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# **Integration of Hypertension and Diabetes Mellitus Screening** and Management in Muranga Hospital and Sabasaba Health **Centre HIV clinics in Muranga County, Kenya: Lessons Learnt**

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## **BACKGROUND / INTRODUCTION**

- People Living with HIV (PLHIV) are at higher risk for non-communicable diseases (NCDs) because of the chronic inflammatory state associated with HIV infection itself, and as a result of side-effects from some of the antiretroviral drugs (ARVs). NCDs are associated with a high morbidity and mortality.
- In 2022, Kenya through National AIDS and STI Control Program (NASCOP) incorporated NCD screening into the package of care for PLHIV. However, NCD integration remained suboptimal and uncoordinated in Muranga and Sabasaba HIV clinics.

### RESULTS

- We screened 2,954 (99%) of 2,985 PLHIV for HTN.
- 119 (4.0%) were newly diagnosed with moderate to severe HTN
- In addition, 1,329 (99.8%) of 1,332 PLHIV were screened for DM
- 123 (9.3%) were diagnosed with DM.
- A total of 32 complicated HTN cases and 51 DM cases have been reviewed by the physician.
- There were missed opportunities for screening during the clinical visits, with the majority of those already identified as having hypertension (HTN) and diabetes mellitus (DM) either not receiving clinical follow-up or had separate NCD clinic appointments.
- We sought to integrate NCD screening and management services through a stakeholder engagement approach focusing on HTN and DM.

#### METHODS

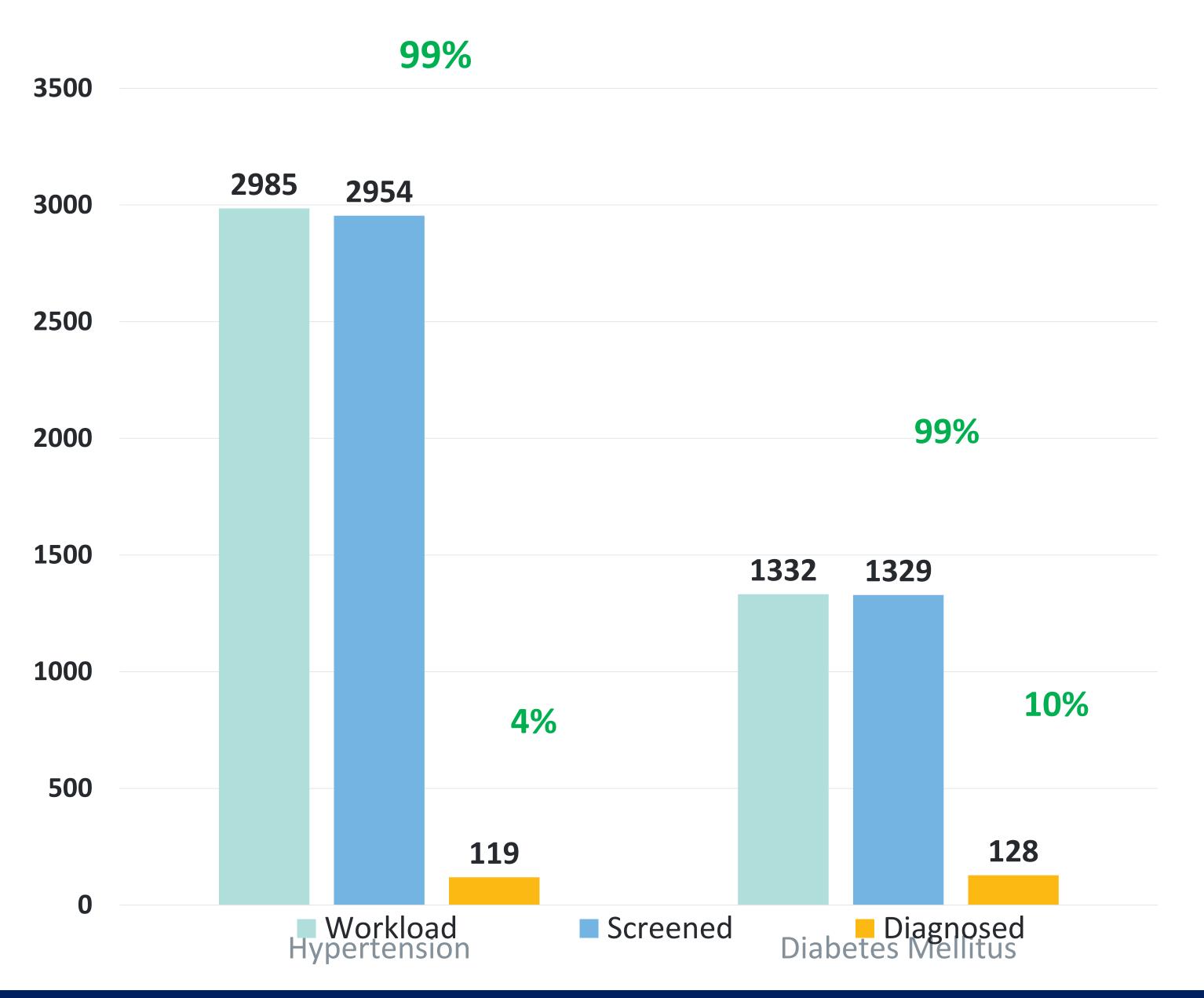
In July 2023, we conducted an assessment on facility preparedness and readiness to offer NCD screening and management services and identified several gaps, including:

- Clinicians not conversant with the latest guidelines on HTN and DM management.
- Lack of blood pressure and blood sugar testing equipment.
- Uncoordinated and unstructured NCD management.

We implemented the following activities:

- Conducted a 3-day off-site training of healthcare providers facilitated by a County Physician.
- Supplied blood pressure monitoring machines that were placed at the triage desk.
- Supplied glucometers and testing strips that were placed in the clinics.
- Established a referral mechanism.

#### Figure 1. Hypertension and diabetes mellitus screening results



- Held facility engagement meeting to discuss benefits of HIV/NCD integration.
- Held a HIV clinic meeting to discuss the roll-out plan.
- Delivered HTN and DM standard operating procedures and job aids.
- Blood pressure measurements were done for all PLHIV 20 years and above during the clinical visits and findings recorded in the Electronic Medical Record (EMR).
- Blood sugar testing was conducted for all PLHIV 50 years and above with documentation in the EMR.
- Harmonized NCD and HIV clinic appointments.
- Engaged a family physician to offer on-the-job training for the HIV clinic team through an outreach model.
- We extracted data from the EMR to conduct this analysis.



#### **IMPLEMENTATION CHALLENGES**

- Inability to meet the high DM screening demand among the clients due to the set age limit.
- Some clients could not honour follow-up appointment for BP and blood sugar recheck to confirm diagnosis.

#### DISCUSSION

- Stepwise approach involving the key stakeholders in the county and facility to promote buy-in and support for NCD integration is beneficial.
- NCD integration is acceptable as part of person-centered care.
- With continuous capacity building initiatives, clinicians are able to offer NCD care and refer where necessary.

#### Murang'a County NCD management training for healthcare workers, June 2023

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