

**Researchers** Elisa Maffioli University of Michigan

Marie Chantel Montás University of Michigan

**Staff** Emeka Eluemunor Country Director, Nigeria

Pheliciah Mkaisaka Mwachofi Research Associate

**Timeline** 2023-2025

Study Status In Progress

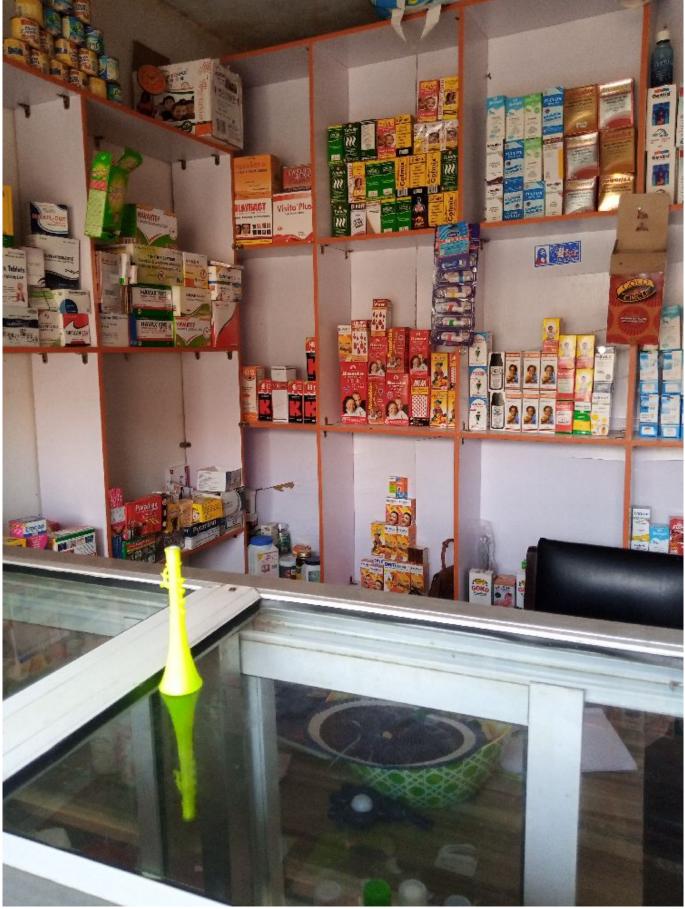
Study Type Randomized Evaluation

Sample Size 78 pharmacies

Research Implemented by IPA Yes

## **Evaluating the Effectiveness of a Mobile-Based Platform for Medicines Quality Control**





In This Image A drugstore in Nigeria



# Researchers are measuring the effectiveness of RxScanner, a mobile-based platform that enables quality controls for medicines, and assessing its impact on the behavior of pharmacists and consumers.

More than 10 percent of medicines in low and middle-income countries are of low quality, posing a significant risk to public health and causing approximately one million deaths each year. [1] This problem is particularly widespread in Sub-Saharan Africa. [2] RxAll, Inc. has developed RxScanner, a mobile-based platform that enables rapid and real-time validation of medication authenticity outside of laboratory settings. The objective of RxScanner is to decentralize drug testing, empowering inspectors and pharmacies to conduct quality checks conveniently and at any location.

To evaluate the effectiveness of RxScanner in detecting low-quality medicines and assess its impact on the behavior of pharmacists and consumers, researchers working with IPA Nigeria will conduct a randomized evaluation. Firstly, the research team will internally validate RxScanner by comparing its results with comprehensive laboratory tests on a subset of medicines in collaboration with Bloom Public Health (BPH). This validation process will ensure the accuracy and reliability of the technology.

Subsequently, 39 pharmacies will be randomly selected to utilize RxScanner, while 39 pharmacies will serve as the comparison group without access to the technology. The research team will regularly visit the pharmacies with RxScanner to collect and download data, enabling continuous monitoring and analysis.

The results of this project will be available in April 2025.

#### Sources

1. World Health Organization. A Study on the Public Health and Socioeconomic Impact of Substandard and Falsified Medical Products. Geneva: WHO Press, 2017.

2. Webb, S. "A Bitter Pill to Swallow: The Problem of, and Solutions to, Sub-Saharan Africa's Counterfeit Pharmaceutical Trade." The Journal of Global Health Online, 2018

### **Research Partner**





**Bloom Public Health** 

#### **Implementing Partner**



RxAll

#### **Funding Partner**



USAID