

Supplementary file – Reflexivity Statement

Study Conceptualisation

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

This study was co-produced by the KEMRI-Wellcome Trust, a research organization in Kenya and the Ministry of Health (MOH) Kenya, based on a need expressed by the MOH for evidence to inform the country's COVID-19 response. Co-authors KK, PA, WN, MM, RA are policy makers based at the MOH. The study specifically addresses the singled-out country priority for evidence to inform its COVID-19 vaccination strategy.

2. How were local researchers involved in study design?

The design of this study was primarily led by local researchers with EB as the senior researcher, and SO and JO leading the implementation of the design by developing the economic and epidemiological models respectively.

Research management

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

Funding for this work has supported SO's PhD studentship, and CO's post-doctoral training, both based at the KEMRI-Wellcome Trust Research Programme. SO's PhD studentship is supervised by EB & JO, while CO's post-doctoral training is supervised by JN.

Data acquisition and analysis

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

All research staff that conducted data collection for this work have also been involved in the analysis of the data and manuscript writing and have hence been included as co-authors.

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

All members of the partnership have access to data.

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

SO and CO, both based at KEMRI-Wellcome have developed analytical skills in cost-effectiveness analysis using dynamic transmission models. Research members have worked collaboratively as a modelling team facilitating the sharing of skills across the multidisciplinary team members.

Data interpretation

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

Research partners have set up a modelling team led by KEMRI-Wellcome Trust, that formally holds working meetings twice a week. These meetings have been used to jointly formulate research questions, deliberate and agree on analytical approaches, provide support implement the agreed on analytical approach, to provide internal review of preliminary analytical outputs, and contribute to manuscript writing.

Drafting and revising for intellectual content

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

The research team is comprised of several senior scientists with established writing skills. These scientists worked with earlier career staff to support the writing.

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

Findings from this analysis have been disseminated locally, regionally, and internationally through presentations, and have been shared with MOH policy makers in the form of a policy brief. There has also been media engagement.

Authorship**1. How is the leadership, contribution and ownership of this work by LMIC researchers recognised within the authorship?**

The majority of the co-authors in this manuscript are LMIC researchers. The joint lead authors (SO and JO), as well as the senior author (EB) are all LMIC researchers.

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

The authorship team includes several early career researchers. SO (who is the lead author), AK, and MO are PhD students.

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

Eight authors (SO, CO, AK, RA, SU, LOO, MM, WN) are female, while 17 are male

Training**1. How has the project contributed to training of LMIC researchers?**

Funding for this work has supported SO's PhD studentship, and CO's post-doctoral training, both based at the KEMRI-Wellcome Trust Research Programme. SO's PhD studentship is supervised by EB & JO, while CO's post-doctoral training is supervised by JN. This project has been part of the training for SO and CO.

Infrastructure**1. How has the project contributed to improvements in local infrastructure?**

This project has not directly contributed to improvements in local infrastructure.

Governance**1. What safeguarding procedures were used to protect local study participants and researchers?**

There was no primary data collection as part of this project, therefore this question is not directly applicable.