

CAPRISA ACC

ADVANCED CLINICAL CARE

Addressing challenges in
HIV and TB patient management

Strategies to optimize identification of unsuppressed viral load in patients on second line antiretroviral therapy (SLART)

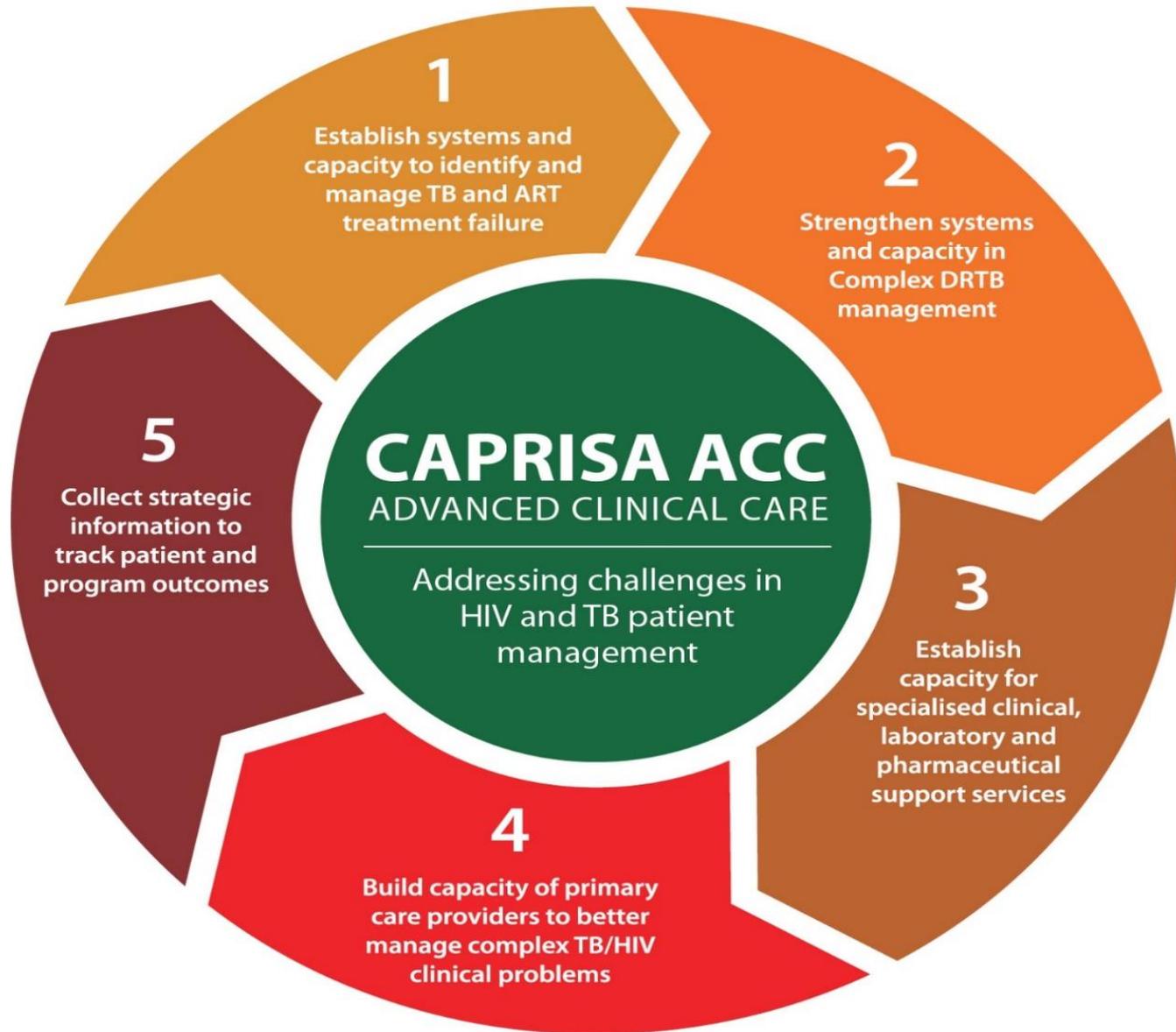
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Data Use Innovations and Best Practices Workshop
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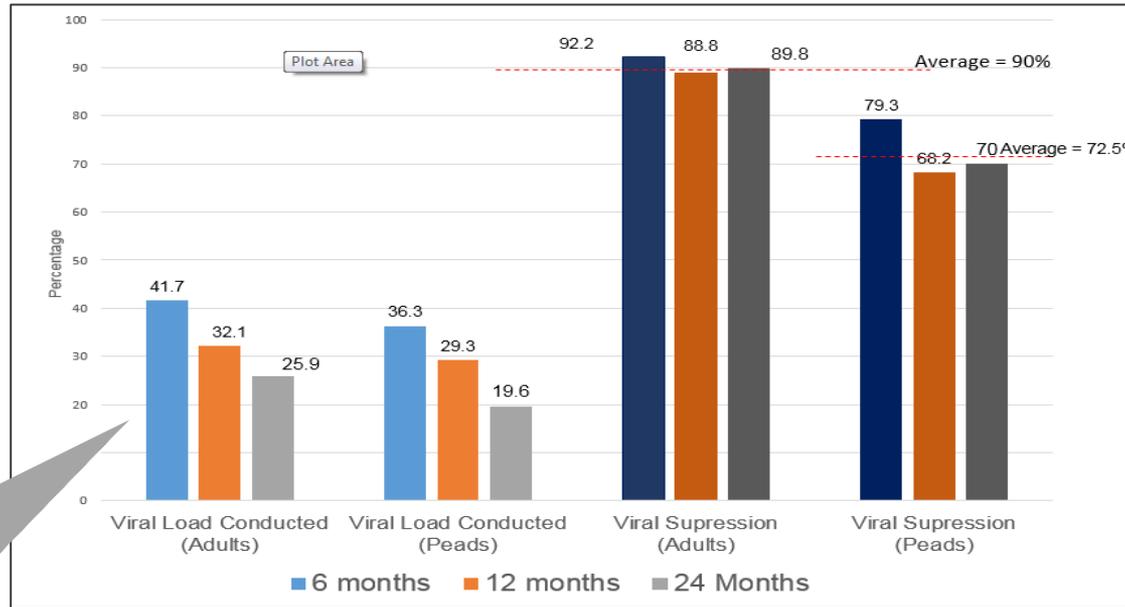


Presentation Outline

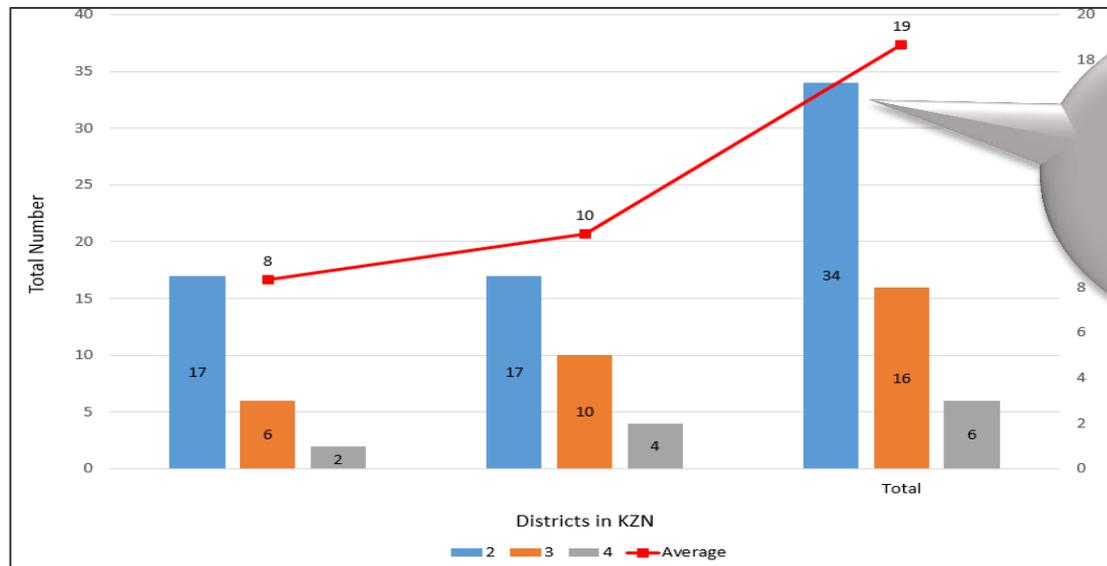
- Background of ACC Programme
- Background of eThekweni Viral Load Uptake and ART Failure project
- Second Line ART review findings
- Key challenges and Solutions
- Conclusion and Next Steps



Problem statement: Low Viral Load Coverage & Poor identification of ART failure



Adult VL coverage 32% at Month 12 and 26% at Month 24



Two/more Consecutive Unsuppressed Viral Loads

eThekwini Viral Load & Drug Resistance Project

- Initiative between CAPRISA ACC, District Management Team, MatCH (DSP), UKZN REVAMP and Infectious Diseases Unit
- Site Selection: 3 high volume ART sites based at District Hospitals
- **Objectives:**
 - I. Improve VL coverage & suppression rates
 - II. Improve identification and triage of patients failing SLART
 - III. Decentralize and improve SLART failure management & re-suppression rates

Identification, Triage & Management of Viral Failure/Resistance

1. Establishing a VL CHAMP in facility – with DMT/DSP
2. Make Viral Load Monitoring Routine – with DMT/DSP
3. Optimize use of Data Sources – creation of high viral load registers
4. Establishment of dedicated Viral Failure Clinics
5. Support PHCs to do the same

Optimize use of data sources to identify SLART patients

SOURCE	UTILISATION
TIER.Net	Most accurate & complete source of data at all ART facilities Collaborative effort between DOH/ MatCh/ CAPRISA/ UKZN REVAMP teams RE eThekweni HAST Viral Load & Drug Resistance Project
Manual audit of all ART files	To reconcile with/ update Tier.net: Identify *INACTIVE Vs ACTIVE PATIENTS (1 st line/ 2 nd line ART) *= LTFU/ T/F-out/ Changed service provider/Demised
NHLS dashboard	Weekly high viral load reports per facility
Facility high viral load registers	Real time monitoring
Pharmacy records	To reconcile with other sources

Abbreviations: LTFU, lost to follow up; T/F-out, transferred out;

Capacity Building: In-reach Training Outputs

Name of Facility	Type of Facility	No of doctors mentored over 4 week period
MaTCH	DSP	3
Ithemba Labantu Hospital	NGO	1
CatoManor CHC	CHC	1
Wentworth Hospital	District Hospital	1
King Dinuzulu Hospital	District Hospital	2
Addington Hospital	Regional Hospital	1
Clairwood Hospital	Specialised Hospital	1
Total Number Trained		10

- ACC trained Doctors selected for in-reach training by facility management
- 4 - 6 days of in-reach training with Adult IDU

Topics Covered

- Anti-retroviral treatment toxicities
- Drug induced liver injury
- Complicated tuberculosis incl (MOTT)
- HIV treatment failure
- Hepatitis B and C virus infection
- HIV assoc hematologic abnormalities
- ART Drug Resistance
- Completion of genotype request forms
- Interpretation of Stanford scoring

Knowledge Area Impacted	Pre Mentorship Median %	Post Mentorship Median %	Improvement Margin (%)
Liver Injury	30.8	84.6	53.8
ART Resistance	46.2	76.9	30.7
TB Molecular Tests	57.1	85.7	28.6
Hepatitis B co-infection	33.3	66.7	33.4

Need for Viral Failure Priority Clinic

Infectious Diseases specialist to HIV infected patient ratio in KZN: 1: > 400 000

- Developed **Criteria** for VF clinic: **2nd line** VF & **complex 1st line** VF together with (complex psychosocial issues/ ADR's/multiple co-morbidities/ organ failure)
- Establish **VF Clinic Day**
- **Systems to Identify patients** – Viral load register/ Tier.net/ NHLS dashboard/follow-up
- **Communication** notification of staff and patients, creation of mechanisms to book patients
- **Capacity building** and Training of key staff via CAPRISA - Infectious diseases ACC In-reach mentorship and training
- Ensure **ongoing support** through outreach by specialist and on site mentorship
- **Re-assess** after 6 months
- **Cascade** to lower level facilities

Approach to SLART File Review

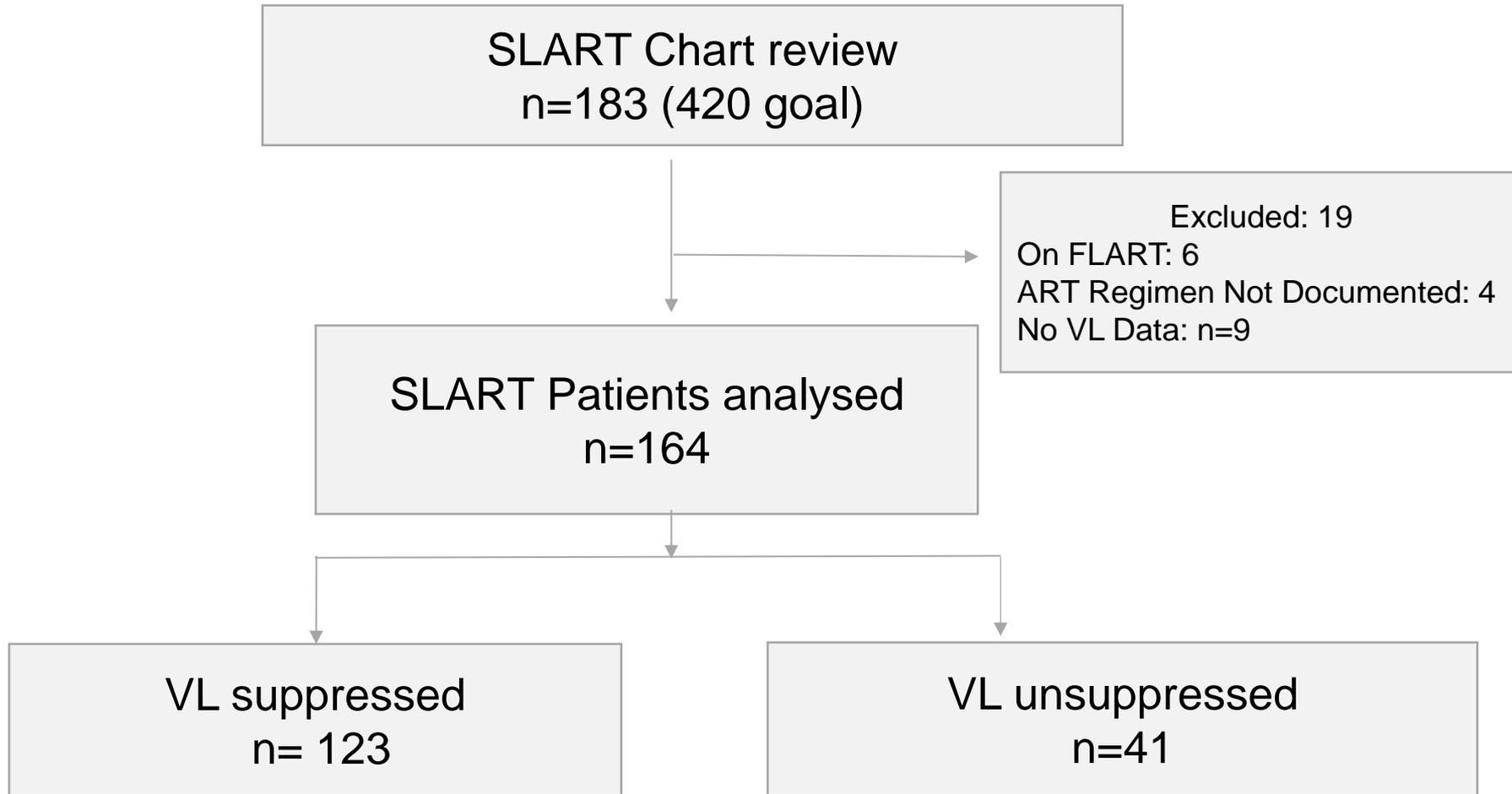
Aim: Targeted HSS for timely identification, triage and management of SLART failure

Objectives:

- Determine the prevalence of SLART failure
- Investigate bottlenecks in timely identification, triage and management of patients failing SLART
- Improve VL re – suppression rates in those failing SLART:
 - Improve access to Genotype Resistance Testing
 - Improve access to TLART
 - Improve access to specialized services

Methods: Stakeholder engagement, developed SOP & 2nd line chart review tool, obtained necessary permissions, clinically trained data abstractors, use of Tier. Net pivot tables to identify patients on SLART, data abstraction and analysis

Viral suppression rates among SLART Patients: preliminary findings



Baseline characteristics of patients on PI regimen

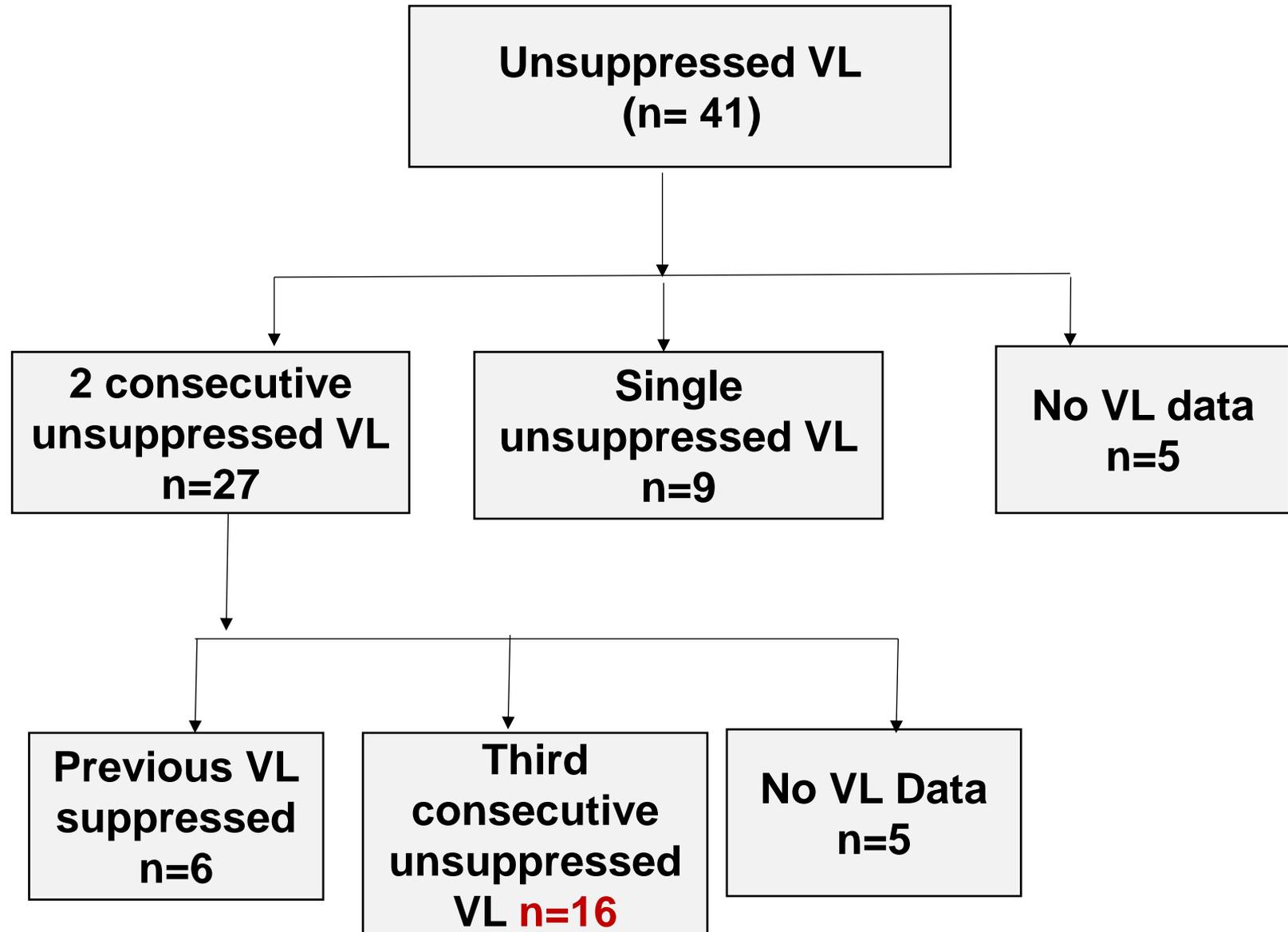
Characteristic	VL unsuppressed (n= 41)	VL suppressed (n=123)
Age, median (IQR)	33 (28-40)	35 (30-43)
Female, n (%)	24 (58.5)	74 (60.7)
TB instance	3 (1.9)	7 (4.5)
Previous ART Failure	36 (90)	96(78)

Abbreviations:

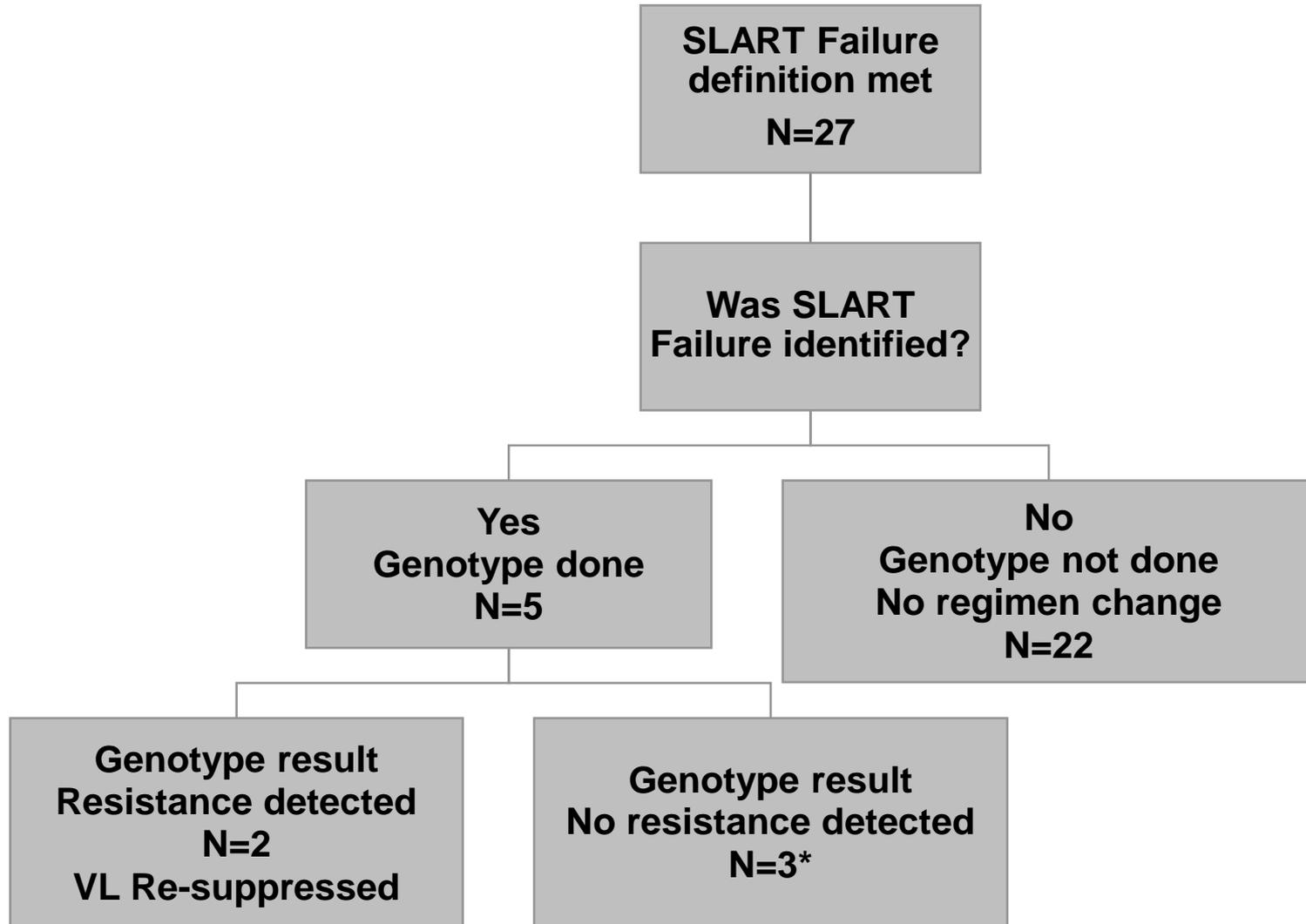
IQR, interquartile range; VL, viral load; TB, tuberculosis; ART, antiretroviral therapy;

Data presented as No. (%), except for age

Laboratory Follow-up of unsuppressed Viral Load



Management of SLART Failure



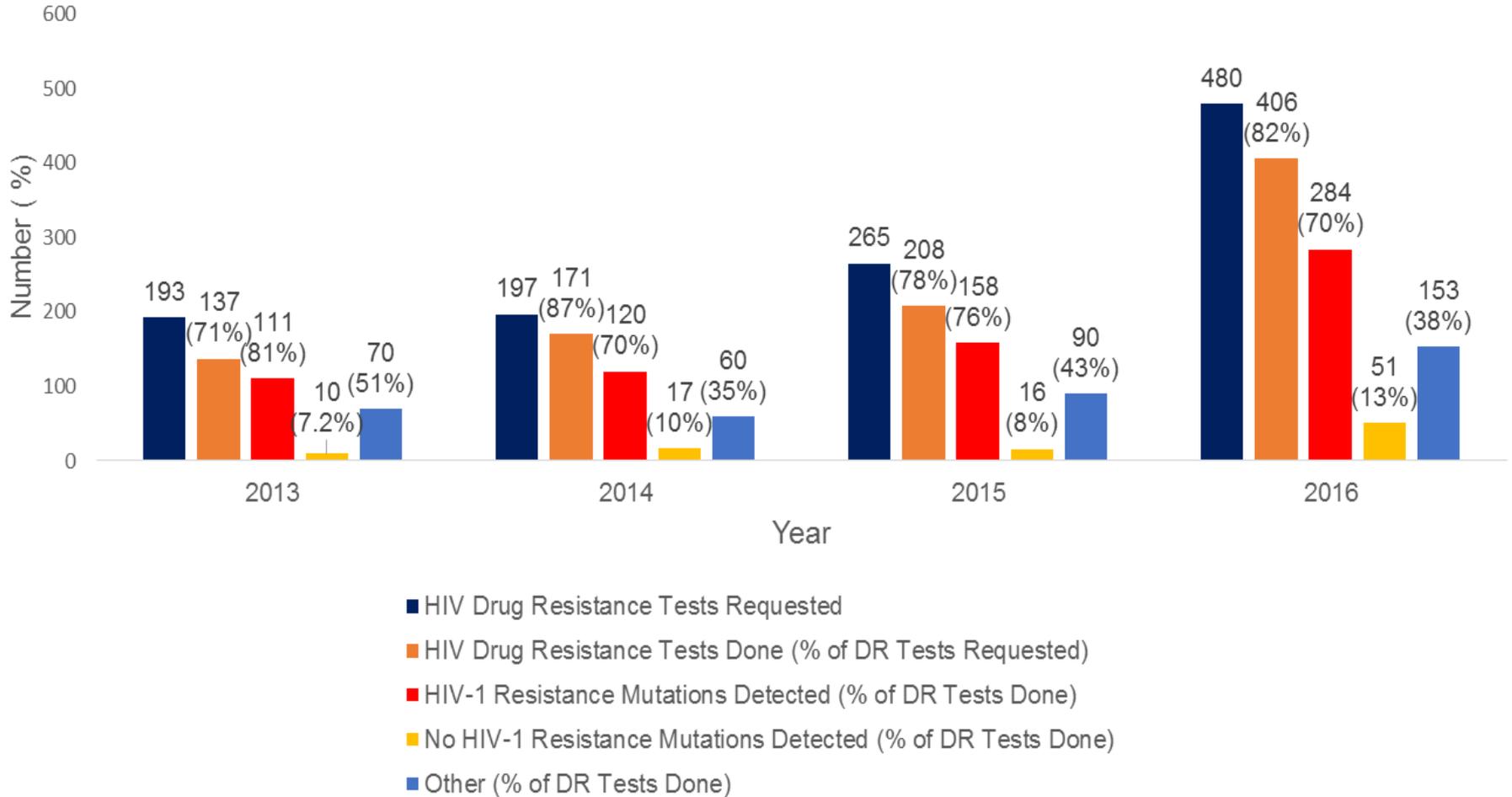
*1-re-suppressed
2-unsuppressed

Clinical presentation of SLART failures

Characteristic	n = 27
Mean age, Years (IQR)	33 (26-37)
Proportion female (%)	17(63)
Duration each SLART patient exposed to high viral load (months)	20
Initiated ART prior April 2013	13(48%)
Median months between two last VL	4.0 (2.7-6.3)

NHLS DoV Helpline Impact on Requests for Genotypic Testing

HIV Drug Resistance Testing in KwaZulu-Natal 2013-2016



Summary

Achieving Viral suppression on SLART

- Establishment of systems for identification and improved management of VF patients
 - 17% of SLART patients failing
 - 60% of SLART failures – poorly managed – third consecutive unsuppressed viral load
 - Re - suppression rates following adherence support poor
 - Genotype testing not routinely offered
- Need for decentralised ART failure services
- Systems for ART failure management support: helplines /mentorship
- Increase in genotype requests noted, however insufficient
- Streamlining systems for improved TLART access in KZN
- Chart audits – standardized approach to improve quality of care

Lessons Learned

- 23 – 36% of patients on SLART are likely to experience virologic failure
- For SA to sustain gains made by the rollout of the ART programme, we need to optimize VL success
- Targeted audits using TIER. Net is critical for early identification, triage and management of SLART failure
- Onsite coaching/mentoring of clinician/nurses in VL failure clinics is critical
- Active interventions on unsuppressed VL are critical

Acknowledgements



Resistance testing Versus Adherence support for Management of Patients with virologic failure on a first-line antiretroviral therapy



Maternal and Adolescent Child Health

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