

Study Title: Understanding maternity care providers' use of data in Southern Tanzania

Structured Reflexivity Statement

Area	Question	Answer
Study conceptualization	How does this study address local research and policy priorities?	The Tanzanian Government is dedicated to scale up digitalization of health care and improve health care data quality and use. It is one of the few countries in the region with an established road map and an enterprise architecture for digitalization with the aim to strengthen health data collection and the health system itself. Several local studies from Tanzania hint at pertinent issues with data quality and use for HMIS data and policy makers at district, regional and national level are keen to gain a better understanding that informs behavioral and policy approaches to improve these. On the other hand, our previous research suggests that health care providers often feel disempowered to use the data they generate. Participants during our co-design workshops conducted under the overall ALERT project told us, that they often feel overburdened and find it difficult to fit documentation into their workflow. Understanding data needs of the user group generating primary data can inform further research and policy making towards an efficient high quality health information system in Tanzania.
	How were local researchers involved in study design?	Our research team consists of a variety of members from high income (HMA, CH and RU) and institutions from a middle-income country, i.e. Tanzania (ABP, FAA, EM and ZJ). All research team members were involved at different stages of the design, planning and implementation process of this study and the larger study, this research is embedded in. ABP, CH and HMA developed the overall

		proposal for Tanzania. HMA, ABP, FAA and RU developed the topic guide for the overall study and RU for the embedded study on data use with input from FAA and EM.
Research management	How has funding been used to support the local research team(s)?	This embedded study on data use was founded through the overall ALERT project. Funds for this project have been used to support several PhD positions in partner institutions in high, low- and middle-income countries though not in Tanzania.
Data acquisition and analysis	How are research staff who conducted data collection acknowledged?	All data collectors are either co-authors or are acknowledged with their names and contributions.
	How have members of the research partnership been provided with access to study data?	All research team members have access to the data.
	How were data used to develop analytical skills within the partnership?	We conducted frequent peer checks during analysis with a broader group of research team members, where initial coding, focused codes and approaches to the development of categories and the core category as well as theoretical concepts were discussed. During data collection daily de-briefing meetings between data collectors and two online de-briefing meetings with a senior member of the research group (HMA) provided opportunities to discuss emerging concepts and underlying theory.
Data interpretation	How have research partners collaborated in interpreting study data?	RU has performed the initial coding and conducted frequent member checks with FAA, HMA, EM and ZJ at the level of focused coding, category level and around themes.
Drafting and revising for intellectual content	How were research partners supported to develop writing skills?	We conducted the manuscript writing as an open process where the initial draft was developed by RU, on which research team members could comment and also read other research team members' comments to learn. In some instances, individual comments were sought via direct messaging to enable junior team members to gain experience in reviewing and revising a manuscript.
	How will research products be shared to address	Findings will be shared through open access publication, during local

	local needs?	scientific conferences and during stakeholder meetings at hospital, district, regional and national level.
Authorship	How is the leadership, contribution and ownership of this work by LMIC researchers recognised within the authorship?	The authors team includes members with a variety of backgrounds and affiliations: One senior researcher, two mid-career- and one early-career researcher from the Global South affiliated to an organization in the global South (ABM, FAA, EM, ZJ), two senior researchers working at academic institutions in the global North (HMA, CH), one mid-career researcher from the Global North, working in the Global South for an institution of the Global North and affiliated to an institution in the Global South (RU). FAA has an affiliation with an institution in the Global North. Authors' positions for this manuscript were discussed within the team according to contribution to design, implementation, analysis or writing. RU, the first author of this study, is a German national living and working in Tanzania for 10 years with experience in urban and rural health care settings and fluent Kiswahili speaker. She conceived and designed the study, collected data, performed analysis and was responsible for drafting of the manuscript with input from various co-authors and was therefore nominated as first author as part of her PhD thesis. HMA is a Danish national with working experience in various African countries similar to Tanzania. She provided major conceptual and analytical input as well as supporting the drafting of the manuscript and was therefore nominated last author in her role as RU's PhD supervisor. FAA and EM supported data collection and provided peer checks during data analysis and reviewed the manuscript, where FAA played a bigger role. ZJ assisted in data collection, peer checks and reviewed the manuscript. Further information on his role, please see below. ABP and CH are both senior researchers, CH is an editor for a scientific journal. Both

		contributed mainly to the writing process.
	How have early career researchers across the partnership been included within the authorship team?	One member of the research team, ZJ is a young early career researcher. He was mentored by RU, FAA and EM during field work and analysis.
	How has gender balance been addressed within the authorship?	The research team is equally composed with three female and three male researchers from a variety of background. First, second and last authors are female.
Training	How has the project contributed to training of LMIC researchers?	All data collectors received a remote training on research ethics and ethnography as a qualitative method under the ALERT project, which this research is part of. De-briefing sessions were facilitated by senior researchers during data collection. The most junior research team member was mentored by more senior research team members as described above.
Infrastructure	How has the project contributed to improvements in local infrastructure?	The project has not directly contributed to improvements in infrastructure.
Governance	What safeguarding procedures were used to protect local study participants and researchers?	Since health data, data manipulation and data use are sensitive topics we have taken care to anonymize the location and participants as much as possible to avoid associations of participants with quotes or content. During data analysis these topics and their possible consequences were repeatedly discussed, and we took our analysis at category level fitted with quotes back to participants and maternity care providers of the two other hospitals included in the overall study to ask for their opinion. All researchers had ample time to review the manuscript and comment or amend. Where power asymmetries were anticipated, e.g. for early career researchers, one-to-one communication was sought via other media than email or in person.

