IMPLEMENTING HIVDR MONITORING FOR CLINICAL MANAGEMENT OF PATIENTS FAILING SECOND-LINE ART

ASLM

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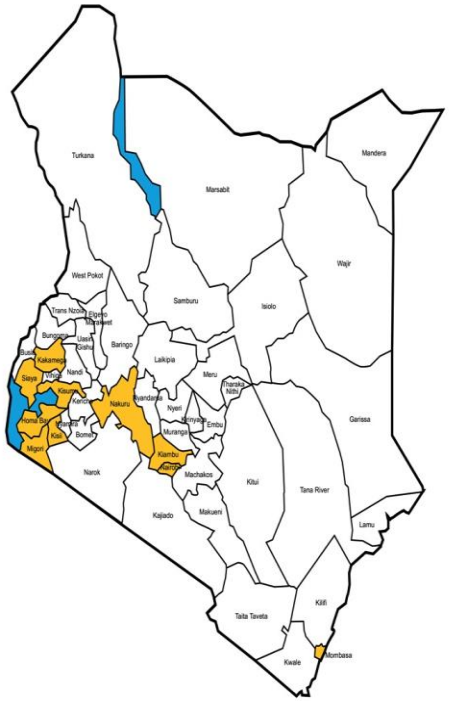
Outline

- Epidemic Status
- Status of Treatment in Kenya
- HIV DR testing
  - Processes
  - Results
- Challenges / Way forward

HIV Burden in Kenya

1.6 million
Kenyans were living with HIV in 2013

191,840
Children (0-14 years) were living

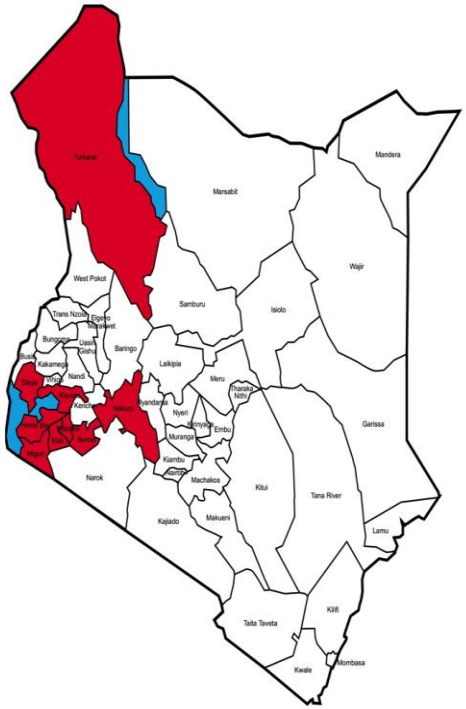


County	Estimated PLHIV
Nairobi	177,552
Homabay	159,970
Kisumu	134,826
Siaya	128,568
Migori	88,405
Kisii	63,715
Nakuru	61,598
Kakamega	57,952
Mombasa	54,670
Kiambu	46,656

Sources: Kenya HIV Estimates Technical Report 2013
NASCOP Key Population Estimates Concensus Report 2012

National HIV Prevalence is 6%

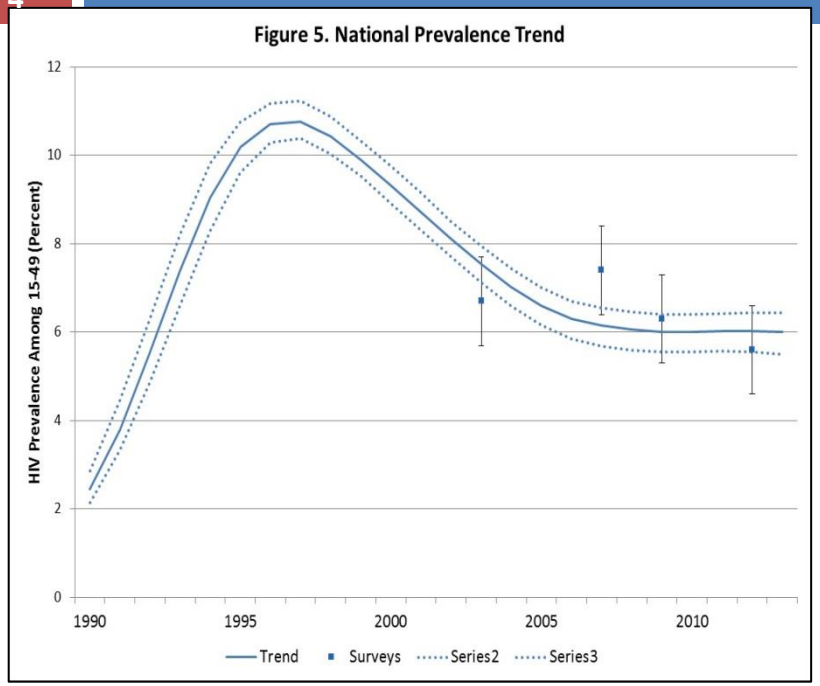
5.6% | 7.6%



65% *of new HIV infections occur in nine of the 47 Counties*

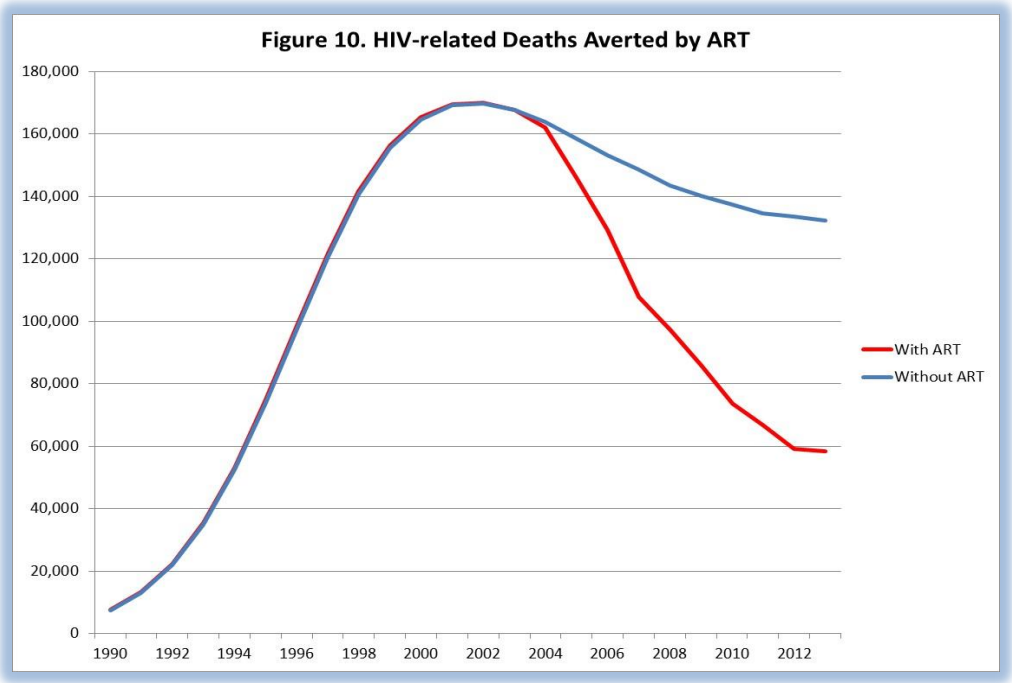
Sources: Kenya HIV Estimates Report 2014
Modes of Transmission 2008

Kenya has made progress



- **Better evidence; Higher investments; ART scale up**

An estimated 380,000 AIDS deaths averted since 2009 due to the scale-up of ART



HIV Treatment

- In 2011 MOH revised guidelines to include management of patients failing 2nd line ART
- All patients failing second line require HIV DR genotyping to determine treatment regimen
- As at end of October 2014, total patients on ART 741,521 (70,000 of these are children) . 4% of these on 2nd line & PI based ART
- Increasing number of patients on 2nd line ART

Indications for HIV DRT

- Confirmed 2nd line ART Virologic failure
  - Requires at least 2 VL tests conducted at 3months apart
- Failure of PI-based 1st line regimen
- Surveillance of HIV DR (pre-treatment , TDR and ADR)

Tools developed

- Guidance document on DRT
- Laboratory request form
- Clinical summary form

Algorithm for DRT

Suspected 2nd line ART failure, NVP exposed children failing 1st line PI based regimen

Obtain Viral Load (VL)

VL > 1,000 copies/mL

Adherence Intervention in all treatment failure patients: adherence counseling, DOTS and home visits (where feasible)Assess for, treat &/or stabilize Opportunistic Infections, Review Drug Interactions

Repeat VL after 3 months

VL < 1,000 copies/mL

No treatment failure: Continue with second-line regimen, Adherence Support,& manage drug toxicity as appropriate

VL<1,000 copies/mL

No treatment failure: Continue with second-line regimen, Adherence Support & manage drug toxicity as appropriate

VL> 1,000 copies/mL

Summarize case in the form and submit through email to therapeutics TWG.

Following approval of Drug Resistance testing Draw blood sample and send to designated HIVDRT laboratory (refer to VL/DRT SOPs).

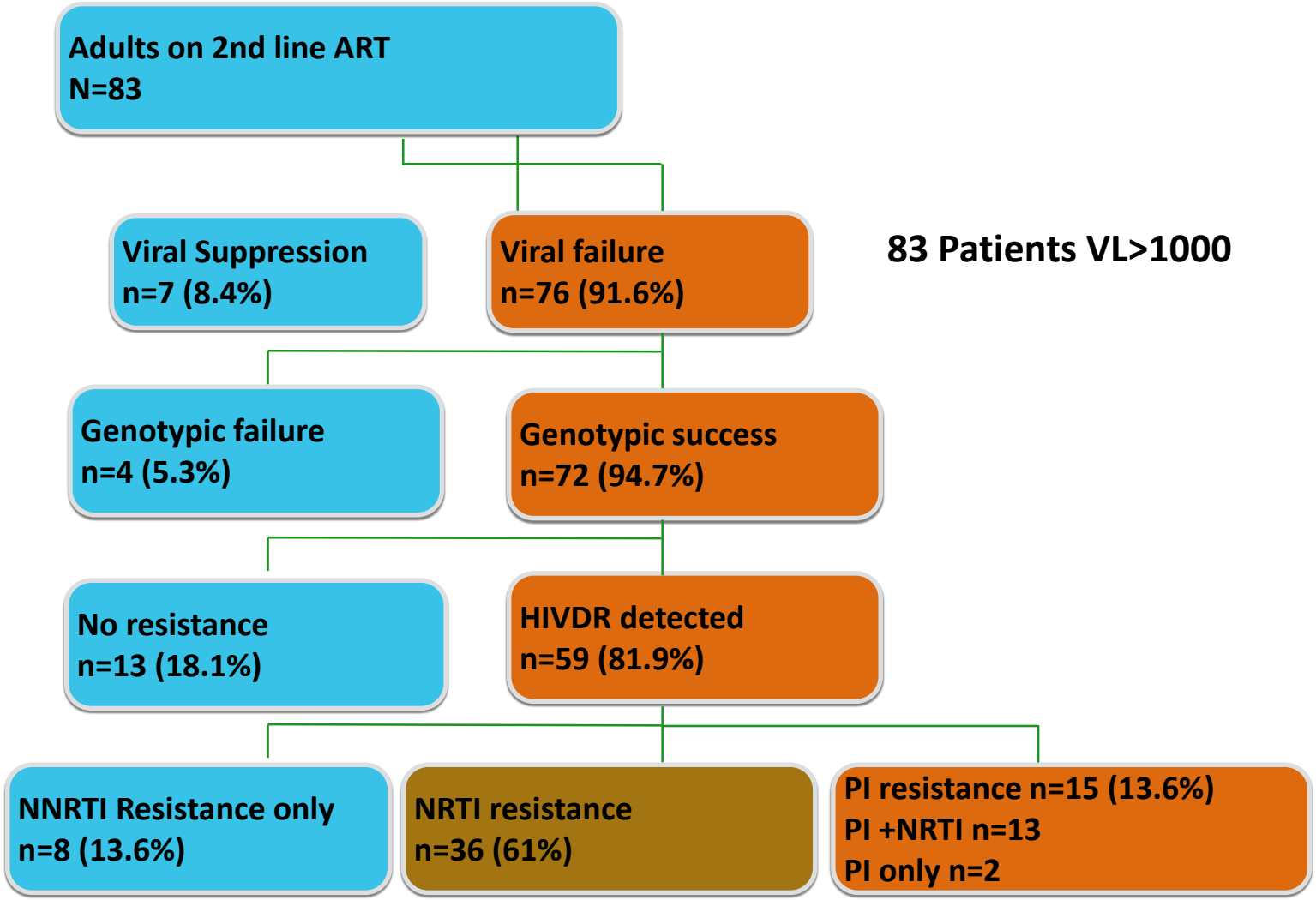
Lab will analyze sample and submit DR test results to therapeutics TWG and health facility. Based on DR results, the TWG will provide management guidance

Support for DRT and Management

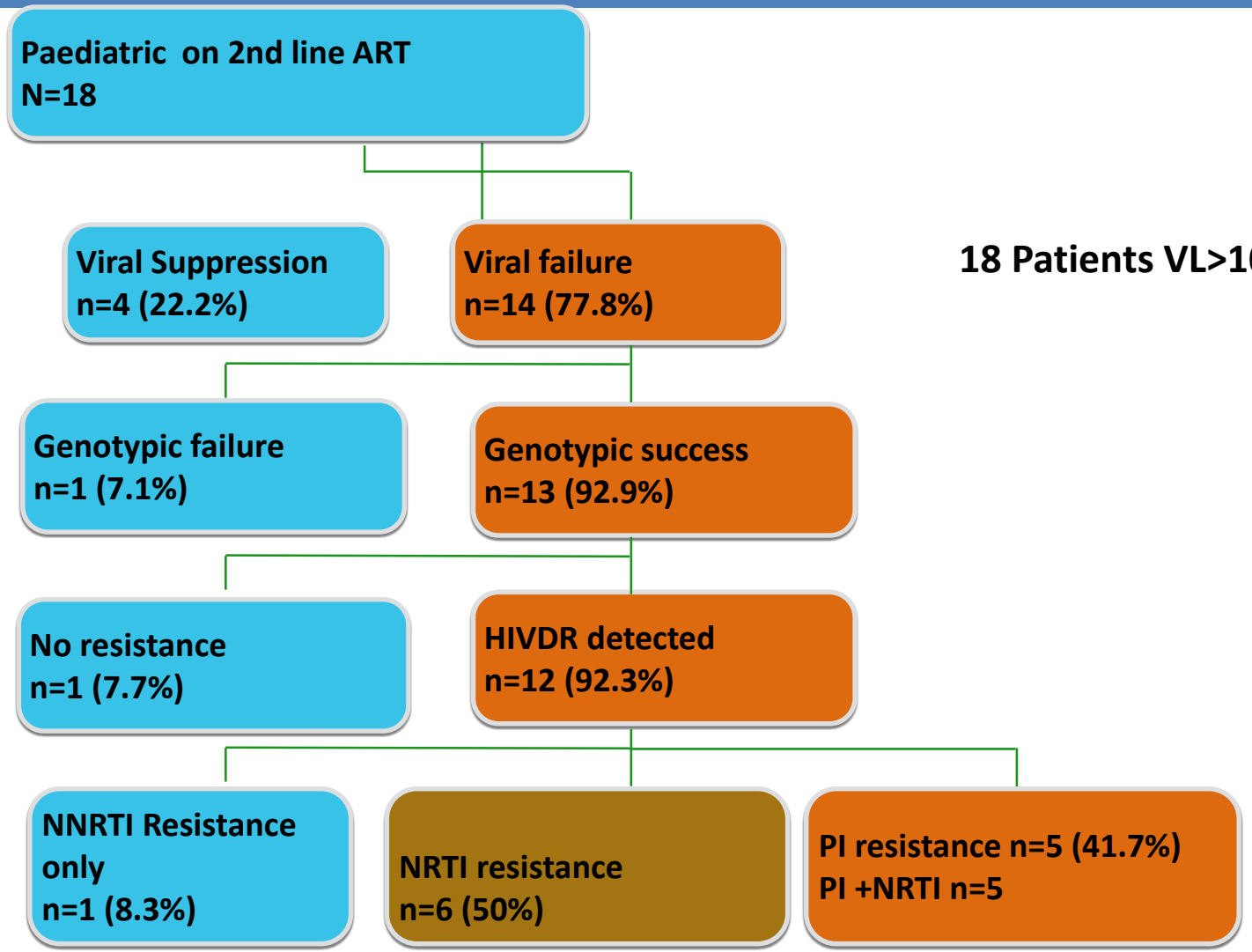
- PEPFAR provides resources for Genotyping. Annual current estimate is 150 tests. Started in 2012
- TWG made up of expert clinicians , program managers, constituted in 2012. TWG recommends DRT
- Transportation of samples supported by institutions or implementing partners
- SOPs for sample collection , packaging and transportation are available
- Average TAT for results 2 weeks . Results sent both to facility and National TWG
- TAT by TWG 2-4 weeks for communication to facilities

Results

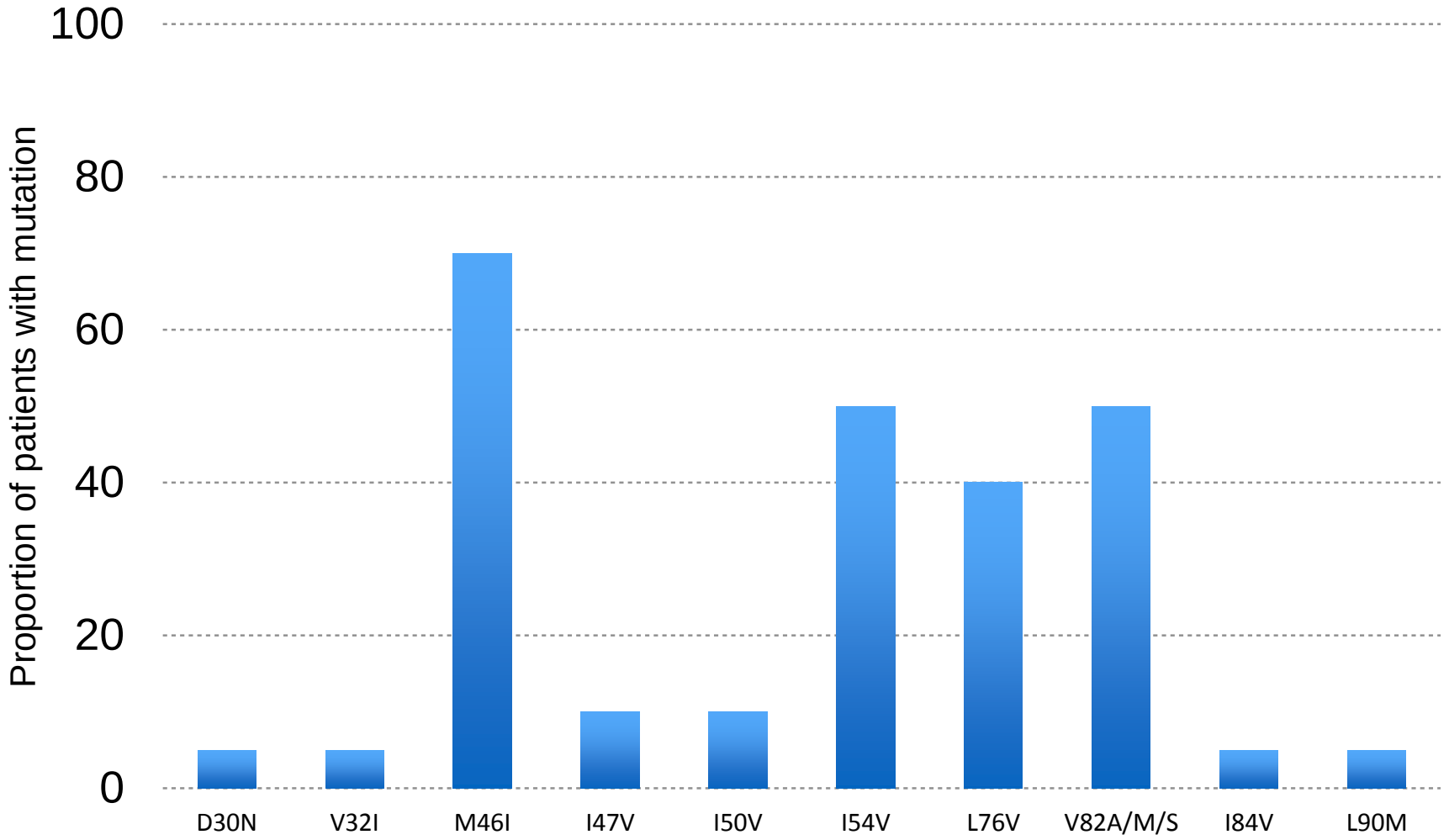
Determination of 2nd Line Treatment Failures in Adults N=83



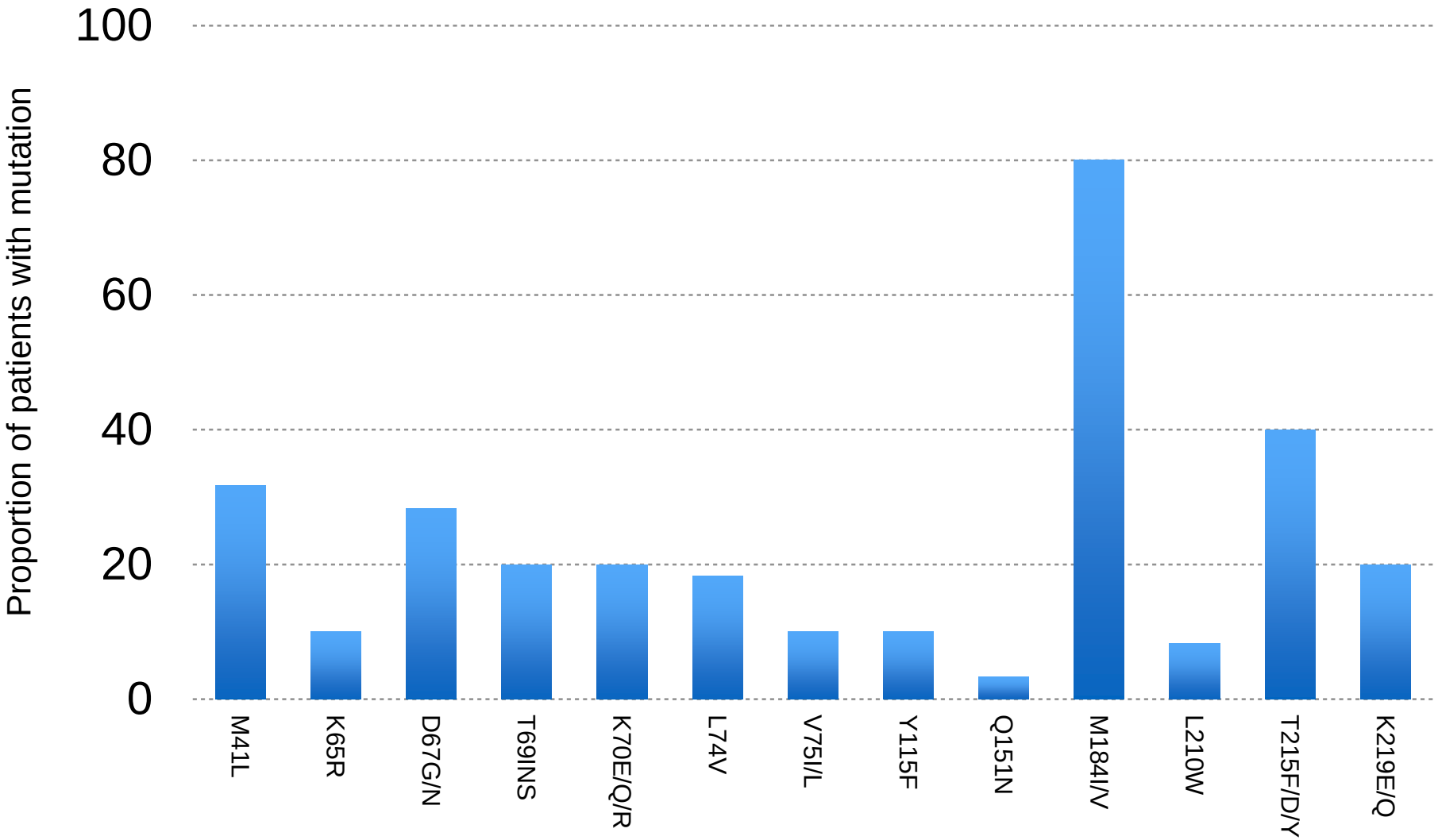
Determination of 2nd Line Treatment Failures in Paediatrics N=18



Patterns of PI mutations n=20



Patterns of NRTI mutations n= 60



Challenges/Key Issues

- Underreporting of 2nd lines failures due to lack of a clear reporting mechanism/not integrated into current systems
- Centralized control of DRT and recommendations for patient management delays response to facilities
- Sample movement a challenge as its partner/facility dependent
- Unavailability of subsequent treatment options when DRMs confirmed
- Uncertainty in funding for DRT in future
- Future role of DRT in context of rising prevalence of TDR and pre-treatment DR

Way forward

- Decentralization of capacity to regional teams
  - MOH and partners already forming teams and training on advanced HIV Clinical care
- Setting up a clear reporting mechanisms from sites –counties – national
- MOH plans Conduct an active study to assess current levels of 2nd line treatment failure
- Need to Develop an active database to monitor patients on 2nd line based on routine VL tests
- Need to compile database of DRMs and clinical support tools to interpret and use DRT results to make management decisions
- Cheaper DRT needed