



## Nairobi County NCD-QM EMS

### The Nairobi County Non-Communicable Disease Quality Electronic Medical System

Malteser International (MI), through the German Ministry for Economic Cooperation and Development, in collaboration with the Nairobi City County Health Services Department and the African Institute for Health and Development (AIHD) plans to implement a project aimed at strengthening the health care system through improved capacity in management of selected NCDs within Nairobi’s informal settlements.

IntelliSOFT Consulting Limited has developed the Nairobi Non-Communicable Diseases Quality Management System, an Electronic Medical Digital Health System which is built on the OpenMRS platform. The use of innovative technology is building the capacity of healthcare workers to adhere to clinical guidelines in the management of hypertension and Diabetes Mellitus (DM), thereby strengthening the health care system through improved capacity in the management of the selected NCDs within Nairobi’s informal settlements specifically targeting 45 health facilities in four sub-counties of Nairobi County.



#### System Description

*Currently on pilot stage in 11 facilities in four sub-counties of Nairobi County.*



Users can access the system through the Android mobile app or the web app. Data can be collected offline using the mobile application for synchronisation in the server later. The server holds the data collected and allow users to view the data, edit the data and generate reports. On full roll-out, the system is expected to handle 10,000-20,000 patients and is scalable to accommodate growing numbers. The system users will primarily be clinicians. Other users expected are data clerks and administrators (sub-county & county level users). Each user has own credentials to facilitate access based on their level/role.

Test Server URL: <http://45.79.145.240:8080/ems/login.htm>  
Credentials: admin/ Admin123

#### Value Proposition

- ✔ Strengthening the health care system.
- ✔ Adherence to the existing national clinical guidelines.
- ✔ Digitization of data.
- ✔ Interoperability with existing e-Health tools.
- ✔ Innovative with a future outlook.

- ✔ Capturing patient care data for diabetes Type I, diabetes Type II, pre-diabetes and gestational diabetes and Hypertension.

- ✔ Integration with existing e-Health tools such as DHIS2 (API Provision).

<b>Model Clinic Estimated numbers to date</b> <ul style="list-style-type: none"> <li>✔ Supported users: 2</li> <li>✔ Number of clients: ~200</li> <li>✔ No. of Visits per clinic day: ~25-50</li> </ul>		<ul style="list-style-type: none"> <li>✔ Intelligent recalls for follow-up visits &amp; auto-creation of appointments in the calendar.</li> </ul>
	<ul style="list-style-type: none"> <li>✔ Security enforced using industry standard security and encryption methods as well as Role-based access.</li> </ul>	
	<ul style="list-style-type: none"> <li>✔ Patient notification and communication via SMS.</li> </ul>	<ul style="list-style-type: none"> <li>✔ Extensive reports</li> </ul>

**MODEL CLINIC**



Westlands Health centre is a Government health centre located in Westlands Sub-location, Nairobi.

Westlands HC runs an NCD special clinic every Wednesday and attends up to 50 NCD patients during the weekly special clinic.

**Estimated numbers to date**

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Westlands NCDs clinic was started in 2012 after a free medical screening at Sarit Centre. It was organized by the then sub-county clinical officer Miriam Kamau a life member to date. She encouraged people found to have diabetes and hypertension to start a support group which would enable them to buy drugs at a subsidized cost due to the erratic supply of drugs by KEMSA from MEDs. It was registered as Diabetic and Hypertension psychosocial support group CBO by Ministry of Culture, Social Services and Gender in the year 2012. They opened a bank account with cooperative Bank Westlands Branch.

Since inception the registration fee to has been 500Kshs for new members and 400Kshs monthly retainer fee for access to DM±/HTN drugs and necessary diagnostic tests within the facility. They support group buys drugs from MEDS with the approval of M.O I/c. The SCHMT/I/C has capacity built the group on commodity management enabling members to manage the supply chain. The medical officer in charge of the facility in conjunction with SCHMT encouraged the leaders of the support group to open an account with MEDS where drugs are purchased at a subsidized cost for all clients regardless of their medical needs

This community pharmacy is only accessible on clinic days and only patients who are enrolled in the clinic benefit from it. The stock cards are updated weekly making it easy to manage the drugs in stock.(clinic runs every Wednesday)

**They have managed to register 594 clients to date with approximately 250 active clients (65% retention).**

