KWAZULU-NATAL PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

HEALTH SYSTEMS TRUST

2030 NDP

STRENGTHENING VIRAL LOAD MANAGEMENT: UTHUKELA DISTRICT

30 October 2025

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Presentation overview

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- Situational analysis
- Aim, objectives and interventions
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Background

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- At the end of Quarter 2 2024, the district performance for the ‘VL done’ indicator was below the target of 95%.

- During a deep dive for data analysis, the team identified that the district had 25 464 patients appearing on the ‘Viral load overdue’ list, indicating poor performance of VL completion.

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Situational analysis

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Activities

- **Eight facilities with high numbers on the 'VL overdue' list were identified: St Chads, Ezakheni No 2, Steadville, Walton, Bergville, Bergville Mobile 2, Injisuthi and Ntabamhlophe Clinics.**
- **Sub-district teams conducted clinical chart audits for patients appearing on the list.**

Gaps identified

Issue area	Description
Date misalignment (DMoC)	Appointment dates not aligning with VL cohort dates.
Actioning gaps	Line lists not being acted on consistently.
Data quality issues	Inconsistent file capturing due to poor file flow.
Missed opportunities for VL management	Patients' blood samples not drawn due to poor clinic flow and inadequate reminders.
Staff capacity	Limited competency and adherence to ART Guidelines

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Aim, objectives and interventions

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Aim

To increase VL done from 89% in 2024 Q1 to 95% by Q4 2026

Objectives

- To reduce the 'VL overdue' list by 15% quarterly
- To align VL testing with ART start-dates
- To improve data quality

Interventions

- Triangulation between patient records, LabTrak and the data management systems.
- Utilised LabTrak to fast-track capturing of awaiting results
- Tracking and tracing of patients on the 'VL overdue' list
- Facility-based upskilling of healthcare workers on VL management through huddle meetings

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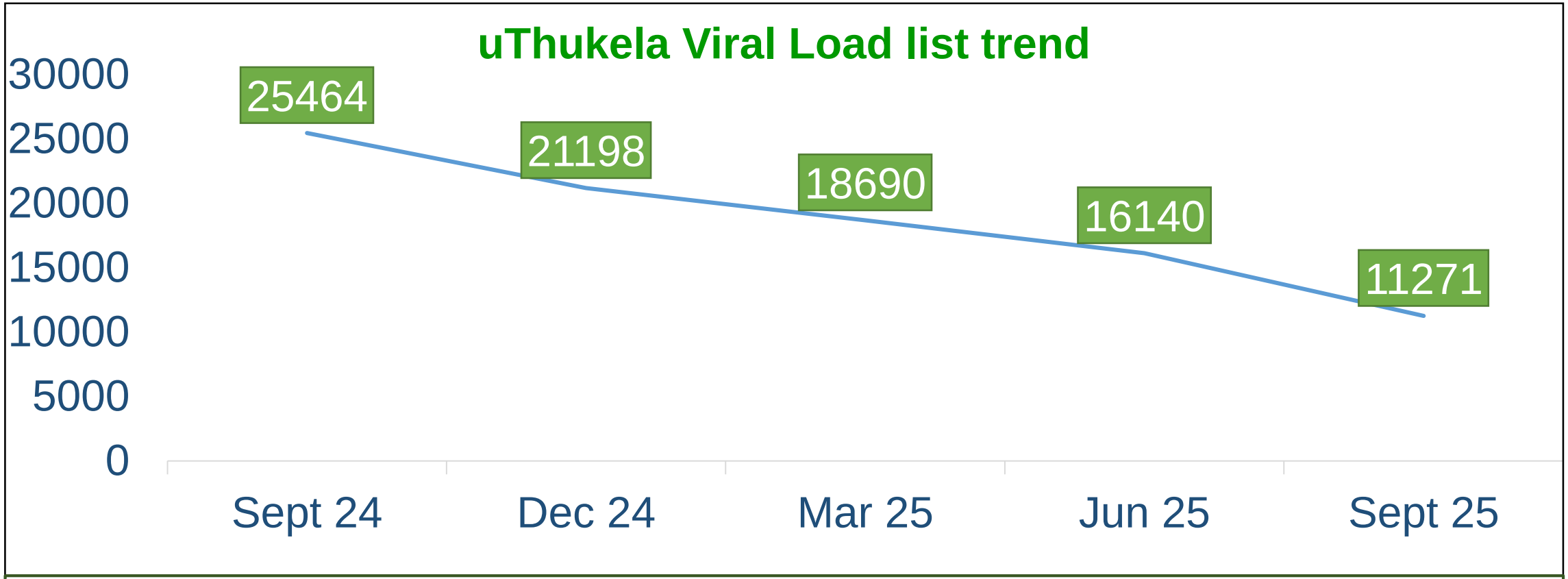
Strengthening VL management using the ‘VL overdue’ list



The graph demonstrates a consistent downward trend reflecting a 56% reduction over a 12-month period.

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uThukela 95-95-95 cascade

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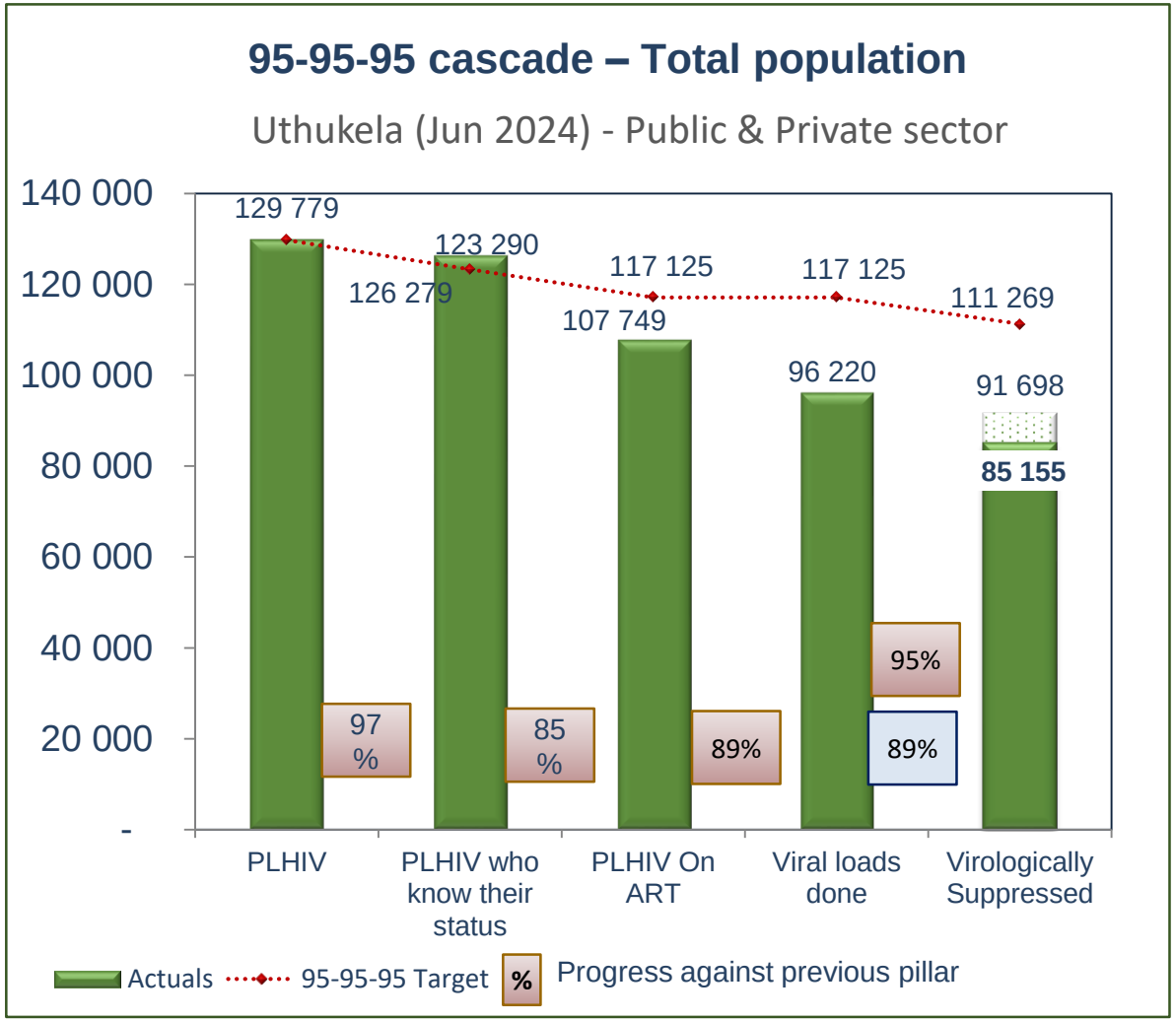

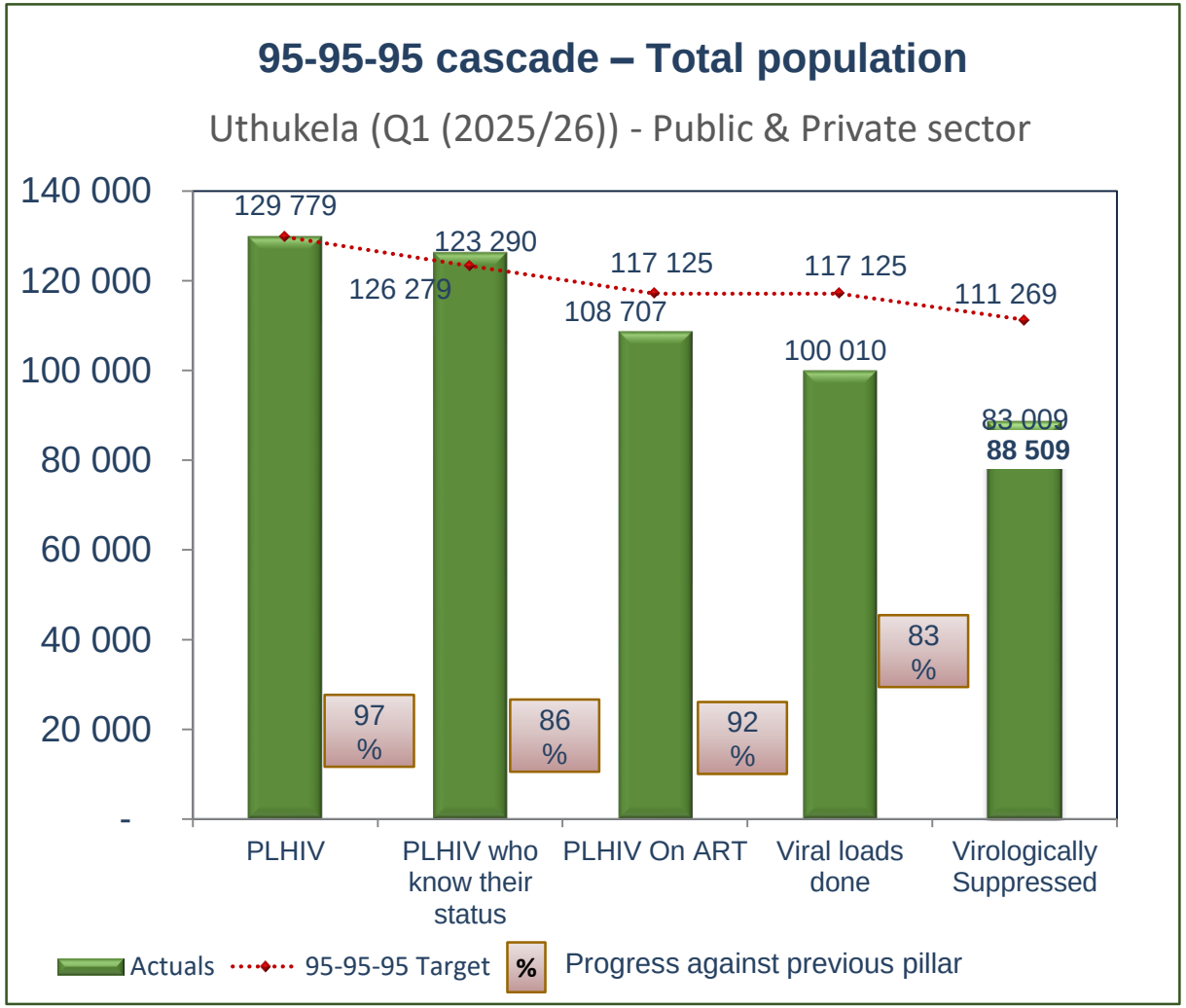

Lessons learnt and sustainability strategy

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Key lessons learnt

- **Data use drives action:** Regular utilisation of the VL Monitoring Tool during facility huddle meetings created a strong culture of accountability and rapid response.
- **Mentorship enhances quality:** On-site coaching, supportive supervision, and AHD/ACC clinical mentoring significantly improved staff adherence to VL Standard Operating Procedures (SOPs) and reduced missed opportunities for VL management.
- **Integration improves efficiency**: Integration of services per Integrated Clinical Services Management (ICSM) guidance enhanced patient retention and VL management.
- **Collaborative structures matter:** Strong co-ordination between the Department of Health (DoH) and Health Systems Trust (HST) enabled a shared accountability framework, ensuring consistent monitoring.
- **Real-time feedback is essential:** Continuous data verification between data systems improved accuracy and ensured prompt corrective action at the facility level.

Sustainability strategy

To sustain and build on these achievements, the district has institutionalised the following measures:

- **Upskill healthcare workers on adherence to VL SOP and ART Guidelines**
- **Continuous follow-up on implementation of the VL SOP and ART Guidelines**
- **Review of performance through the Operation Phuthuma strategy**
- **Integration of VL indicators into routine performance reviews and district quarterly reports.**

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Routine ART and VL monitoring

Routine VL monitoring	Intervention	EAC indicated?
First VL after ART initiation	Do 1st VL after **3 dispensing cycles**	• Allows for earlier detection of factors influencing viral suppression • Allows for earlier decanting for suppressed clients to minimise visits and promote continued engagement in care • This VL will form part of the **6 month VL completion cohort** in Tier.net
Second routine VL after ART initiation (in clients who remain virally suppressed)	This VL can be done from **10 dispensing cycles** but should be aligned with the clients scripting cycle	• This VL will form part of the **12 month VL completion cohort** in Tier.net
Third routine VL after ART initiation (in clients who remain virally suppressed)	This VL can be done **from 22 dispensing cycles**, but should be aligned with the clients scripting cycle	• This VL will form part of the 24 month **VL completion cohort** in Tier.net
Fourth and all subsequent VLs	VLs will be taken at intervals of 12 dispensing cycles for all clients who remain virally suppressed	
The timing of dispensing cycles, follow-up visits, and VL monitoring is illustrated in the diagram below		

SOURCE: 2023 ART Clinical Guidelines for the Management of HIV in Adults, Pregnancy and Breastfeeding Women, Adolescents, Children, Infants and Neonates, page 20.

Viral Load Analysis Tool

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The **VL Analysis Tool** is an Excel-based instrument designed to provide a facility-level snapshot of viral load performance and patient management using data extracted from TIER.Net.
It integrates data from four key TIER.Net lists: VL Cascade, VL Overdue, 2 Consecutive Unsuppressed VL, and Patient Appointments covering over 98% of Total Remaining on ART (TROA).

Core functions

Comprehensive VL monitoring:
Stratifies patients by VL thresholds (e.g. <19, <50 copies) and identifies those due, overdue, or unsuppressed.

Adherence and retention tracking:
Highlights patients who have missed or delayed appointments (early, late, uLTFU) to support tracing and follow-up.

Differentiated Models of Care (DMoC):
Flags patients enrolled in or eligible for CCMDD/6MMD, based on ART duration, suppression status, and regimen type.

Clinical Action Lists:
Generates summaries and filtered lists for action, e.g. patients with unsuppressed VL on DMoC, missing VL results, or sudden VL changes.

Automated Data Processing

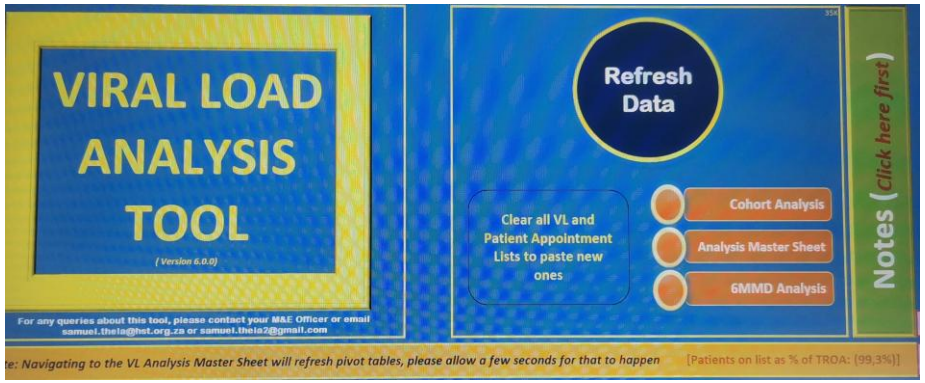
Cleans, merges, duplicates, and refreshes all source data with one click (‘Refresh Data’), creating ready-to-use pivot dashboards.

Limitations

Provides a point-in-time snapshot not suitable for trend analysis or district-level reporting. Some regimen or patient data may be incomplete due to list source differences.

In short

The VL Analysis Tool helps HCWs and Data Teams in rapidly visualising and acting on viral load performance at facility level, enabling targeted interventions, improved patient follow-up, and better VL suppression outcomes.



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A male coach at Driefontein Clinic explains the benefits of treatment adherence.

The Roving Team at Walton Clinic actioning line lists (TB outstanding outcome, TB uLTF, TB outstanding results, ART uLTF, VL overdue)

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Nosimilo Duma (Peer Mentor) conducts classes for pregnant women on the importance of knowing one's HIV status and PrEP.

Nonhle Ntethe capacitates facility staff on planning for upcoming adherence groups <19 years.

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The DO ART mobile clinic team supports Steadville Clinic by tracing patients whose VL testing is overdue, taking VL blood tests, delivering treatment, and providing adherence counselling.

VL test results are sorted and filed, and patients who have missed their appointments are traced telephonically.

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Staff triangulate TIER.Net and sub-district data to determine whether a patient is attending another clinic.

Retrieving files of patients who have missed their appointments.

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Thank you

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