

Non clinical settings for hypertension management in low income countries

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Hypertension ranks among the most prevalent conditions and important risks for cardiovascular morbidity and mortality also in low income settings. Health facility-based diagnosis, treatment and long-term management is hampered by lack of access to care and opportunity costs. Even after diagnosis of hypertension and initiation of treatment, optimal control requires regular blood pressure (BP) monitoring. Self-monitoring could be an option but is rarely available and may not be feasible especially among the poor; likewise, frequent visits to health facilities just for a BP measurement are time consuming, hence associated with high opportunity costs, and can strain the capacity of the already overburdened health facilities. Evaluations in Malawi yielded a high degree of loss to follow-up in chronic care clinics. On the other hand, examples from the US have proven the success of BP measurement and monitoring in non-clinical settings, in this case barbershops. Similar models and experiences are lacking for low income settings.

We aim to establish an innovative BP measurement model, e.g. using traders at markets places and sellers of mobile phone cards or other community-based structures as non-clinical providers (NCP) to measure and document blood pressure in the communities and send the results as text message to the treatment centre. We will conduct a formative research to understand community knowledge and beliefs about hypertension as well as to investigate their ideas of an optimal access to diagnosis and treatment. The participating NCPs will receive a formalized training in standardized blood pressure measurement and documentation, according to national and international guidelines. The NCPs will be visited by health surveillance assistants or community nurses on a weekly basis to verify the measurements and monitor the system.

In the first phase of the project we will enrol patients with a confirmed diagnosis of hypertension (at a facility) and already initiated hypertension treatment, according to the respective national treatment guidelines (from lifestyle interventions to drug treatment). We

aim to evaluate the community-based intervention against the standard of care at facilities with regards to proportion of patients regularly monitored and proportion of patients with controlled hypertension. The research project will be implemented within the framework of the ongoing ZaMaC project which works on the integration of HIV and NCD services in Zambia and Malawi offering an exciting multi-professional experience for a candidate.

Cooperating partners: Lighthouse Trust, Lilongwe, Malawi