

## **Appendix S1 – Reflexivity Statement**

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

The medicines retail sector delivers approximately half of the essential health commodities to those in need in Uganda and is a critical part of the health system in many low- and middle-income settings. The delivery of quality-assured, essential medicines is a key component of the government's health plans. The difficulties of effectively governing drug shops and the role that they should play in providing health care is often the subject of debate at the Ministry of Health and in the national media in Uganda. Understanding the underlying mechanisms that would influence uptake of interventions to improve the function of medicine retail sector and its contribution to achievement of set societal targets is a national priority.

### **2. How were local researchers involved in study design?**

This study was conducted in the context of a long-standing collaboration between researchers and academics at the London School of Hygiene and Tropical Medicine and Makerere University, respectively. The collaboration has conducted research and capacity building activities in drug shops and the medicine retail sector in Uganda since 2011. The late Prof Anthony Mbonye, a co-investigator based in Uganda with a team that included Dr Freddy Eric Kitutu, Ms Sunday Mundua and Ms Lydia Peace Ocheru were involved in development of the proposal for research funding and eventual design of the study. Prof Mbonye had dual assignment as a senior policy maker in the Uganda Ministry of Health and an Honorary Professor at Makerere University School of Public Health. Dr Freddy Eric Kitutu is a senior lecturer at Makerere University and a member of national technical committees on pharmaceutical systems strengthening and occasionally provides technical support to Uganda Ministry of Health. Prof Mbonye's deep concern to facilitate effective, long-term changes in the market underpinned the key questions in this research project. Dr Kitutu took on additional roles as the Ugandan based co-investigator at the start of the data collection process and brought his deep knowledge, experience and scholarship in the medicine retail sector to the study. Dr Eleanor Hutchinson of the London School of Hygiene and Tropical Medicine (LSHTM) is the Principal Investigator, and she is joined by Prof Sian Clarke (LSHTM), and Prof Kristian Hansen, a health economist (National Research Centre for the working Environment, Denmark) on this study, in collaboration with the Ugandan team named above.

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

Dr Freddy Eric Kitutu worked extensively with Prof Kristian Schultz Hansen on the conceptualization and data collection tool to explore and examine the financial performance of the study medicine outlets. Ms Jacquelyn Nambi Ssanyu, Ms Sunday Mundua and Ms Lydia Peace Ocheru were junior members of the study team in Uganda and were supported by the investigators to understand the study and acquire skills to conduct the fieldwork, manage and participate in the analysis, interpretation and write up of the findings. The project facilitated their attendance of a course in qualitative research methods offered by the University College London. They participated in preparation of the manuscript and they are co-authors, in accordance with the ICMJE guidelines.

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

Jacquellyn Nambi Ssanyu, Sunday Mundua and Lydia Ochero collected the data and are co-authors on this paper.

**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?**

Sunday Mundua, Jacquellyn Nambi Ssanyu and Lydia Peace Ochero were trained by Eleanor Hutchinson in Nvivo and worked with her to code the qualitative data in this project.

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

All researchers were involved in interpreting the data for this study and are co-authors on this paper. In addition, we have presented the key findings of the project to officials of the National Drug Authority, the Luwero District Health Team, the Ministry of Health and other organisations that we consider stakeholders in this market.

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

The early career researchers (Jacquellyn Nambi Ssanyu, Sunday Mundua and Lydia Peace Ochero) were supported by senior academics within study team to develop and refine their writing skills.

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

Findings from this study have been disseminated to the study District Health Teams and national stakeholders in dissemination workshops. The participants in these workshops include representatives from Department of Pharmaceuticals and Natural Medicines and Health Sector Partners and Multi-sectoral Coordination of the Ministry of Health, National Drug Authority, medicine outlet owners and attendants, Allied Health Professional Council, Pharmaceutical Society of Uganda, Uganda Medical and Dental Practitioner's Council, Uganda Pharmacy Owners Association, National Drug Shop Association Initiative, representatives of research institutes and civil society organizations and researchers. This paper will be published as open access. Once successfully published, it will be distributed at a workshop with members of the MRS in Luwero district and among national stakeholders in Uganda. We will use this to underpin discussions with the different policy makers and stakeholders at district and national level in Uganda.

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

Authors, Dr Eleanor Hutchinson and Dr Freddy Eric Kitutu worked as part of the senior authorship team in developing this manuscript, and their contribution has been recognised as first and last authors respectively.

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

We have included early career researchers Sunday Mundua, Lydia Peace Ochero and Jacquellyn Nambi Sanyu as authors . They attended all the workshops, contributed to the data analysis.

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

Six authors are female, two are male (Freddy Eric Kitutu and Kristian Schultz Hansen).

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

Sunday Mundua and Lydia Peace Ochero have received extensive training in the collection of ethnographic, qualitative and quantitative data by the research team.

**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?**

We have anonymised the participants in the text, ensured that all participants provided informed consent.