

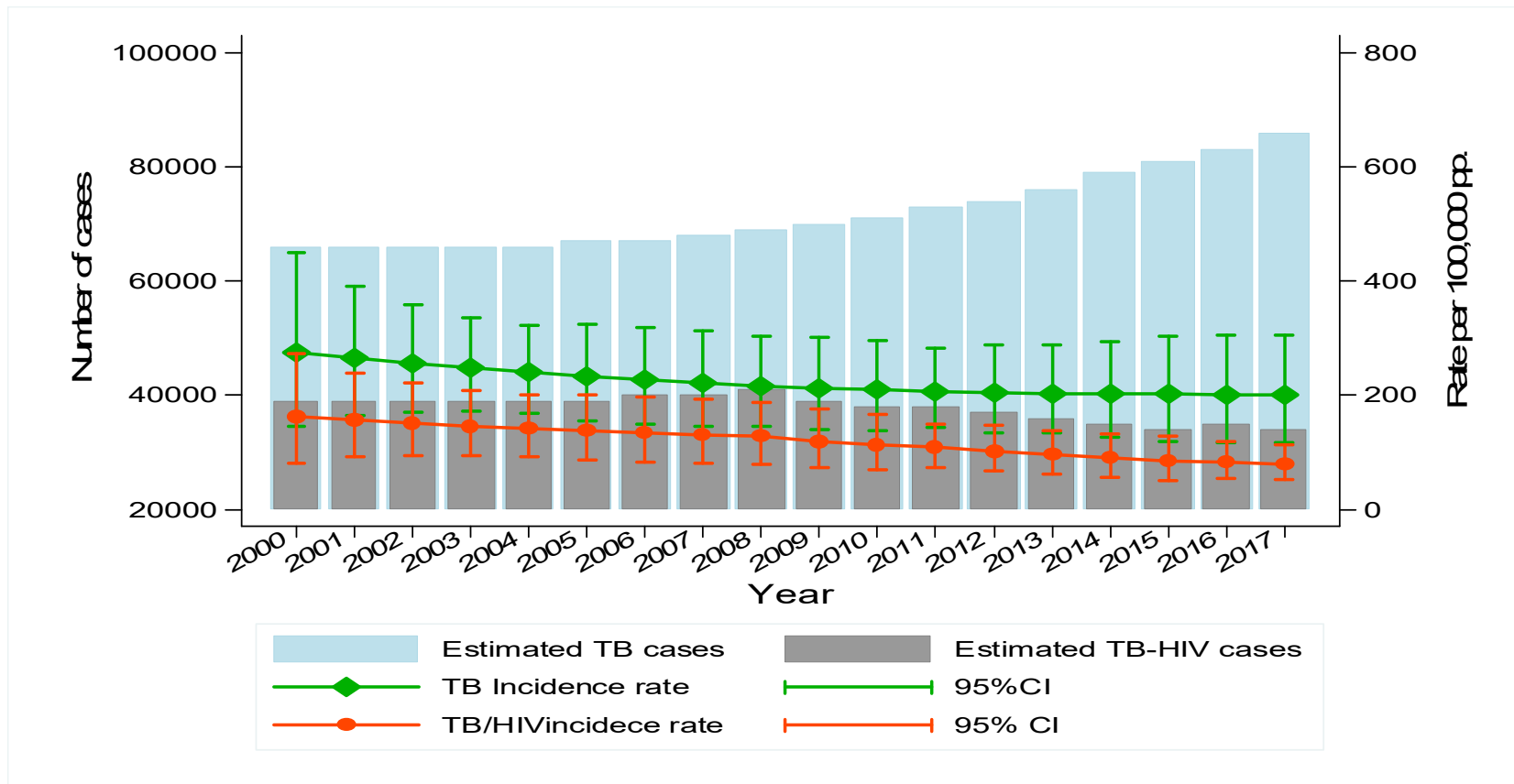


Country experiences with optimizing TB diagnostic and sample transport networks to improve access to rapid testing: *Uganda*

National Tuberculosis and Leprosy Program

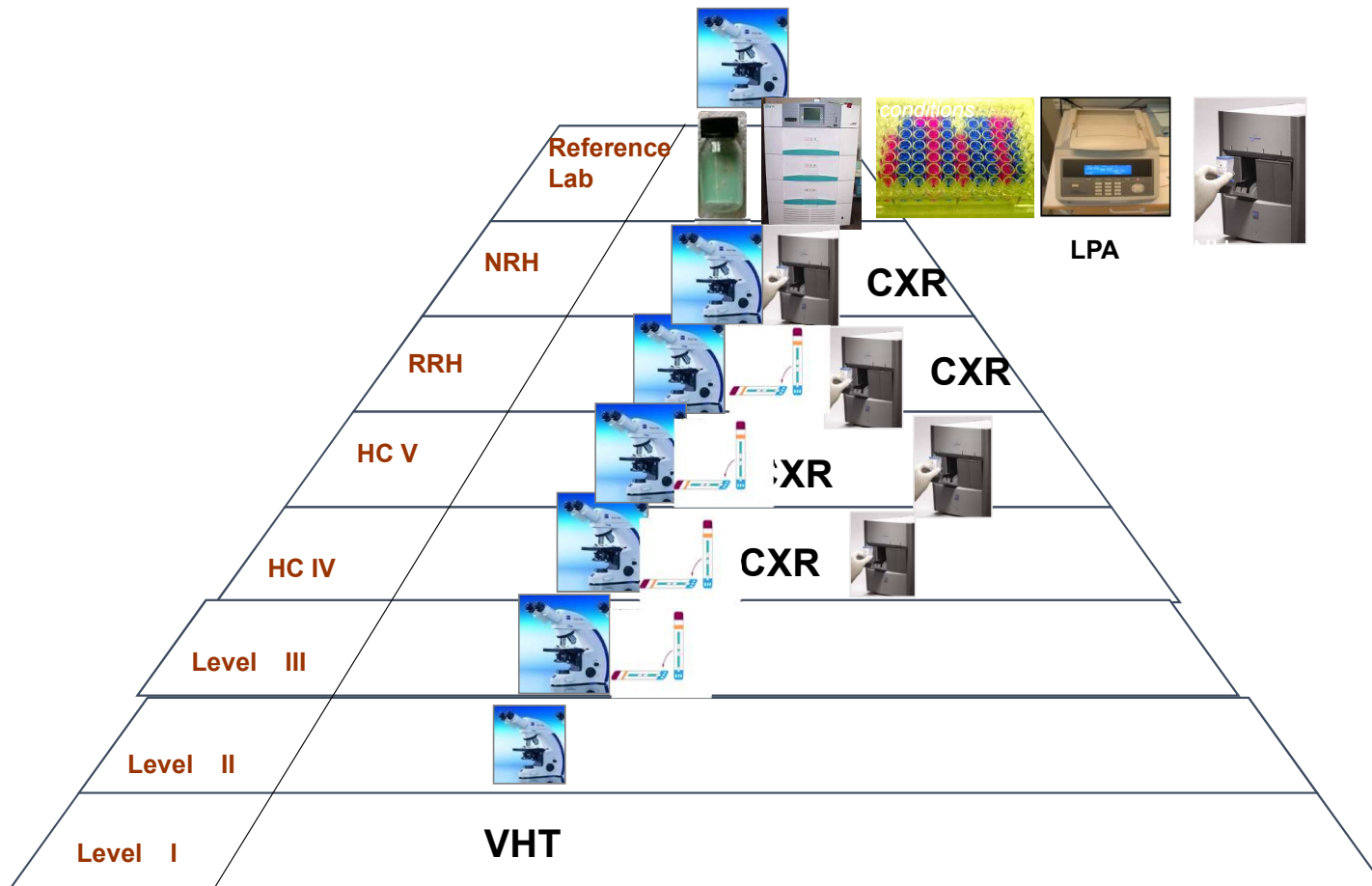
African Regional TB Summit post- UNHLM: Step up effort to find all people with TB.

Uganda WHO estimated TB incidence





Access to TB diagnostics in Uganda tiered health system

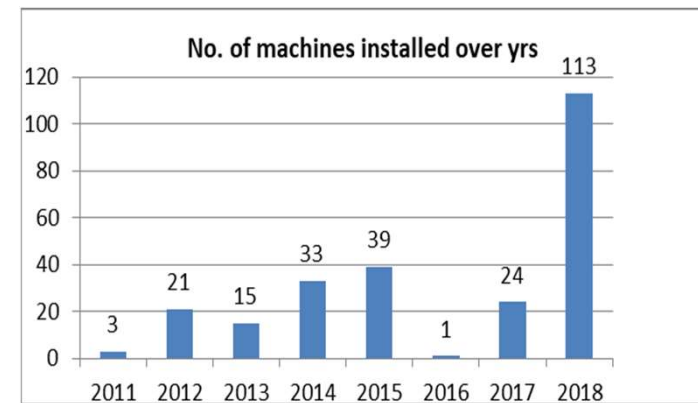


Slide 3

- a1** Is it possible to add numbers of HC2, 3with microscope, 4s with Xpert including the 10 planned for installation,hospital/5 and RRHs.
acer, 8/12/2018

TB diagnostic network

- Uganda has over 1,600 DTUs. All DTUs have bright field microscopes, 100-flourescent microscopes, 249 GeneXpert machines and 120 facilities performing TB-Urine LAM test. Xray services available most hospitals
- The Country and Partners such as USIAD, CDC, The Global fund, FIND, EAPHLN, US-DOD, GLRA, CUAMM, IDI, UCMB etc. have heavily invested in GeneXpert technology
- During initial implementation, the eligibility for GeneXpert focused on PLHIV, Children and previously treated TB patients. Following the 2015 TB PS, the algorithm was revised.





Trend of GeneXpert utilization rate [249 machines]



10

Utilization increased with increasing number of Xpert machines

5

0

2014

2015

2016

2017

2018

3

5

5

6

9

119,077

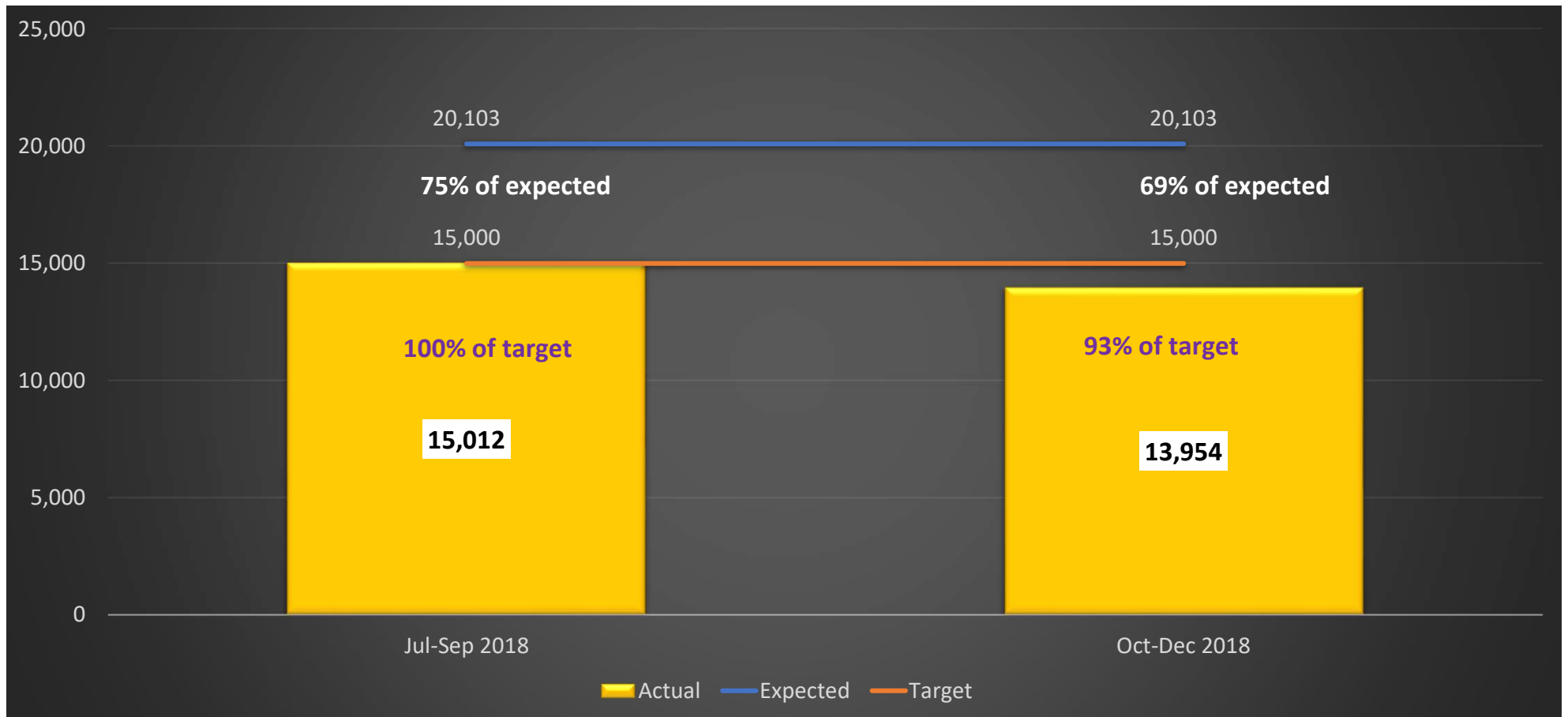
182,952

305,257





Incident TB cases notified (Target 60000 new cases)





Uganda's Strength (01)



- There is a Hub system for sample referral which allows non-Xpert facilities to have access to GeneXpert, culture and Genotypic and phenotypic DST (1st & 2nd line drugs)
- Placement of Xpert is based on workload & geographical coverage, risk population
- All hospitals, 58% HCIV have Xpert technology (only 15% of all DTUs)
- Forecasting for GeneXpert needs in the country is based on TB prevalence and targets
- The algorithm was revised to make it more sensitive in line with findings of TB prevalence survey
- Quarterly mentorships are conducted to disseminate new policies, guidelines, SOPs and tools and create awareness among clinicians and patients
- Uganda has fully transition to Xpert MTB/Rif Ultra



Uganda's Strength (02)



- Piloted the use of GeneXpert for EID POC testing and now moving to national scale up. Planning to use Xpert platform for HPV, Hep. B and Ebola testing
- There is a designated unit responsible for quantification and procurement of health products including TB commodities. This is done in collaboration with NTRL, NTLP and Partners
- Storage and distribution of these commodities is managed by a national ware house.
- NTLP, NTRL and Implementing Partners monitor the use of the TB Lab commodities to avoid stock outs
- Gx Alert in use. Developing an in-country Data/Network connectivity solution
- Domestic resources are used to procure ZN commodities (reagents, slides, sputum containers). Engaging Parliament through TB caucus to increase Government funding for TB for sustainability purposes on going



Key challenges (01)



- The intermediate laboratories are not fully operationalized. Decentralization of EQA has been done for only 4 out of the 12 regions.
 - [Scaling up EQA decentralization to all regional labs](#)
- Regional Equipment maintenance workshops trained on GeneXpert maintenance but not equipped to handle this task.
 - [As part of the bundling MOU, Cepheid is required to train and mentor more Biomedical engineers on GeneXpert service and repair](#)
 - [Engage Government & Partners to increase funding to the regional workshops](#)
- The Hub system does not reach all facilities with presumptive patients eligible for GeneXpert. There are delays in result return to clinicians and patients
 - [Increasing the number of Hub riders per Hub to increase coverage and frequency of visits](#)
 - [Developing Data connectivity solution or electronic LIMS](#)



Key challenges (02)



- The CSOs, media have not fully impacted on demand creation among clinicians and patients.
 - NTLP now has BCC team that is working on advocacy, communication and awareness on TB control services in the country
- Given the short expiry date of Ultra cartridges, it is challenging to ensure continuous supply of commodities while avoiding expiries
 - Staggering the delivery of cartridges, using quick alternative mechanisms for delivery of cartridges and monitoring use. Putting up system for facilities to report on weekly cartridge stock status
- GeneXpert bundling MOU was signed without considering multi-pathogen testing. We lack big Xpert platforms (16 module machines) to meet the high demand in high volume facilities (national & regional Hospital)
 - Engaging Cepheid to place 16 module GeneXpert for multi-pathogen testing
 - Bundling MOU will be revised to cater for multi-pathogen testing after national scale up



Key challenges (03)



- Gx Alert is costly to use and there are challenging with sustaining internet connection especially in the peripheral laboratories
 - Developing in country Data connectivity solution
 - Working with Partners and Health facility in-charges to provide internet to laboratories
- GeneXpert cartridges and other consumables such as TB LAM, FM reagents depend on donor funding
 - NCC and Parliamentary caucus lobbying for increase Government funding for TB



Looking ahead



- Planning to conduct an assessment for the TB Laboratory network
- Lab scale up strategy
- Xpert-omni for HCIIIs
- Perfect the bundling price implementation
- Community engagement for increased demand
- Introduction of LTBI testing
- Improving access to Xray
- Universal LAM
- Mentorship and supervision

