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# **Integrating hypertension care in DSD for HIV treatment: implementation experience from Uganda**

What's new in DSD for HIV treatment: from WHO recommendations to reality

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# Background

- Prevalence of hypertension (HTN) in people living with HIV (PLHIV) is **20-29%** in Uganda
- PLHIV with hypertension (HTN) have increased risk of cardiovascular diseases
- Despite progress towards HIV epidemic control, HTN treatment and control among PLHIV is sub-optimal
- Integrated HTN/HIV care is required: to leverage HIV program gains for dual control
- Since 2014, WHO and Uganda Ministry of Health have recommended the integration of care for HIV and HTN

# Background of the project

## Barriers to HTN control among PLHIV in Uganda

- Limited access to HTN medicines (high cost)
- Lacked evidence based protocols for HTN
- M&E tools for HTN were inadequate
- Low knowledge and skills for HTN treatment
- Patient knowledge on HTN was low

- MJAP is a private-not-for-profit NGO of Makerere University
- PLHIV on ART at MJAP are **20,468**
  - Viral suppression **96%**
  - HTN control **5.1%**
- MJAP competitively won a two year grant (April 2019-March 2021) from Resolve to Save Lives, a US based NGO



# Overview of the implementation science project

To integrate HTN and HIV care at Mulago ISS (16,500 PLHIV), the largest HIV clinic in Uganda

- Hypertension treatment protocol (CCB as first line)
- Medication supply for both HTN and ART at no cost to patients
- Information system for HTN and HIV
- Patient centered care (task shifting)
- Incorporate DSD components for HTN:
  - 3 month MMD (758 patients)
  - Telemedicine: Phone call follow ups
  - Community medication delivery during COVID-19

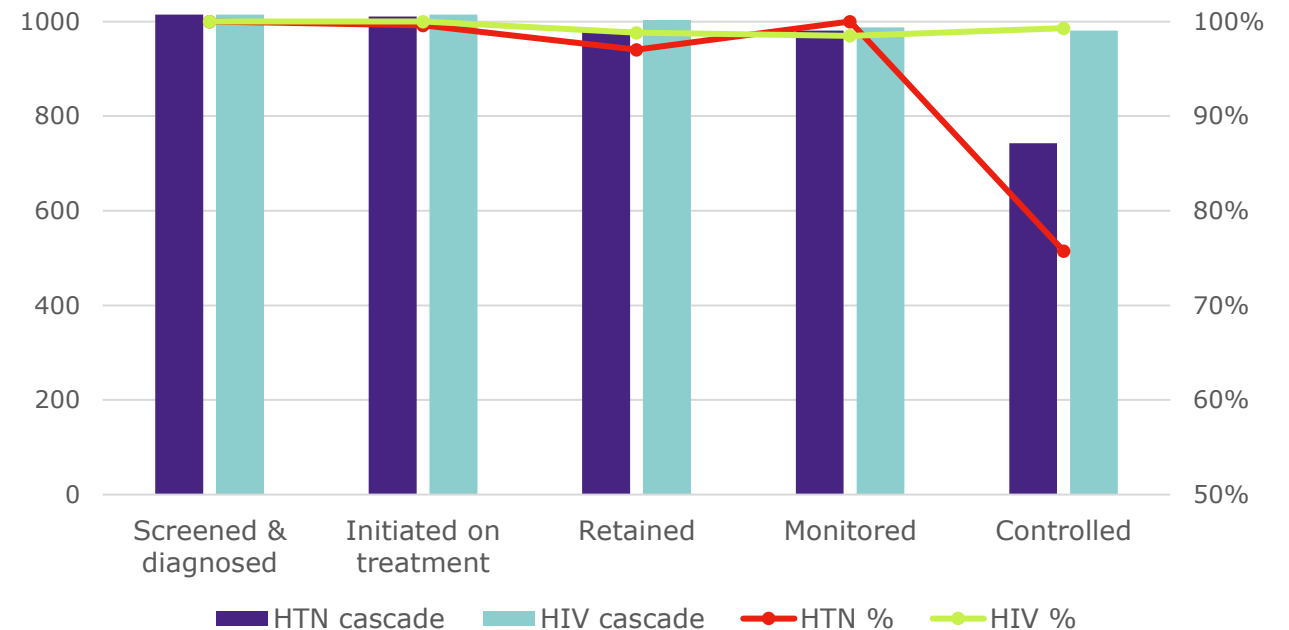
# Methods

- Qualitative
  - Understand barriers & facilitators of integrating HTN and HIV care
  - Adapt the WHO HEARTS strategy for HTN control
- Quantitative
  - Pre-post longitudinal study
  - Determine effectiveness of the adapted WHO HEARTS strategy

# Results

- At baseline, 24.4% of those living with HIV were confirmed to have hypertension (n=3,877 of 15,953)
- Of the 3,877 with hypertension, only 38 were on treatment, 6 were retained and monitored and 2 were controlled
- 1,105 people living with HIV and hypertension were recruited to the HTN-HIV care model

HTN and HIV cascade for those in the HTN-HIV care model after 6-months follow-up



- Among those in the HTN-HIV care model, 75% had controlled HTN and 99% had controlled HIV after 6-months

# Discussion and conclusion

- Nearly one quarter of adult PLHIV had HTN (**24.4%**)
- Simple, stepwise treatment protocols were effective for HTN control
- Task-shifting (HTN screening and treatment) facilitated HTN-HIV integration
  - Healthcare workers can be trained to manage HTN in HIV clinics
- Continuous supply of HTN medicines is necessary
- Healthcare workers can be trained to manage HTN in HIV clinics
- Providing HIV and HTN care together (education and management) supports patient centered care
- M&E parameters for all non-communicable diseases (HTN, diabetes and mental health) should be integrated into the existing MoH data tools and EMR

# Next steps

- The pilot project led to a larger 5-year NHLBI funded project
- **PULESA-UGANDA:** Strengthening the Blood Pressure Care and Treatment Cascade for Ugandans Living with HIV– Implementation Strategies to Save Lives
  - To develop and test implementation strategies for HTN care in HIV clinics across two districts
- MoH is conducting a nationwide baseline assessment prior to integrating HTN, diabetes and mental health care into HIV services
  - Using lessons learnt from our pilot project

# Stakeholder's of the LINKS project at MJAP



Participants of the stakeholders' meeting included MJAP team, Uganda MoH, Makerere University, CDC-Uganda and other partners.

## Acknowledgements

- Uganda MoH
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