



# PARIS

**FAST-TRACK CITIES 2024**

13-15 October 2024 | Maison de la Mutualité, Paris

## Implementation of Advanced Clinical Care (ACC) clinics in Johannesburg, South Africa

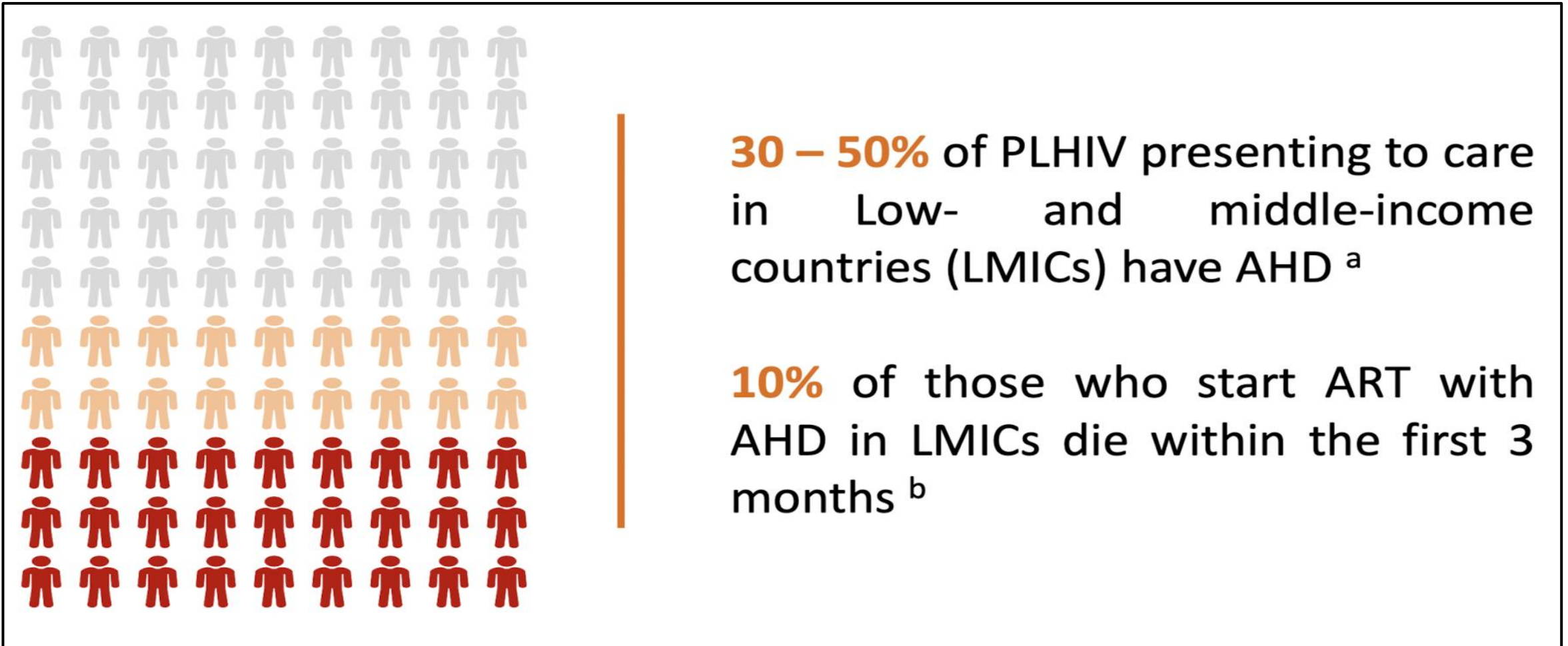
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Anova Health Institute, South Africa



**GAUTENG**  
PROVINCIAL GOVERNMENT  
REPUBLIC OF SOUTH AFRICA



## Prevalence of Advanced HIV Disease (AHD)



**30 – 50%** of PLHIV presenting to care in Low- and middle-income countries (LMICs) have AHD <sup>a</sup>

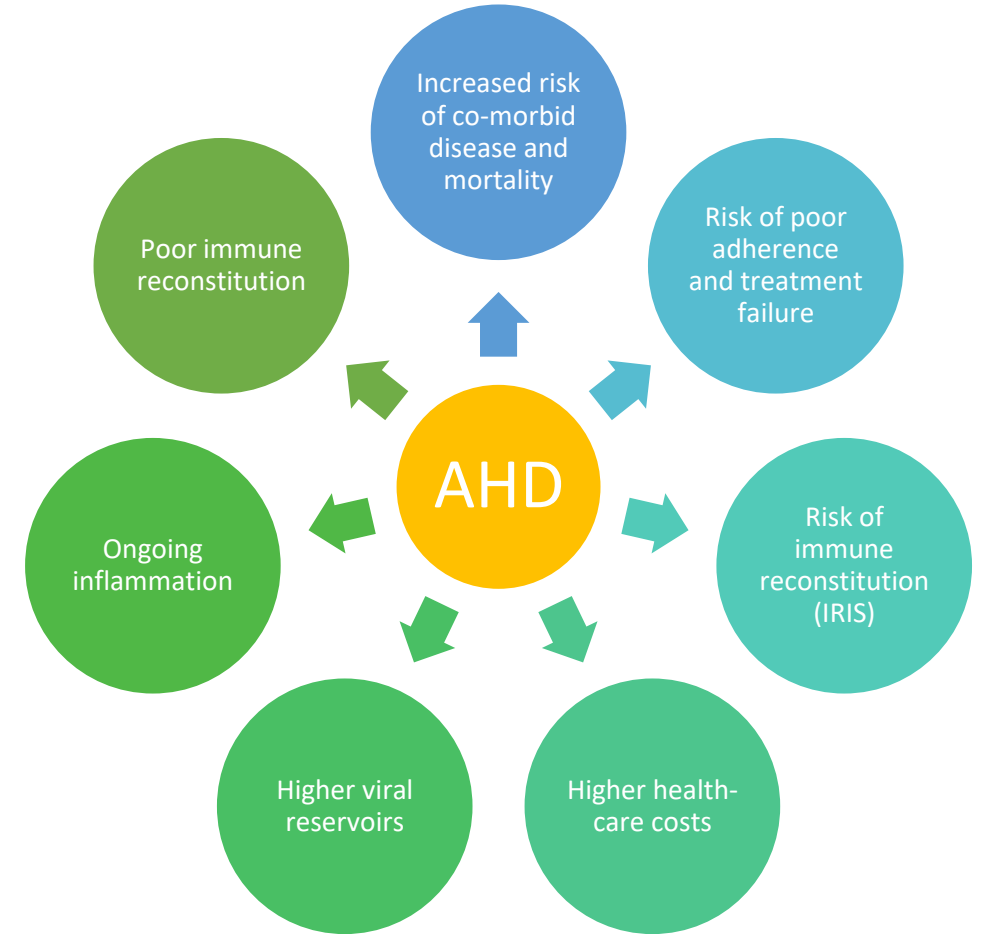
**10%** of those who start ART with AHD in LMICs die within the first 3 months <sup>b</sup>

<sup>a</sup> WHO consolidated HIV guidelines, 2017 (<https://apps.who.int/iris/bitstream/handle/10665/258967/WHO-HIV-2017.05-eng.pdf>)

<sup>b</sup> REALITY Trial

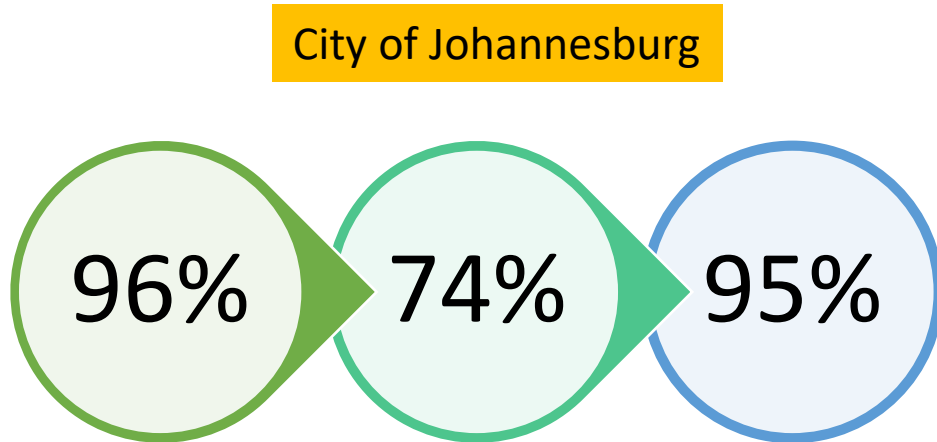
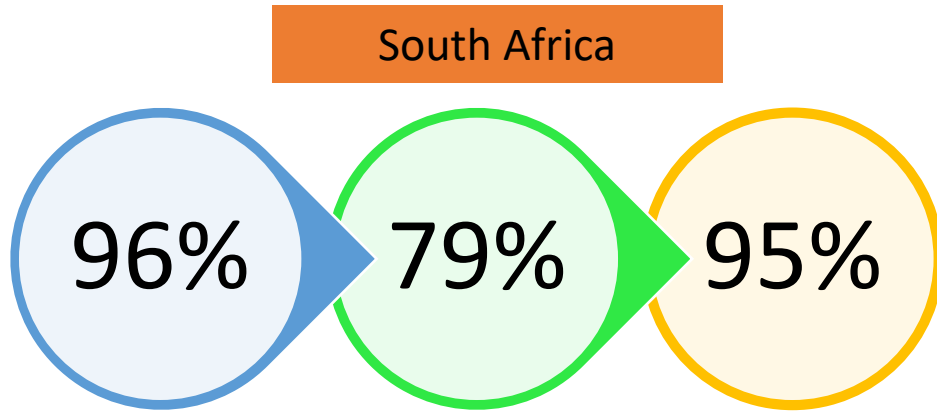
## What is Advanced HIV Disease?

Individuals > 5 years and older	For adults and adolescents, and children five years and older, advanced HIV disease is defined as CD4 cell count <200cells/mm <sup>3</sup> or WHO stage 3 or 4 event Includes both ART naïve individuals and those who interrupt treatment and return to care
Individuals < 5 years old	All children younger than five years old with HIV are considered as having advanced HIV disease. Although children older than 2 years, on ART for more than 1 year, and are clinically stable are not considered to have AHD.



Source: WHO consolidated HIV guidelines, 2021 (<https://www.who.int/news/item/16-07-2021-who-publishes-new-consolidated-hiv-guidelines-for-prevention-treatment-service-delivery-monitoring>)

## South Africa at 96-79-94 against the UNAIDS 95-95-95 HIV epidemic control goals



- The pooled prevalence of AHD among ART-naïve and ART-experienced patients in South Africa is estimated to be 43.45% (95% CI 40.1-46.8%, n = 53 studies) and 58.6% (95% CI 55.7 to 61.5%, n = 2) respectively.
- City of Johannesburg has an estimated HIV prevalence of 720 647
- Critical gaps in 2<sup>nd</sup> 95 still exist in men (95-70-95) and children (85-63-75)

### Between October 2023 and May 2024

- ~ 30% of CD4 counts done are < 200 cells/mm<sup>3</sup>
- 70% TB/HIV co-infection rate
- 56% mortality in TB/HIV hospitalised cases
- 16% cryptococcus positive tests

Kitenge MK, et al. Prevalence and trends of advanced HIV disease among antiretroviral therapy-naïve and antiretroviral therapy-experienced patients in South Africa between 2010-2021: a systematic review and meta-analysis. BMC Infect Dis. 2023 Aug 22;23(1):549.



# Advanced Clinical Care implementation in Johannesburg: September 2023 - date



## PROBLEM

- Facility focus: **Viraemia clinics** not offering comprehensive AHD/ACC management
- **Reactive** approach to patient management
- DSP driven interventions: medical officers focus more on **direct service delivery (DSD) vs Technical assistance (TA)**
- More nurses than Drs **trained** in HIV management
- High mortality and morbidity associated with poor retention:

## INTERVENTIONS



- **Transitioning from viraemia clinics to ACC Clinics**
- **Capacity building** – training and mentorship of nurse clinicians: DSP and department of health (DOH) and PHC doctors
- **Data driven proactive approach to file audits.** TIER.Net line lists for CD < 200 cells/mm<sup>3</sup> and lab RfA results are used to guide file audits
- **AHD and ACC job aids and reporting tools developed**
- **Clinician led case management**
- **Mentorship:** virtual platforms to aid with tele-mentorship; adoption and adaption of ECHO virtual to address gaps in ACC/AHD management

## RESULTS



- **40 Actively reporting clinics in COJ**
- **Two hospitals** implementing ACC -
- Scale up to 4 additional hospitals in progress
- **23 599 clients** reached through DSD and file audits
- **312 PNs and 107 DRs** are receiving ongoing AHD training and mentorship
- **Increased roving TA support** from **4 ACC Medical Officers** to addition of **32 Nurse Clinicians** (Clinical Technical Advisors) and **10 Programme** (VTP/TB/Men’s health) **Technical Advisors**
- **13 facilities implementing clinician led case management**
- **District TWG** to inform clinical governance

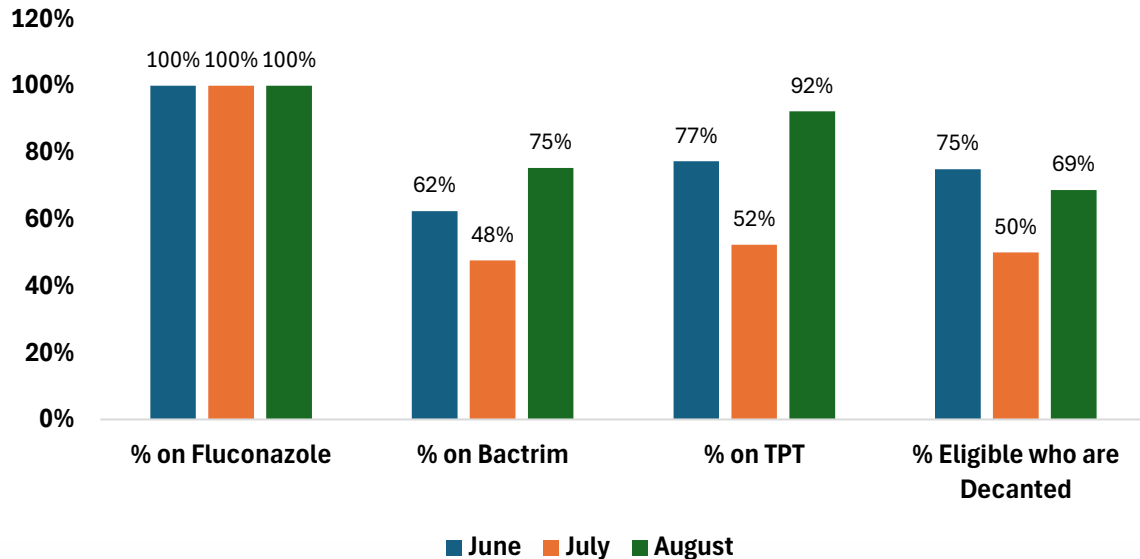




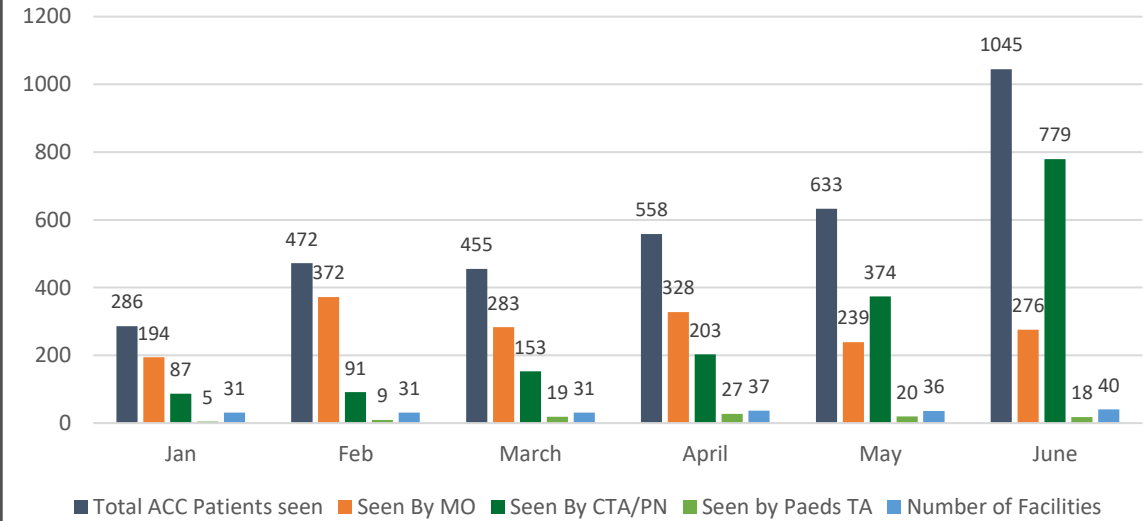
## ACC clinics activities

- Data from Tier.net and Lab results for action (RfAs) is used to inform activities on file audits of clients with CD4 count < 200 cells/mm<sup>3</sup>
- Files are audited comprehensively and notes are recorded to give guidance on clinical management of client at next appointment visit
- Clients who need urgent care are tele-traced and provide virtual consultation and case management where possible

**File Audit: CD4 <200**

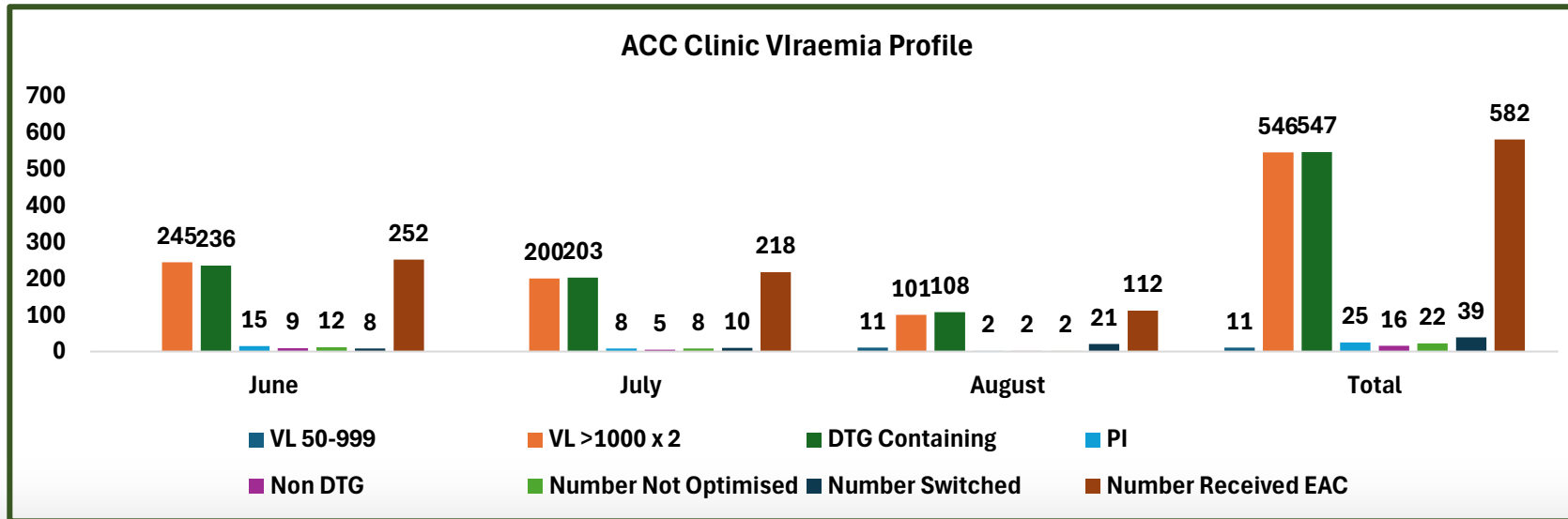
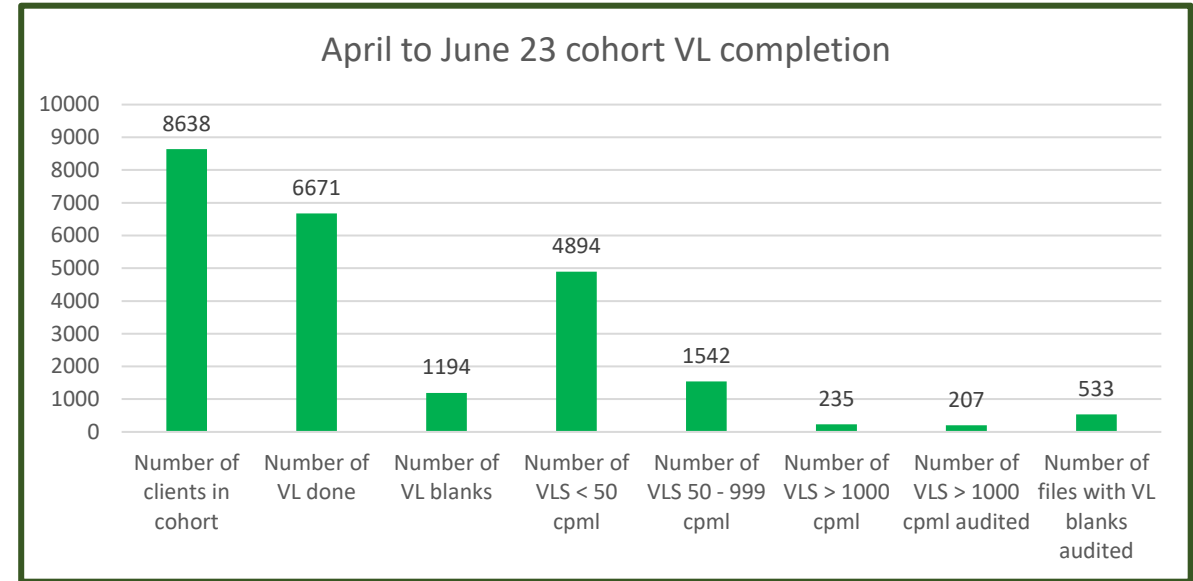
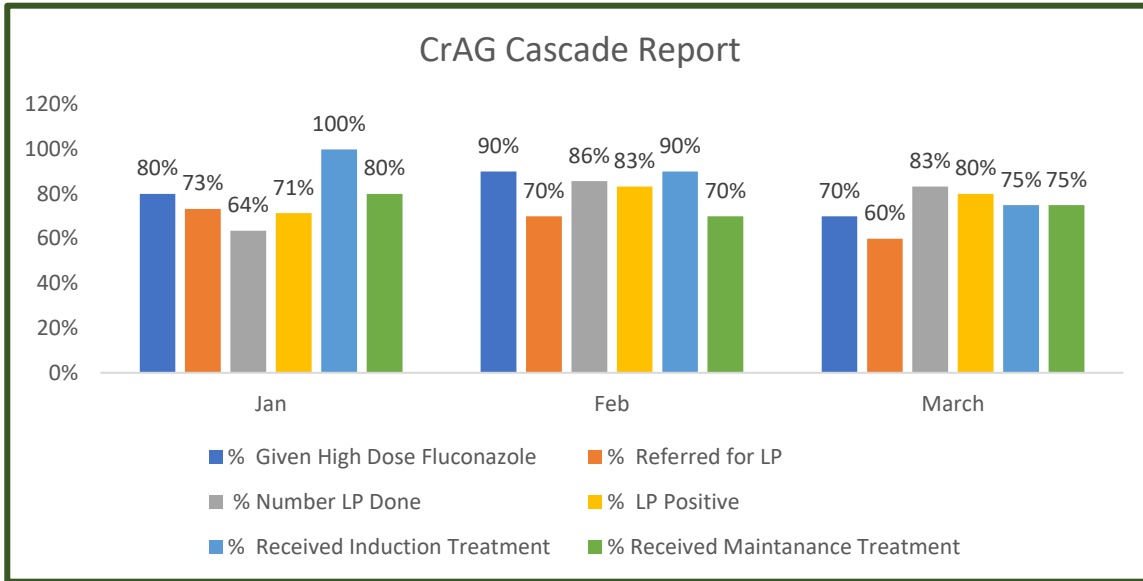


**ACC Clinic report Jan to June 2024**

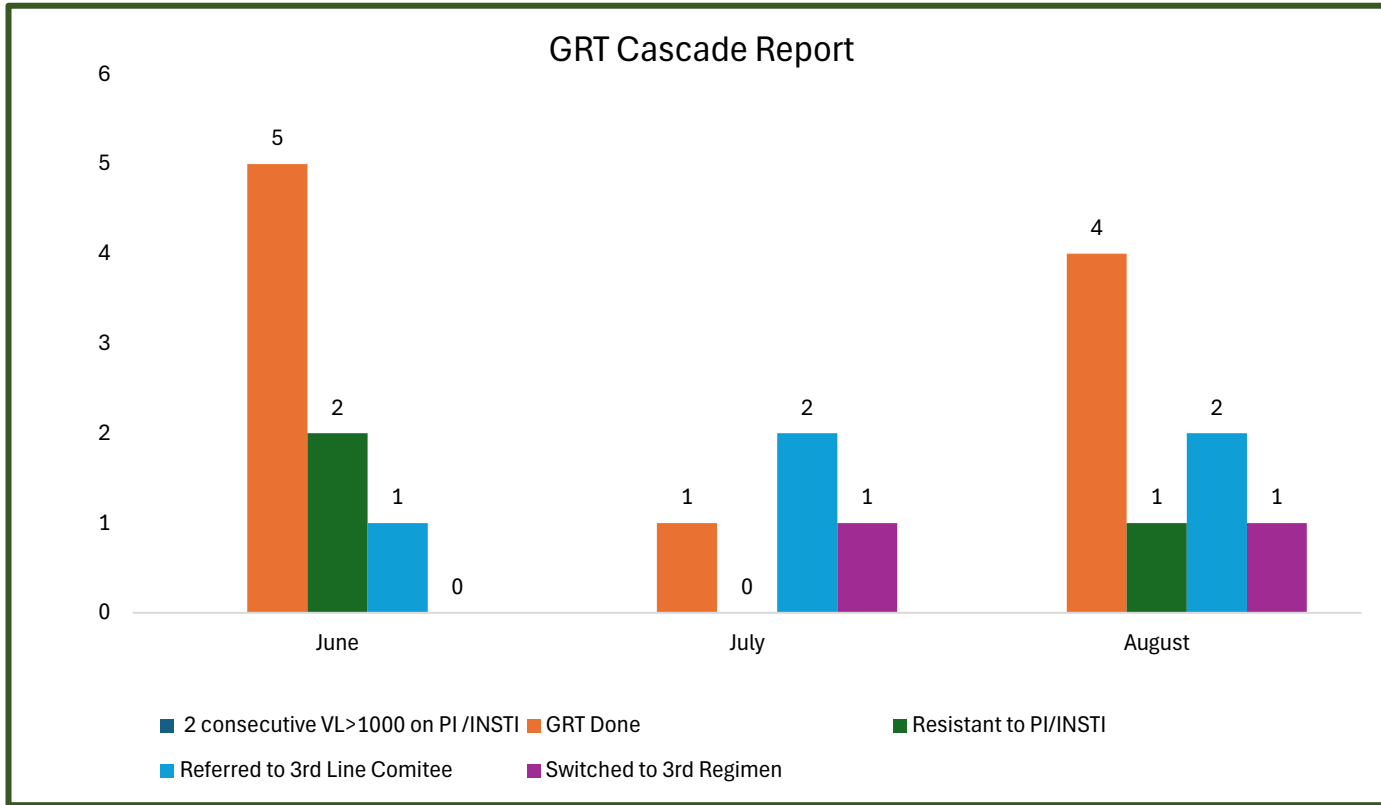


- Number of facilities implementing full AHD support increased from 31 to 40 by June 2024
- CTA activities gradually increasing month on month

File audits are also conducted for clients with positive Cryptococcus test and VL > 50 copies/ml



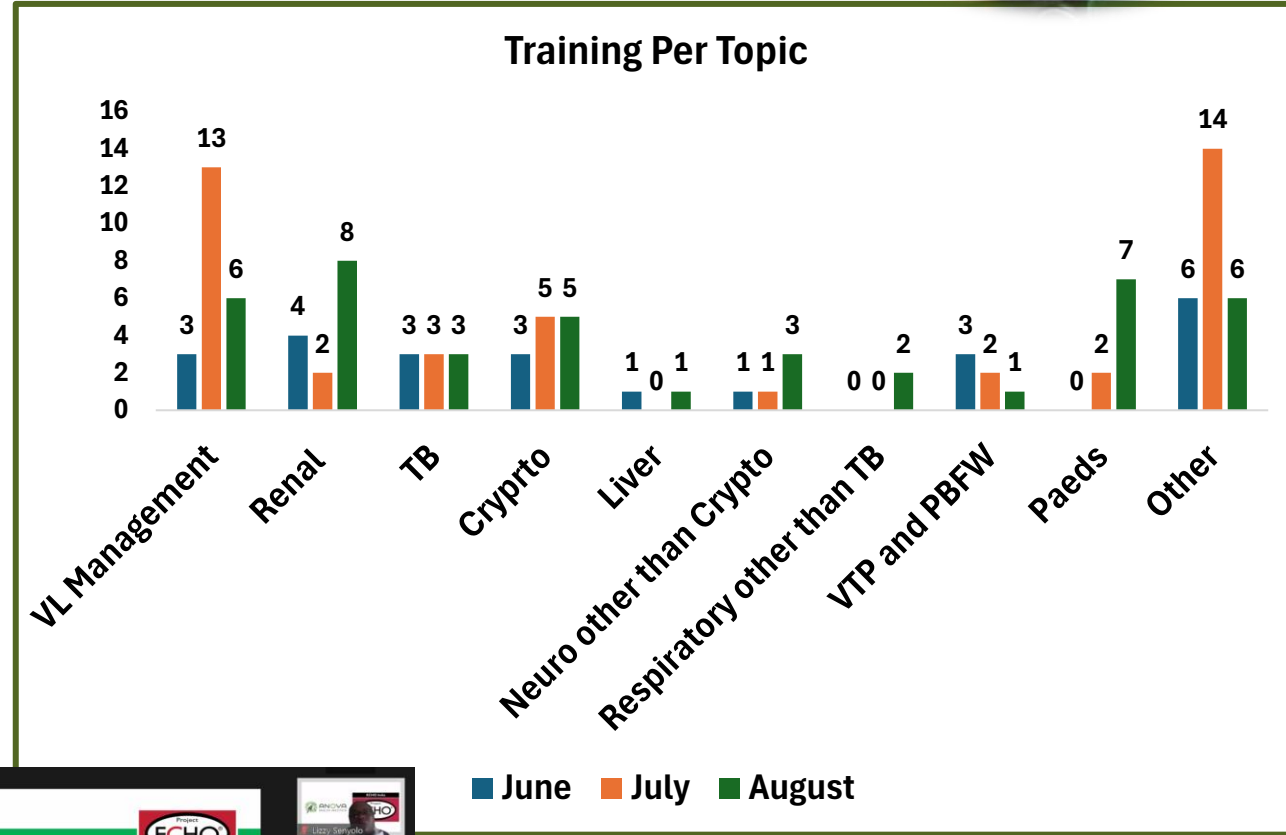
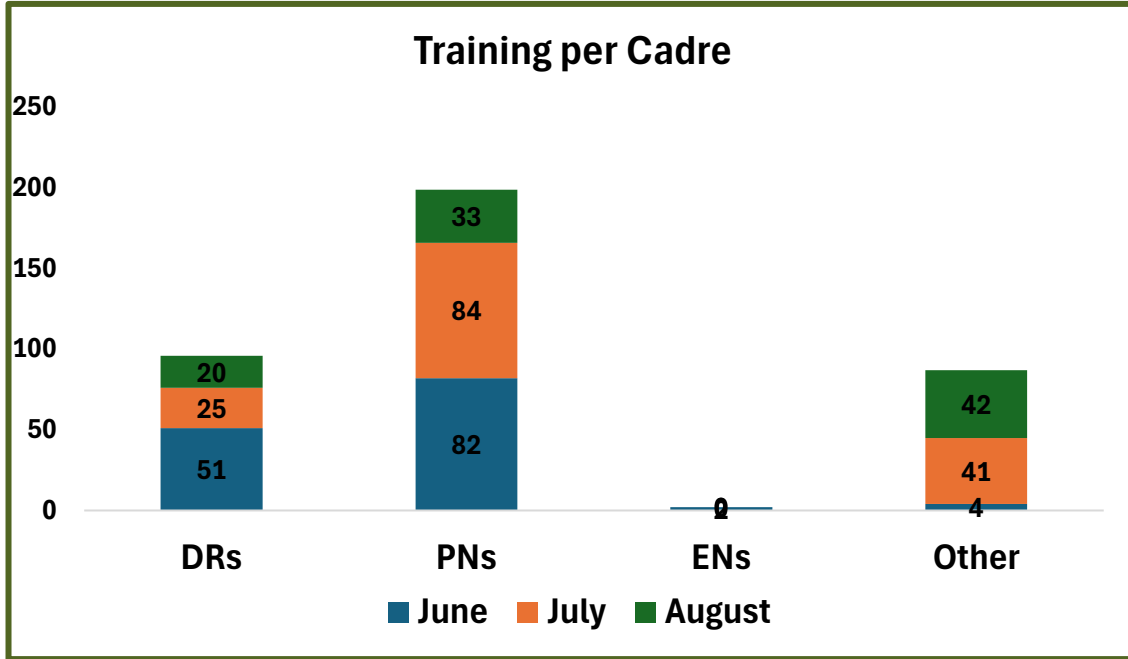
## Genetic Resistance Tests are done for clients with virological failure on PI/INSTI regimen



- Medical officers get referrals of clients failing 2<sup>nd</sup> line ART (PI/INSTI) regimens
- Comprehensive clinical and PSS assessments are done following SA ART guidelines
- Mos consult with 3<sup>rd</sup> line clinicians (Infectious disease and HIV specialist) to determine course of action
- ACC MOs also provide ongoing monitoring of clients on 3<sup>rd</sup> line regimes for progress



## ACC ACTIVITIES: JUNE - AUGUST 2024: TRAINING



- For the period June – August: 96 Doctors (Interns), 199 PNs, 2 ENs, 87 other were trained on ACC related topics.
- Other include RCs, SAWs, HTS counsellors and Data Capturers.

### Managing Viral Non-Suppression ECHO: Management of Unsuppressed Viral Loads 2023 Guidelines

**Date:** 29 September 2023  
**Time:** 11.30am to 1pm  
**Register at**  
<https://iecho.org/public/program/PRGM1693218874016ZOUO3ZKOKU>

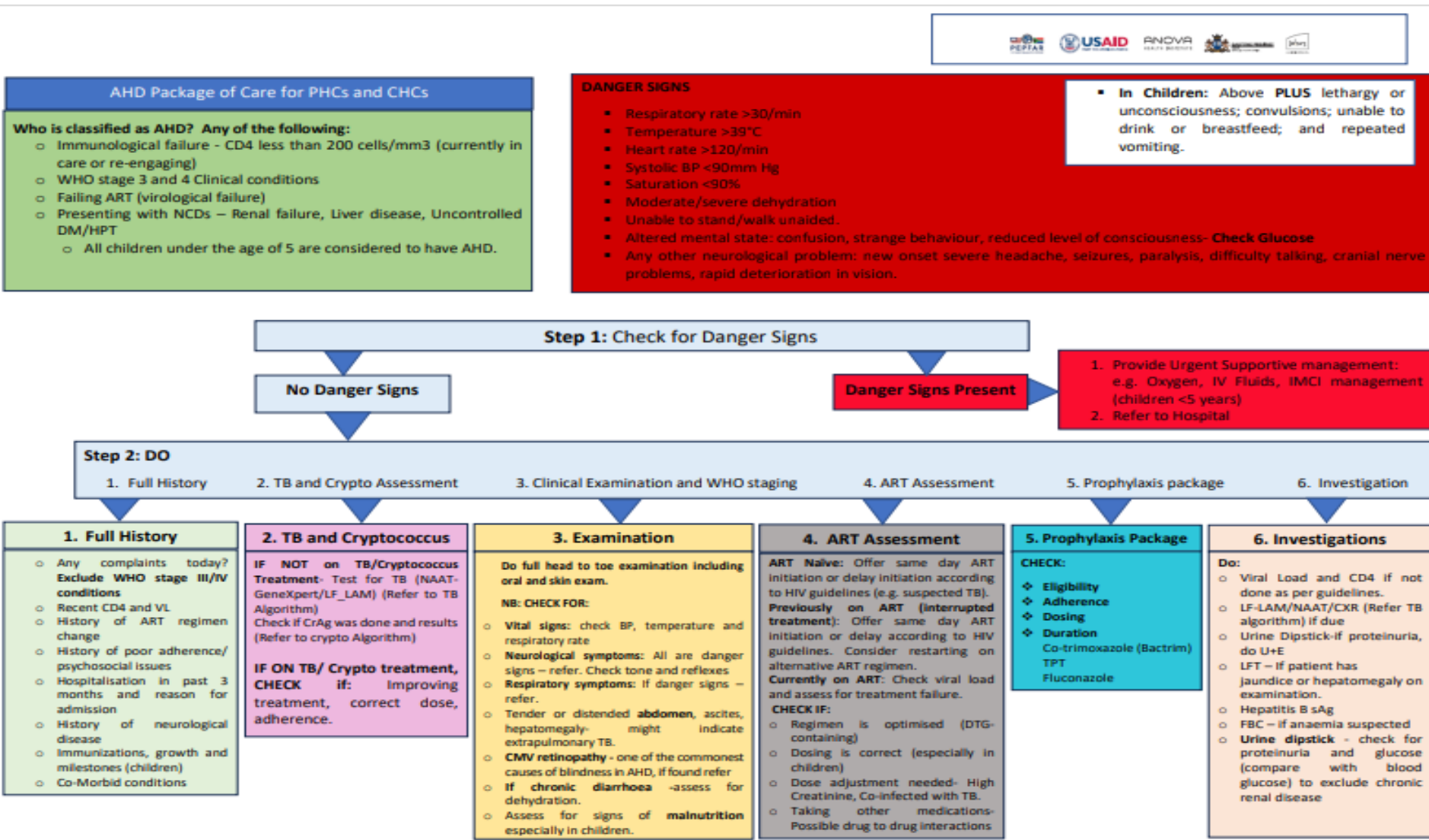
**Enquiries:** Louise Gilbert  
([drgilbert@victoryparkgp.co.za](mailto:drgilbert@victoryparkgp.co.za))

**Expert Speaker:**  
 Dr Natasha Davies  
 HIV Specialist,  
 Clinical Care

**Case Presenter:**  
 Dr Ninko Fourie  
 ACC HQ JHB

**Moderator:**  
 Dr Mthabisi Moseane  
 Programme Lead: HIV  
 Treatment Adherence,  
 Retention and the 3<sup>rd</sup> 90

## AHD Package of intervention poster (job-aid)



## Lessons learned

### Challenges

- High staff rotation necessitating ongoing training and mentorship of clinicians.
- Highly mobile catchment population resulting in ~ 39% lost to care in clients enrolled in case management.
- Referral pathways between PHC and hospitals not well established.
- Poor management of hospitalised AHD clients due to poor capacitation and supervision of junior Drs.
- Limited resources for multi-disciplinary team management of AHD client.
- Poor collaboration with non-health departments resulting in poor access to community psychosocial support.

### Conclusion

- Despite the significant progress made in South Africa in getting millions of individuals living with HIV into care, many patients still present or re-enter care with Advanced HIV Disease (AHD).
- Despite HIV's evolution to a chronic disease, **the burden of AHD remains high among both ART-naive and ART-experienced patients in South Africa.**
- **Scale-up of Nurse led ACC clinic** is a necessity in the face of growing AHD prevalence
- **A comprehensive ACC package of services and early diagnosis of asymptomatic AHD** are necessary to address the immunological deficiencies caused by HIV, despite viral load suppression in PLHIV.
- **Virtual mentorship platforms** are important to address the shortage of HIV experts

## Acknowledgements

Name	Role
Anova Medical Officers: Dr Ninke Fourie, Dr Khavisani Choshi, Dr Lameze Witbooi, Dr Tumiso Masenya	Implementation of ACC clinics offering comprehensive AHD services through DSD and capacity building (training and mentoring) of both Anova and department of health staff
Dr Nthabiseng Motsoane	Anova 3 <sup>rd</sup> 95 lead – strategic consultation and implementation support
Gauteng Department of Health clinicians working in COJ	ACC champions
Anova Clinical Tas and Programme TAs	DSD support and file audits to identify AHD clients

