Innovation Factsheet



M-SCAN

Developers of low cost portable ultrasound devices that are laptop, tablet and mobile phone compatible.

COUNTRY

) Uganda

STRATEGIC FOCUS



Private Partnerships; Access to Services and Products

TARGET BENEFICIARIES

Pregnant women in Rural Areas

OWNERSHIP



Mobile Scan Solutions (U) Ltd owns all Intellectual property

STATUS



Gotten research approval, awaiting National Drug Authority Approvals

FUNDING



Other Funding: \$25,000 (YHER); \$25,000 (Tech Crunch); \$50,000 (Johnson &

PARTNERS

Introduction

M-SCAN aims at reducing maternal mortality through early detection of complications arising in pregnancy using M-SCAN devices.

The current maternal mortality rates stand at 16 mothers daily. Most of the mothers die of complications arising in pregnancy. Most of these complications such as placenta previa, cord around babies neck, can be detected on ultrasound, however, health facilities cant afford the traditional ultrasound machines that are very expensive and use a lot of power.

As such, M-SCAN is providing ultrasound devices to such resource limited settings mainly through three channels; availing the M-SCAN devices directly to clinics and hospitals in the rural facilities, scanning pregnant women at medical camps in rural Uganda, training frontline health workers in basic obstetric ultrasound. We these well implemented, we plan to contribute to lowering unnecessary maternal deaths.

Progress and Results

M-SCAN was started after seeing the plight of pregnant mothers in rural Uganda with many dying of undetected complications in pregnancy. With the power of M-SCAN, the goal was to aid early detection of risk factors of maternal health, have mothers intervened early and their lives and those of the babies saved.

From incorporation in July 2017, M-SCAN through seed funding from UNFPA was incubated at Outbox Hub under the Upaccelerate programme. We managed to develop an MVP (Minimum Viable Product).

In 2018, we outsourced manufacture in China and developed a more robust prototype that was able to scan in real time and visualize internal organs to include the fetus for pregnancy.

So far, we have deployed an M-SCAN device at Kalangala Health Center IV, one of our pilot sites. The machine generates data that we compile and analyze. This informs us on the utility of the device, it's effectiveness and specificity in detecting complications.

On the same note, we have carried out more pilots in districts of Kampala, Jinja, Karamoja, Bukwo, Buyende, Mubende where a total of 532 pregnant women have been scanned, with over 88 complications detected.

M-SCAN has also worked on a data management software that feeds into the scanning software to make reporting easier. This helps in following up patients with complications.

We have research that has gotten approval from Mulago Institutional Review Board – Mulago hospital. Results from the research will help to further validate the M-SCAN devices.



HAST – Kenya

Johnson)

Initial: \$10,000

- Infectious Diseases Institute, IDI
- Johnson & Johnson Inc.

TYPE OF SOLUTION



Medical Device

More about M-SCAN

Check us out at; Email: mscanug@gmail.com Website: <u>www.mscanug.com</u> Documentation: <u>https://drive.google.com/open?id=14_e4bQztiKDzTtfffsM52CK-5KUOc3LH</u>

This fact sheet was developed, by: Menyo Innocent Team Lead M-SCAN Uganda Tel. +256 700 903 657 Email. <u>imenyo25@gmail.com</u>

Challenges and Lessons Learnt

The approval process is very slow, however conducting local research is the best approach to acquire approvals from necessary regulatory bodies.

Not many frontline health workers can perform ultrasound, training is a key enabler to sell more machines, we currently partnering with Infectious Disease Institute to offer training services.



Mobile Scan Solutions Uganda Limited Plot 23 Soliz House Lumumba Avenue P.O.BOX 26570 Kampala - Uganda