Appendix S1 – Reflexivity Statement

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

The current study was designed to respond to the healthcare delivery problem identified through our previous research in that community. We identified patient hardships in post-discharge follow-up care due to high cost of transportation, long distance travels, and poor provider-patient communication at health facilities. In Rwanda, the government has prioritized growth in the telecommunication sector, including granting tax-exemptions for telecommunications equipment and devices. The cornerstone of the Rwandan health system, community health workers (CHWs) have been critical to the reduction of maternal and child mortality and are considered key to new health initiatives accessing rural parts of the country. Recently, the availability of locally manufactured smartphones has encouraged efforts to expand the use of mHealth by CHWs to report prioritized health events. This convergence of policy prioritization, resource infrastructure, and patient need led to our current area of research focus: to explore how telemedicine advances available in high-income countries can be replicated in the rural Rwandan setting, specifically how telemedicine could be used to facilitate CHW-based follow-up care for women who undergo caesarean section.

2. How were local researchers involved in study design?

This study involved local researchers with various levels of training and experience as well as researchers from the United States, Germany, and Sweden with experience in designing, leading, and organising international research collaborations that involve low- and middle-income countries. The research question that prompted this study – the prevalence of surgical site infections in rural district hospitals – originated from an ongoing national operation research training in Rwanda [1]. This year-long research capacity-building course is part of a decade-long partnership between Partners In Health/Inshuti Mu Buzima (PIH/IMB), Harvard Medical School, and Brigham and Women's Hospital with aim of building local capacity in implementation research. The Intermediate Operational Research Training (IORT) [1] were led by BH and RR. TN, AN, LB, and JN are also local co-authors who participated in the program as trainees and later as mentors (TN, AN). At the time of the study, FK, a Rwandan epidemiologist and medical doctor, was head of research at IMB, a Rwandan-based NGO focused on supporting the government's public health priorities including support of the district hospital where the study took place. FK served as a co-Principal Investigator on this study along with BH and RR. The local researchers were involved from the earliest stages of study's development, including problem identification; the generation of the research question, study objectives, and hypothesis; and the study design. They were also key to guiding study implementation and data analysis. EG is the national [Rwanda] coordinator of eHealth and was involved as a policy maker and expert in the mHealth field. On the other side, WW, LV, EM, AM are developing their global health experience and leverage this study implementation to that effect. SJK and BH are his mentors and academic supervisors of TN's doctoral project and mentored him through this project and beyond.

[1] Odhiambo J, Miller AC, Nyirahabimana N, et al. Implementation, Outputs, and Cost of a National Operational Research Training in Rwanda. Ann Glob Health. 2020 Aug 5;86(1):93. doi: 10.5334/aogh.2933. PMID: 32832387; PMCID: PMC7413170.

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

This project had a capacity building component including the training of junior researchers through the IORT. BHG and other faculty who supported the one-year operational research course did so unpaid. AN, LB, and JN were among trainees of the cohort of IORT where they led their first papers. Funding from this study was directly used to support tuition at graduate degree programs for several local study team members. The study also directly funded the salaries of the data collectors, study coordinator, site PI (FK), and community health workers involved in the study. Particular to TN, the first author, in the duration of his participation in this study, he transitioned from a study coordinator and research trainee to a research mentor and doctoral candidate with more than twenty peer-reviewed publications. The data from this project were used in current paper is part of his doctoral thesis pursued at Technical University of Munich.

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

Research staff who conducted data collection and administrative work were already part of the research team and contributed to this manuscript as prescribed by the International Committee of Medical Journal Editors (CMJE) authorship criteria. Only the community health workers are not included in the author list given their educational limitation. Thus, they were acknowledged in this manuscript. Our research team has engaged with the study community health workers on non-traditional publications, including a presentation at a global health conference that was unfortunately cancelled due to the COVID-19 pandemic.

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

All members of the partnership have access to data.

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

The local team benefited from the skills transfer in aspects of data cleaning and analysis. Through the IORT, local authors had opportunities to analyse the subsets of this larger study for their led papers under mentorship of BH. Particular to this paper, the data analysis was led by TN and involved the local researchers under mentorship of BH and SJK who are Biostatistician and Epidemiologist respectively.

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

The study team had bi-weekly conference calls to brainstorm the development of the manuscript and discuss findings. Co-authors were paired and given study-related tasks to accomplish ahead of the subsequent conference call when they have to report to the study team. All co-authors contributed in the drafting and reviewing of the manuscript including literature review that was essential to the interpretation of this study findings.

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

The risk of parachute research was excluded through ongoing research training series and through the research policy implemented by PIH/IMB whereby every research should equitably involve local researchers for the aim of ownership and capacity building. For this purpose, in addition to contributing to the literature review, data management and manuscript writing and review of current study; three local authors (AN, LB, JN) led separate papers nested under the current study dataset, involving high-income country researchers with extensive or ongoing experience as part of the IORT.

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

The research findings were shared on ongoing basis with institutions where the study took place, namely Kirehe District Hospital and Partners in Health/IMB. From the design though implementation this study was discussed with officials at the Rwandan Ministry of Health and the national coordinator of eHealth desk is involved as author in the entire project. The paper will be published as open access so that it can be accessed by local readers, scholars and policy makers. Additionally, the research brief will be shared with the Ministry of Health along the published copy of this paper for policy action.

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

TN, the first author led the whole manuscript development and writing and other local researchers (AN, FK, LB, JN, and EG) actively contributed in its design and development, which resulted into their authorship on this manuscript. However, we acknowledge that the authorship balance slightly bends toward high-income. The reason for this is that the participating institutions such as Harvard Medical School and Brigham Women's Hospital, were recipient of the funding source; and the Technical University of Munich where TN pursues his doctoral studies SJK is his university-based academic supervisor. Further, senior authorship falls to BH the mentor and co-principal investigator who supervised the overall project.

Authors RM and NO worked as part of the senior authorship team in developing this manuscript, and their contribution has been recognised as joint first and joint last authors respectively. We have specifically included researchers based in the global south (RM and NO) within the senior authorship team as joint first and joint last authors. We acknowledge, however, that the authorship team is predominantly based in high-income countries. The primary reason for this is that the initiative has been driven from the perspective of journal editors with insight on how to develop transparent and implementable guidelines to assess manuscript submissions from international partnerships.

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

We have included early career researchers (AN, LB, JN, & EG) within the authorship team. They attended all the conference calls, and actively contributed to the literature review, data

collection, cleaning and analysis, findings interpretation, and to development and review of the manuscript.

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

The gender is well balanced within the authorship. Seven authors are male (TN, FK, RR, LB, JN, AM, EG) and seven authors female (WW, AN, EM, LV, ASG, SJK, BH).

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

The project funds were used to cover all logistics and administrative costs of the IORT that trained LMIC researchers and the doctoral thesis for TN through which he benefited from mentorship and coaching from senior researchers from high-income countries. The authorship team ensured fair balance among researchers with senior and junior experience and from both high-income and low- and middle-income countries.

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

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

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

All study procedures and methods were carried out in accordance with relevant guidelines and regulations, and in local language. This included advising study participants about aims, procedures, benefits and risks, and informed them about their rights, including their right to withdraw at any time. we protected patients' privacy by anonymising their data and storing them in encrypted study devices. This study protocol was reviewed relevant scientific and ethical bodies from Rwanda and USA and approved its procedures ahead of its implementation. Further, we have consciously considered the issue of safeguarding and parachute research through the entire project and within this manuscript.