Integrated care shows substantially reduced health costs for people with HIV, diabetes and hypertension
10 September 2021

The effect of aging and decreased survival on the total health service costs of managing people living with multiple conditions (HIV and/or diabetes and/or hypertension) in Uganda and Tanzania in years 2020, 2025 and 2030, compared to baseline. Credit: DOI: 10.1186/s12916-021-02094-2

Research conducted through an equitable partnership of the LSTM and its partners (theRESPOND-Africa consortium), which includes NIMR in Tanzania and MRC/UVRI and LSHTM Uganda Research Unit in Uganda, has found that integrating the care of HIV, diabetes, and hypertension into a 'one-stop clinic' can reduce the costs for both patients and healthcare services in Uganda and Tanzania.

The burden of non-communicable diseases (NCDs) has risen rapidly in Africa, with these diseases typically affecting younger working populations than seen in developed countries. Diabetes and hypertension alone lead to about two million deaths a year on the continent. Africa also has a continuing high burden of HIV-infection. The achievements of the high-quality HIV programs are impressive, with over 60% of people living with HIV infection in East and Southern Africa in regular care. In contrast, health care services for diabetes and hypertension, which are also often organized separately, are patchy with only about 10 to 20% of people with these conditions estimated to be in care.

In a paper published in *BMC Medicine*, led by LSTM's Professor Louis Niessen and supported by multi-disciplinary teams in Tanzania, Uganda and the UK, RESPOND-Africa reports the socio-economic impact of installing 10 new Integrated care clinics across Uganda and Tanzania to establish the potential benefit of treating patients with HIV, diabetes, or hypertension in the same clinic, the first such study to report the detailed economics on real-life integrated care across all disease programs.

Dr. Josephine Birungi, Senior Research Scientist at MRC/UVRI and LSHTM Uganda Research Unit, said: "Before integrating care for the three conditions, a patient with two or more conditions used to attend two separate clinics on different days of the week with duplication of some of laboratory investigations. The patient therefore had to have transport fare for two appointments to the same facility, sometimes take two days off work (for those employed) not forgetting that some had to travel with the care takers too—such a huge cost to the household!"

LSTM's Honorary Professor Sayoki Mfinanga is Chief Research Scientist at National Institute for Medical Research, Tanzania. He said: "After a year of the integrated clinics being in place, they found that integration of HIV services with diabetes and hypertension control reduces both health service and household costs. They saw a 22% reduction of the service cost across all patients with more than one condition, and health cost to patient households were kept to, on average, 12% of households' monthly income. Therefore, this initial,
explorative, non-randomized study suggests that integrated care of these chronic conditions is likely both an efficient and equitable way to address the increasing burden for the financially vulnerable patient groups with multiple conditions among Africa's aging populations.

The consortium is additionally generating more economic evidence through a longer-term larger-scale implementation trial to compare extended integrated care packages with standard of care in a cluster randomized trial to include more evidence on clinical benefits.

RESPOND-Africa works in partnership with patients, community groups, civil society and policy makers to ensure its research is relevant and that evidence is used to inform policy and practice.

Professor Andrew Swai, Chairman of the Tanzania NCD Alliance said "This study highlights the high economic costs for patients to visit clinics for chronic care services, especially those with diabetes or hypertension, who do not have good access to free medicines. More research is needed to guide policy and practice in improving medicines supply for these chronic conditions."

Professor Kaushik Ramaiya, Hon. General Secretary of the East African NCD Alliance, said, "The Respond-Africa partnership, which led this research, engages people living with NCDs in sharing research findings and shaping future research. This approach is fundamental to the Global Charter on Meaningful Involvement of People Living with NCDs launched by the NCD Alliance this week."


Provided by Liverpool School of Tropical Medicine
APA citation: Integrated care shows substantially reduced health costs for people with HIV, diabetes and