of LMIC researchers?

The project has invested heavily in building capacity of research field staff and program staff in data interpretation and analysis and in research implementation processes. Four 5-day workshops took place in Eswatini over the three-year study period and technical advisory staff visited Eswatini at least monthly to provide technical assistance and support.

14. How has the project contributed to improvements in local infrastructure?

This project has not directly contributed to improvements in local infrastructure, except IT infrastructure, where the project has provided a server and laptop computers (tablets) for future data collection efforts.

15. What safeguarding procedures were used to protect local study participants and researchers?

Safeguarding procedures included: (a) obtaining informed consent and assent of all study participants; (b) creating a dedicated study helpdesk where study participants could lodge grievances and choose to withdraw from the study, as needed; (c) a dedicated partnership with SWAGAA (Swaziland Action Group Against Abuse) where participants and study staff could be referred to counselling services in the case of possible abuse or gender based violence; and (d) the World Bank's Inspection Panel as part of the World Bank's Grievance Redress System, where complaints against World Bank projects can be lodge (none were lodged for this project).