The CQUIN Learning Network

The Science & Practice of Scale Up

Scaling up viral load services in Manzini

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HIV LEARNING NETWORK

The CQUIN Project for Differentiated Service Delivery

The Science & Practice of SCALE-UP

Empowering Health for 15 years ICAP

Columbia University Mailman School of Public Health

Outline

- Background and context
- Methods: the intervention package
- Results
- Lessons learned and way forward

Background – RVLT in Eswatini

- In 2016, the Eswatini national HIV guidelines recommended VL monitoring for patients on ART
  - Targeted approach during dissemination of guidelines
  - Scale up of routine VL testing (RVLT) started in April 2017
- In 2017, the National Molecular Referral Laboratory (NMRL) received 146,676 samples for RVLT
  - 13,406 (9%) were not virologically suppressed
- SOPs for monitoring ART with RVLT were developed but not widely circulated

Context – ICAP in Eswatini

- ICAP has been a PEPFAR implementing partner in Eswatini since 2005, with a diverse portfolio of activities.
- In 2015, ICAP received funding from PEPFAR via CDC to support laboratory systems strengthening, including education and training for lab accreditation, improving equipment and supply chain management, strengthening lab information systems, and improving testing access.
- ICAP is also working with MOH to optimize the viral load cascade, providing technical assistance at the central (national) level and supporting VL scale up at 43 health facilities in the district of Manzini

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Priority Activities

- Supported MOH to reconvene national VL task force
  - Drafted terms of reference
  - Coordinated strategic planning meeting
- Drafted a national VL implementation plan
- Conducted site readiness assessments (clinical & lab)
- Drafted clinical & laboratory SOPs
- Supported quantification for lab commodities

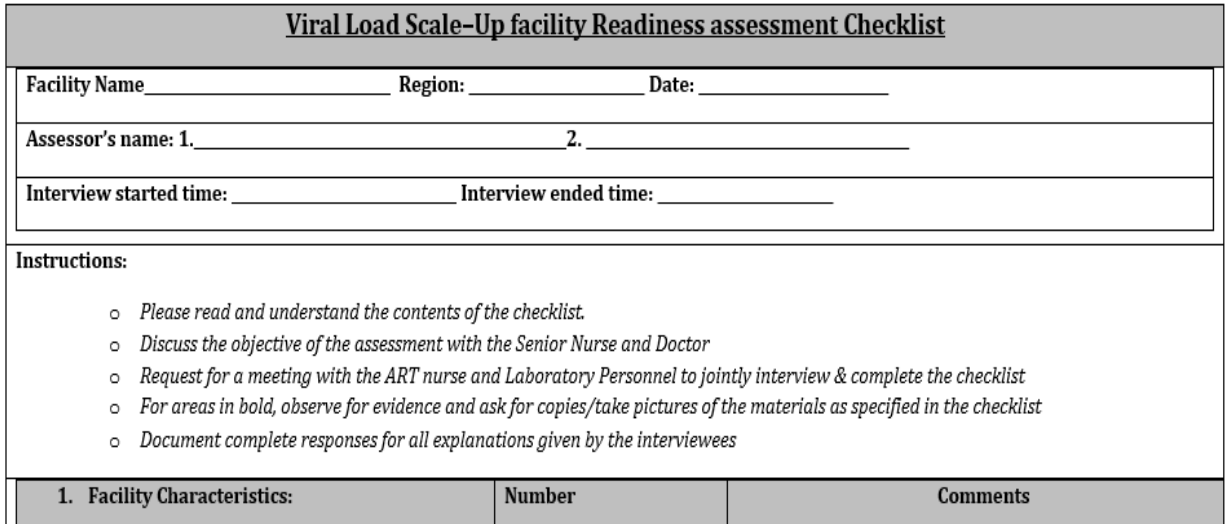
Example: Clinical SOPs

Developed SOPs for:

1. Ordering VL tests at the facility level
2. Returning unsuppressed VL results from the lab to the facility
3. Handling VL results at the facility level (once returned from lab)
4. Returning VL results to patients with suppressed VL
5. Returning VL results to patients with a first unsuppressed VL
6. Returning VL results to patients with a 2nd unsuppressed VL
7. Running the multidisciplinary team

Example: Readiness Assessment Tools

- Structured checklists for clinical and laboratory services
- Assessed infrastructure, staffing and service delivery



Viral Load Scale-Up facility Readiness assessment Checklist

Facility Name_____ **Region:** _____ **Date:** _____

Assessor's name: 1._____ **2.** _____

Interview started time: _____ **Interview ended time:** _____

Instructions:

- *Please read and understand the contents of the checklist.*
- *Discuss the objective of the assessment with the Senior Nurse and Doctor*
- *Request for a meeting with the ART nurse and Laboratory Personnel to jointly interview & complete the checklist*
- *For areas in bold, observe for evidence and ask for copies/take pictures of the materials as specified in the checklist*
- *Document complete responses for all explanations given by the interviewees*

1. Facility Characteristics:	Number	Comments

Readiness Assessment: Illustrative Results

N = 24 facilities

Is there a system in place to routinely review VL results and flag those > 1,000c/mL?

- 71% had a system in place to review results
- But only 46% routinely flagged /separated results showing unsuppressed VL

Is there a system in place to ensure VL results are delivered to patients?

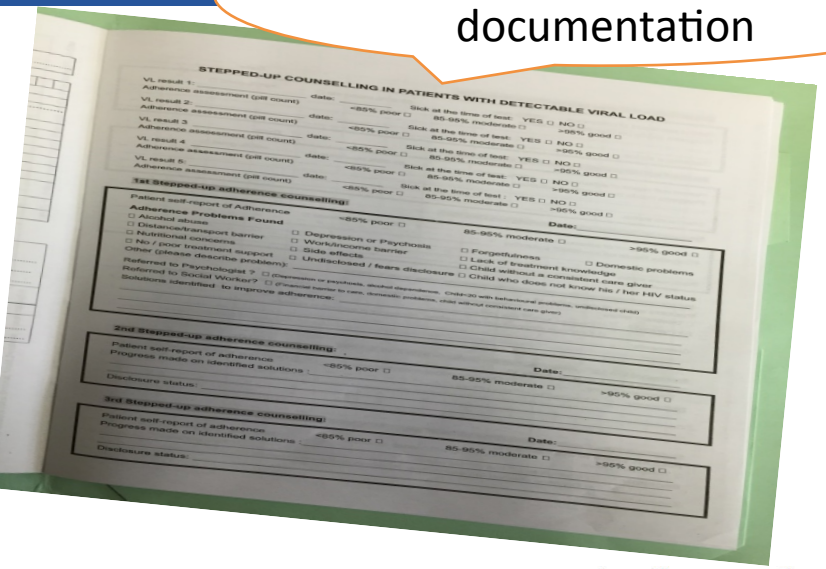
- 63% had a system in place
- 59% called patients
- 4% made home visits

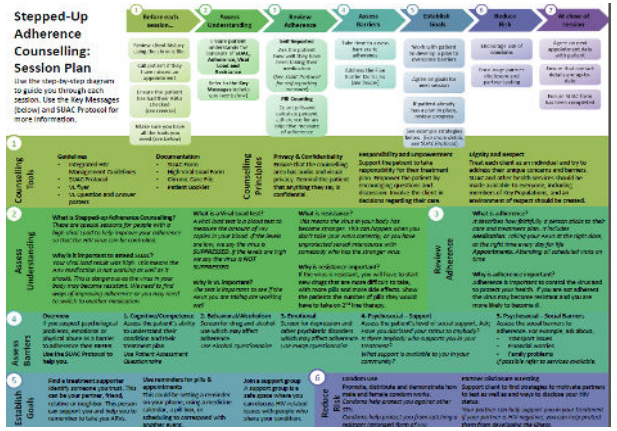
Example: Implementation Tools Developed

1. Laboratory request form (revised)
2. SOPs for specimen collection, storage, and transport (DBS and plasma)
3. Log sheets for VL specimen referral and result record
4. Job aids for specimen collection, storage, and transport (DBS and plasma)
5. NSTS specimen delivery checklist
6. VL lab testing SOPs (DBS and plasma)
7. VL log sheet for VL specimen referral and results recording

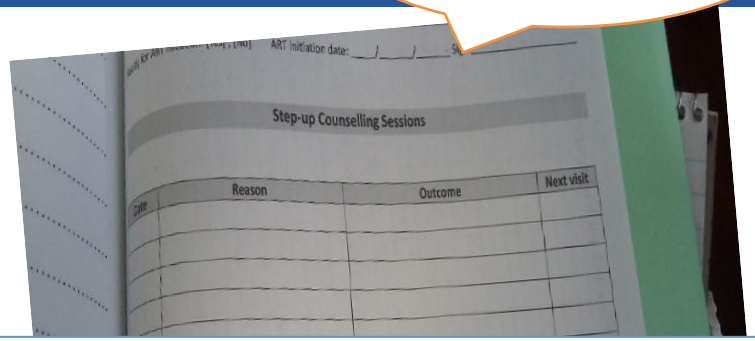
Tools Developed

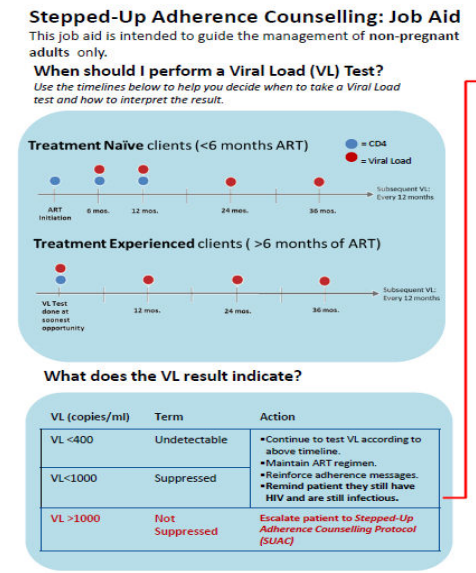
High VL counselling documentation

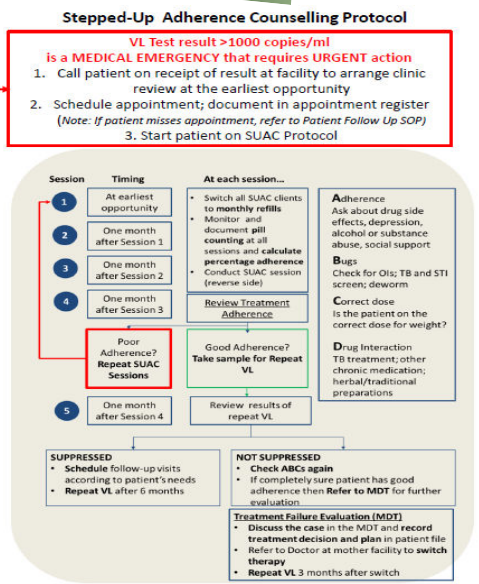


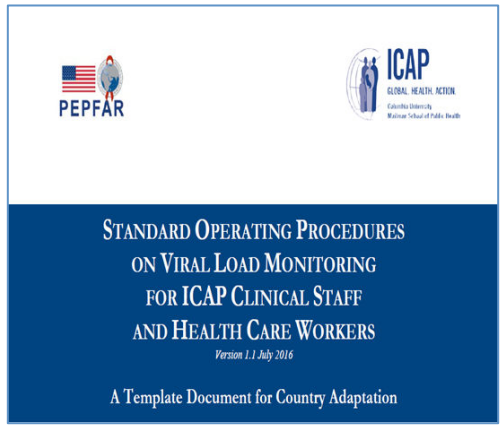


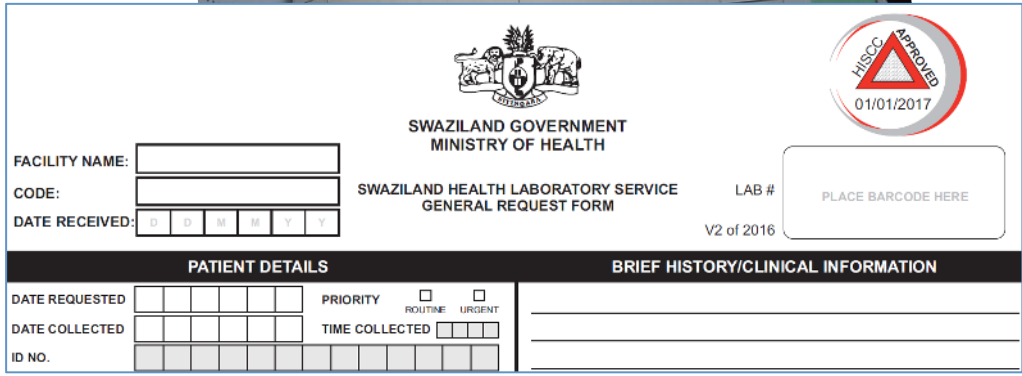
Documentation for general counselling











High VL register

VL results LOG value	Date results received at facility	Date client received result + First SUAC (DD-MM-YYYY)	Second SUAC (Date) (DD-MM-YYYY)	Third SUAC (Date) (DD-MM-YYYY)	If further sessions write date	If further sessions write date	Date Repeat VL taken	Repeat VL Result in copies

Example: Lab Systems Strengthening

1. Established the new molecular lab in all regions and one in Manzini
2. Provided four refrigerated vehicles to strengthen the NSTS
3. Mapped and rerouted sample referral to new molecular labs (to national TB hospital for most facilities in Manzini region)
4. Conducted training on sample collection and referral
5. Procured freezer, centrifuges and refrigerators

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  - ✓Coverage
  - ✓Utilization
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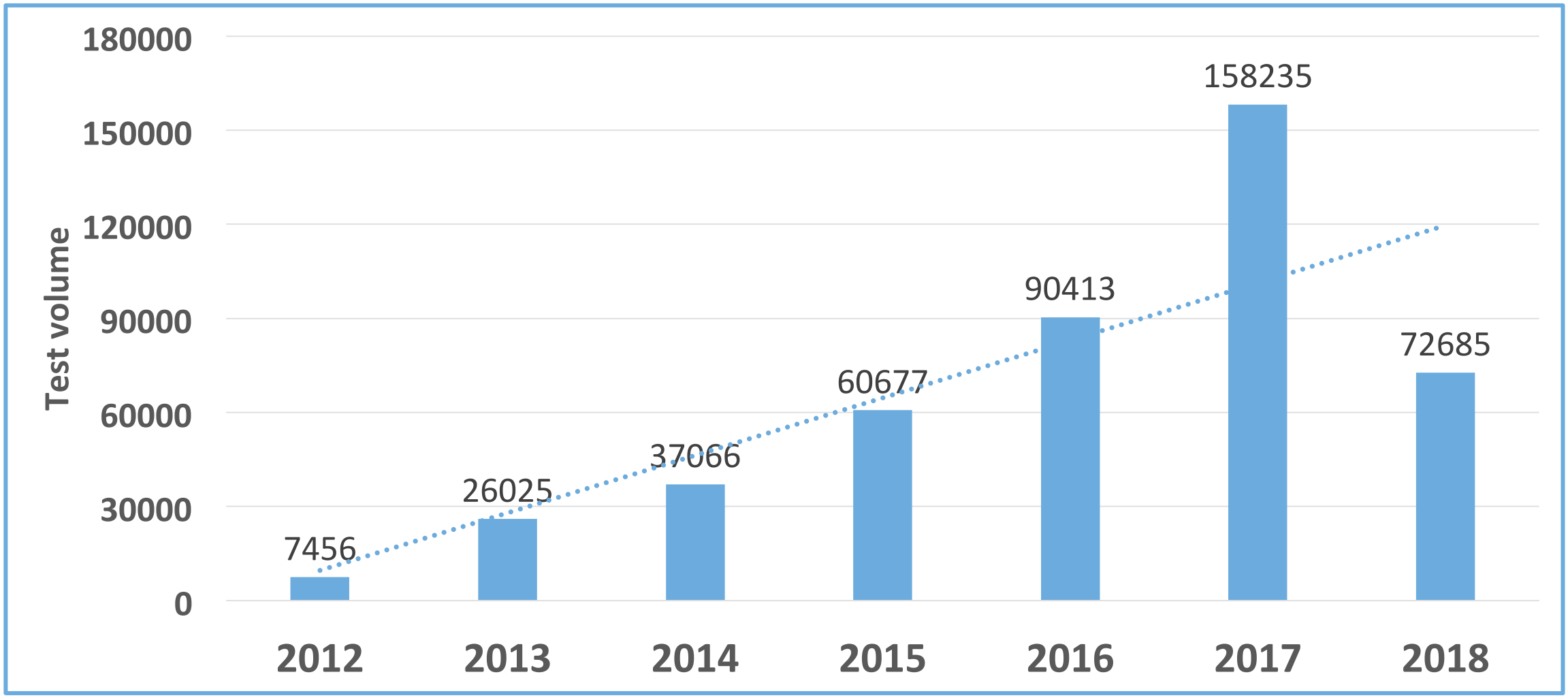
National Trend VL Test Volume 2012-2017 in Eswatini

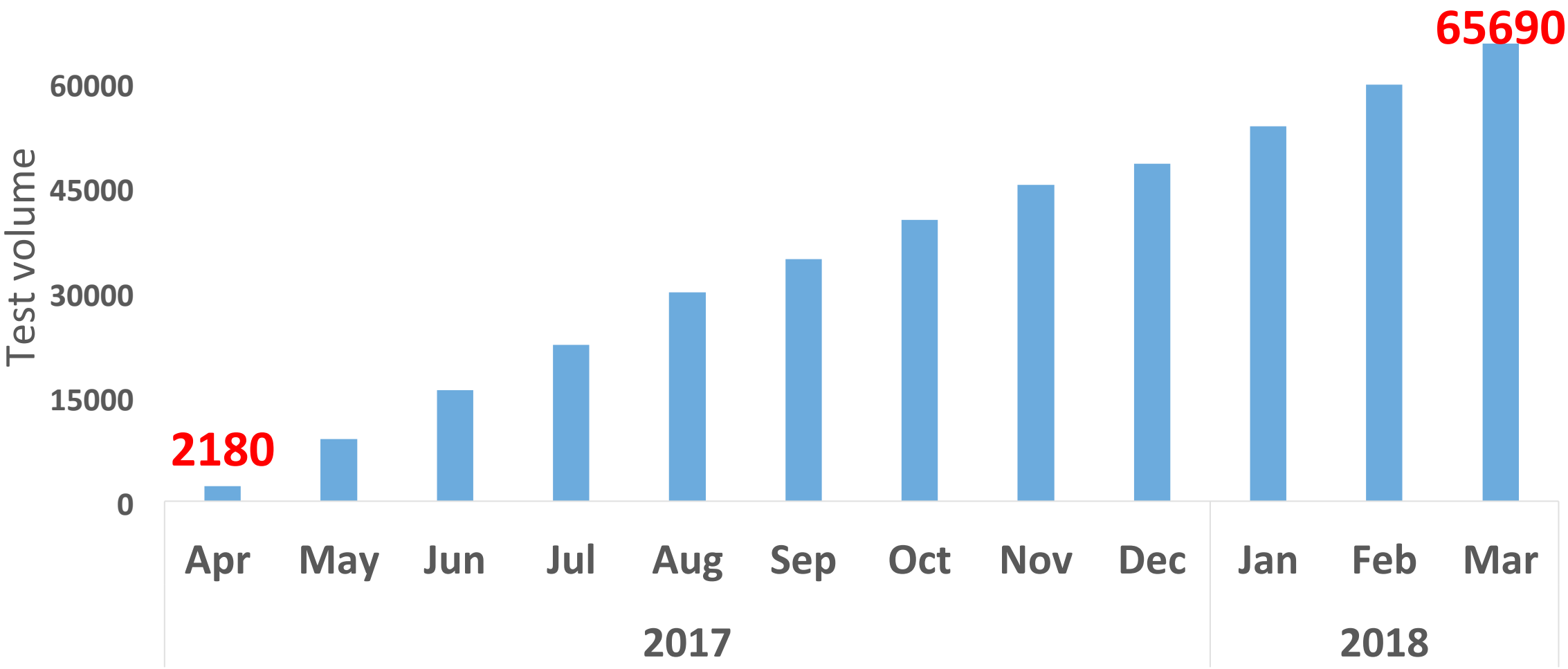


Coverage: Viral Load Testing in Manzini

Between April 2017 – March 2018:

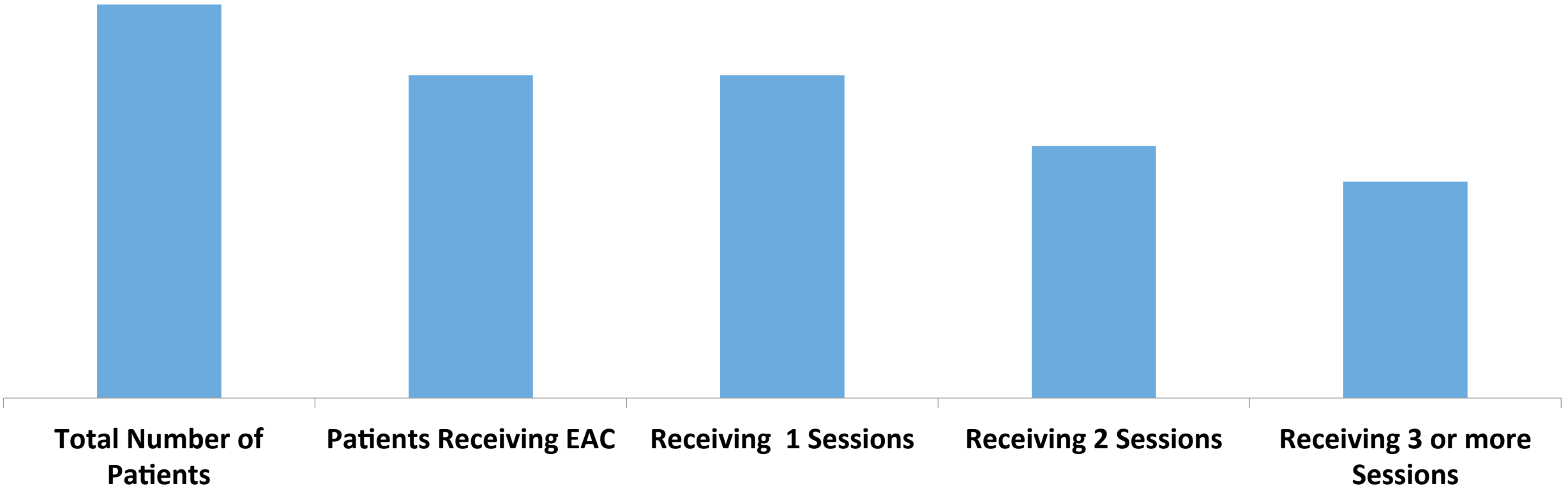
- 58,574 patients on ART
- 65,690 VL tests
  - 67% female patients
  - 87% patients ≥ 20 years
- 91% suppressed (90% < 400 copies/mL, 1% 400-1,000 copies/mL)

Cumulative number of viral load test done in Manzini April 2017-March 2018



Utilization: High Viral Load Results

Monthly cohort of patients with high VL Receiving SUAC



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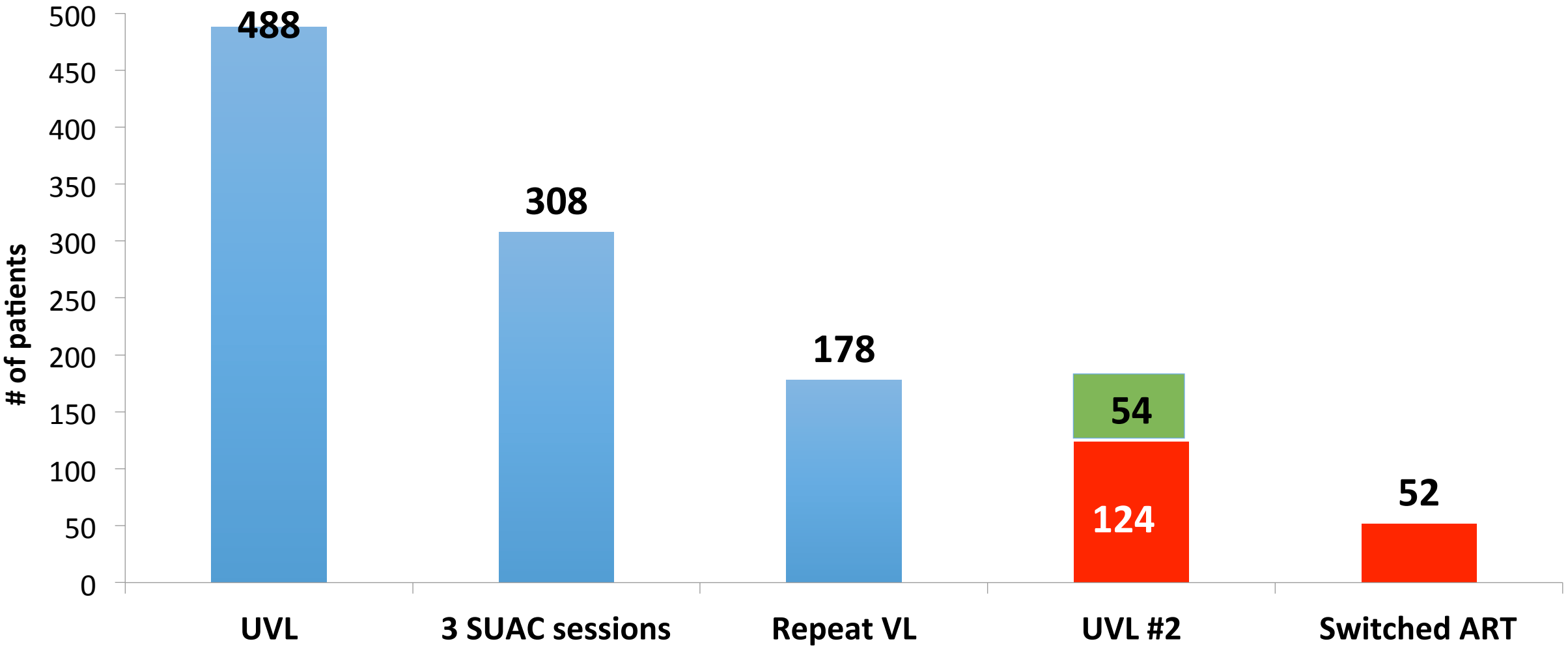
Utilization: High Viral Load Results
July-September 2017



Utilization: Suppressed VL Results

- Twenty three (53%) of ICAP supported facilities are implementing DSD models
  - By March 2017, 13545 clients were identified as stable using suppressed viral load results
  - 3,382 clients (25%) are enrolled in DSD (fast track/CAGs) model of care

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Lessons Learned -1

- Need to focus on both VL coverage and VL utilization
- Critically important to monitor the whole VL cascade
- Lab barriers:
  - Equipment failures
  - Lack of timely communication of results to facilities
- Clinical barriers:
  - Systems and processes
  - Clinician knowledge and skills

Lessons Learned -2

M&E tools not optimized:

- Lack of patient level identifiers → tracking # of tests, not # of patients
- No dashboards/tracking by VL results (e.g., UVL *vs.* suppressed)
- Some discrepancies noted between LIS and CMIS

Best Practices

- Separating the high viral load files
  - Using stickers
  - Cabinets labelled according to the SUAC session number
  - Color coding
- Fast tracking those due for SUAC
- A dedicated day to attend patients with unsuppressed VL

	Children <19 yrs
	Suppressed at 3rd VL
	2nd line ART but with High VL
	Deceased; or 3rd line ART
	Transferred Out

Next Steps / Way Forward

- Coverage
  - Simple strategies to flag patients who need VL testing, e.g., color coding and stickers
  - Training, mentoring and supportive supervision
- Utilization
  - Differentiated service delivery!
  - Special clinic days for patients with unsuppressed VL
  - Track and improve referral of patients with suppressed VL to DSD models for stable patients

Acknowledgment

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Thank you