



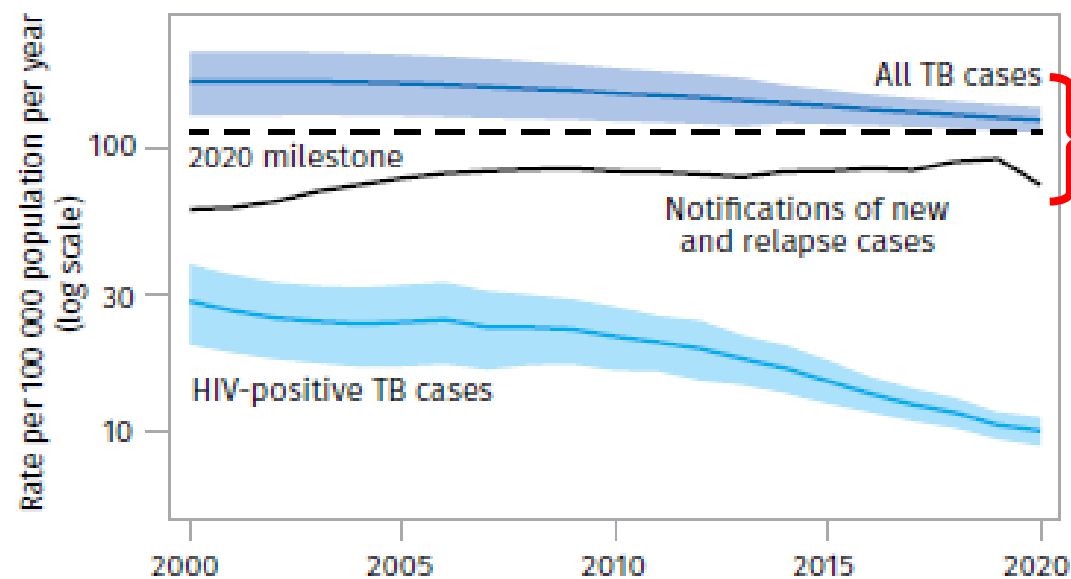
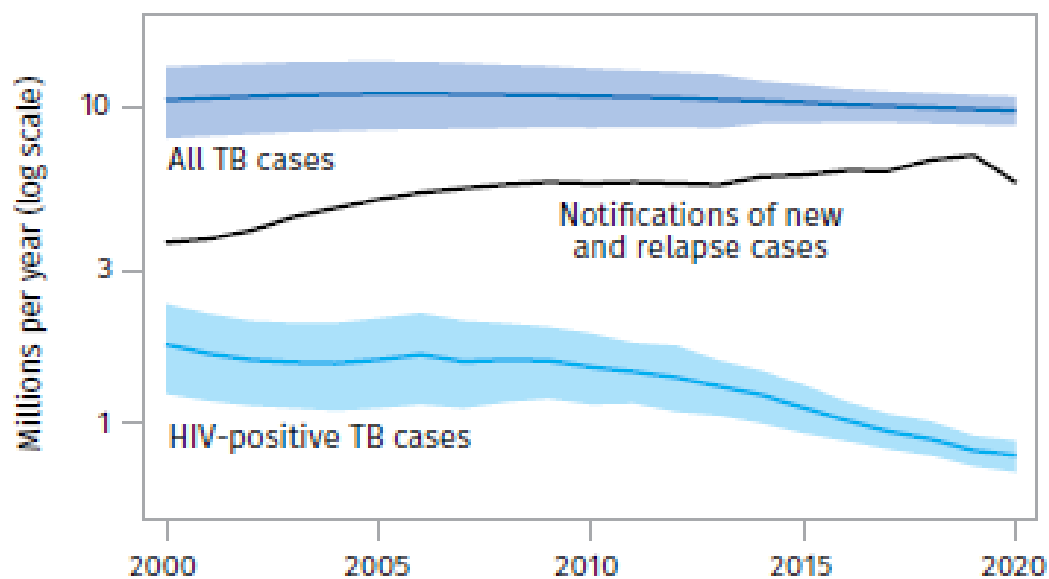
Implementation of TB CLICQ! - ECHO in Uganda

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Global trends in the estimated number of incident TB cases (left) and the incidence rate (right), 2000–2020

Shaded areas represent uncertainty intervals. The horizontal dashed line shows the 2020 milestone of the End TB Strategy.



The missing TB patients

TB CLICQ-ECHO: Goals

Goals:

- (1) Improved TB case finding and appropriate treatment initiation among HIV-positive and HIV-negative persons with confirmed TB in Uganda
- (2) Improved time-to-TB diagnosis and time to TB treatment initiation among HIV-positive and HIV-negative persons with confirmed TB in Uganda.

CLICQ-ECHO: Objectives



Objectives:

1. Increase the number and proportion of HIV-positive and HIV-negative persons with presumptive TB that receive TB laboratory services and/or accurate test results in a timely manner.
2. Increase the number and proportion of HIV-positive and HIV-negative TB patients that initiate appropriate (drug-sensitive or drug-resistant) TB treatment.
3. Reduce turnaround times associated with TB laboratory receipt of specimens for testing, lab-confirmation of TB disease, return of TB laboratory test results and/or initiation of appropriate TB treatment.
4. Quantify the value of providing sites DiCE assessments alone versus providing sites DiCE assessments plus 2 learning sessions that are strengthened with weekly ECHO-based mentorships.

Program Design



EVALUATION ACTIVITIES SUMMARY	
DiCE Assessments	DiCE + CLICQ! Participation
Conduct DiCE entry assessments of all participating clinic-lab pairs to identify gaps in their TB/HIV diagnostic cascades of care (including a presentation of results with guidance and discussion to close identified gaps).	
	Conduct two guided Learning Sessions , focused on CQI practices, with healthcare workers and laboratory technicians to develop improvement projects to strengthen prioritized gaps
	Conduct weekly ECHO sessions (and <i>ad hoc</i> WhatsApp consultations) to provide technical assistance and mentorship for evaluating improvement project progress.
Conduct DiCE follow-up assessments of all participating clinic-lab pairs to identify improvements and remaining gaps in their TB diagnostic cascade of care.	

RESULTS

DiCE+ CLICQ Facilities: Decrease in TAT (Laboratory, diagnosis & treatment initiation TAT)

Rwenyawawa and Kagadi Improvement Projects: TAT for results return

DiCE + CLICQ! ENTRY							
SPECIMEN TRANSFER		LAB TURNAROUND		DIAGNOSIS		TREATMENT INITIATION	
Days from specimen collection to receipt by the lab		Days from specimen receipt at lab to release of NAAT result		Days from specimen collection to receipt of result by clinic		Days from specimen collection to treatment initiation	
ABOKE	1.6	ABOKE	0.2	ABOKE		ABOKE	7.8
HOIMA	0.4	HOIMA	0.3	HOIMA	0.9	HOIMA	77
IBUJE	0.3	IBUJE		IBUJE	3.1	IBUJE	6.2
KAGADI	1.4	KAGADI	5.4	KAGADI	6.1	KAGADI	11
OGUR	0.0	OGUR	0.0	OGUR	0.0	OGUR	
RWENYAWAWA	0.5	RWENYAWAWA	3.3	RWENYAWAWA	8.7	RWENYAWAWA	14.0
AVERAGE	0.7	AVERAGE	1.8	AVERAGE	3.8	AVERAGE	23.2

DiCE + CLICQ! FOLLOW-UP							
SPECIMEN TRANSFER		LAB TURNAROUND		DIAGNOSIS		TREATMENT INITIATION	
Days from specimen collection to receipt by the lab		Days from specimen receipt at lab to release of NAAT result		Days from specimen collection to receipt of result by clinic		Days from specimen collection to treatment initiation	
ABOKE	0	ABOKE	0.8	ABOKE	0.7	ABOKE	2.2
HOIMA	2.1	HOIMA	0.1	HOIMA	0.9	HOIMA	2.6
IBUJE	2.3	IBUJE	3.6	IBUJE	2.1	IBUJE	4.4
KAGADI	1.0	KAGADI	0.7	KAGADI	1.5	KAGADI	3.8
OGUR	0.6	OGUR	0.0	OGUR	0.5	OGUR	0.6
RWENYAWAWA	1.2	RWENYAWAWA	2	RWENYAWAWA	3.1	RWENYAWAWA	3.7
AVERAGE	1.2	AVERAGE	1.2	AVERAGE	1.5	AVERAGE	2.9
CHANGE	0.5	CHANGE	-0.6	CHANGE	-2.3	CHANGE	-20.3

Some facilities whose improvement projects were not on TAT also recorded a noticeable improvement in treatment initiation TAT (spillover benefit of empowering health care workers in CQI)

	Reduced TAT
	Increased TAT

DiCE only facilities: No improvement in TAT (specimen transfer, laboratory & diagnosis TAT)

There was however a slight improvement in treatment initiation TAT from 7.3 to 6.5 days

DiCE ONLY ENTRY							
SPECIMEN TRANSFER		LAB TURNAROUND		DIAGNOSIS		TREATMENT INITIATION	
Days from specimen collection to receipt by the lab		Days from specimen receipt at lab to release of NAAT result		Days from specimen collection to receipt of result by clinic		Days from specimen collection to treatment initiation	
APAC	0.7	APAC	0.6	APAC	1.3	APAC	8.3
BALA	0.3	BALA		BALA	0.8	BALA	5
KIGOROBYA	0.5	KIGOROBYA	0.2	KIGOROBYA	0.5	KIGOROBYA	0
KISIITA	0	KISIITA	0.6	KISIITA	1	KISIITA	26
KYANGWALI	0	KYANGWALI	0	KYANGWALI	0	KYANGWALI	2.3
LIRA	0	LIRA	1.2	LIRA	1.3	LIRA	2.3
AVERAGE	0.26	AVERAGE	0.5	AVERAGE	0.8	AVERAGE	7.3

DiCE ONLY FOLLOW-UP							
SPECIMEN TRANSFER		LAB TURNAROUND		DIAGNOSIS		TREATMENT INITIATION	
Days from specimen collection to receipt by the lab		Days from specimen receipt at lab to release of NAAT result		Days from specimen collection to receipt of result by clinic		Days from specimen collection to treatment initiation	
APAC	0.5	APAC	0	APAC	2.6	APAC	11.6
BALA	0.4	BALA	7.8	BALA	2.5	BALA	14
KIGOROBYA	0.0	KIGOROBYA	1.8	KIGOROBYA	1	KIGOROBYA	0.3
KISIITA	2.7	KISIITA		KISIITA	3.8	KISIITA	1.8
KYANGWALI	0.0	KYANGWALI	0.1	KYANGWALI	0.3	KYANGWALI	2.3
LIRA	1.3	LIRA	0	LIRA	2.7	LIRA	8.9
AVERAGE	0.8	AVERAGE	1.9	AVERAGE	2.2	AVERAGE	6.5

CHANGE 0.6

CHANGE 1.4

CHANGE 1.4

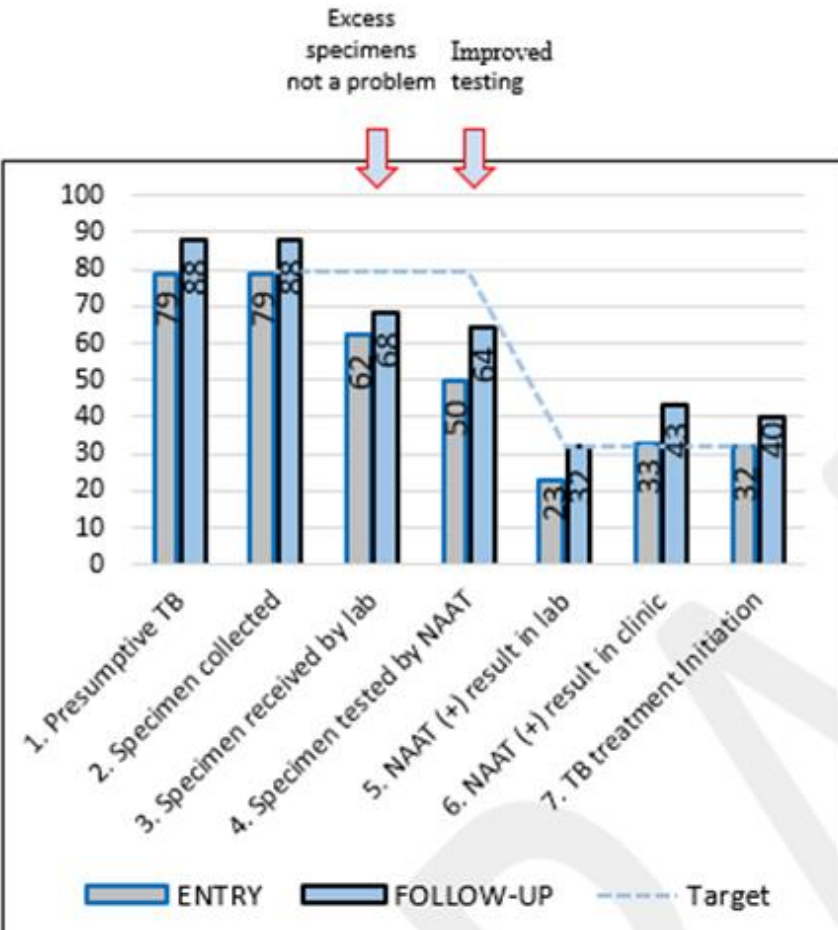
CHANGE -0.9

	Reduced TAT
	Increased TAT

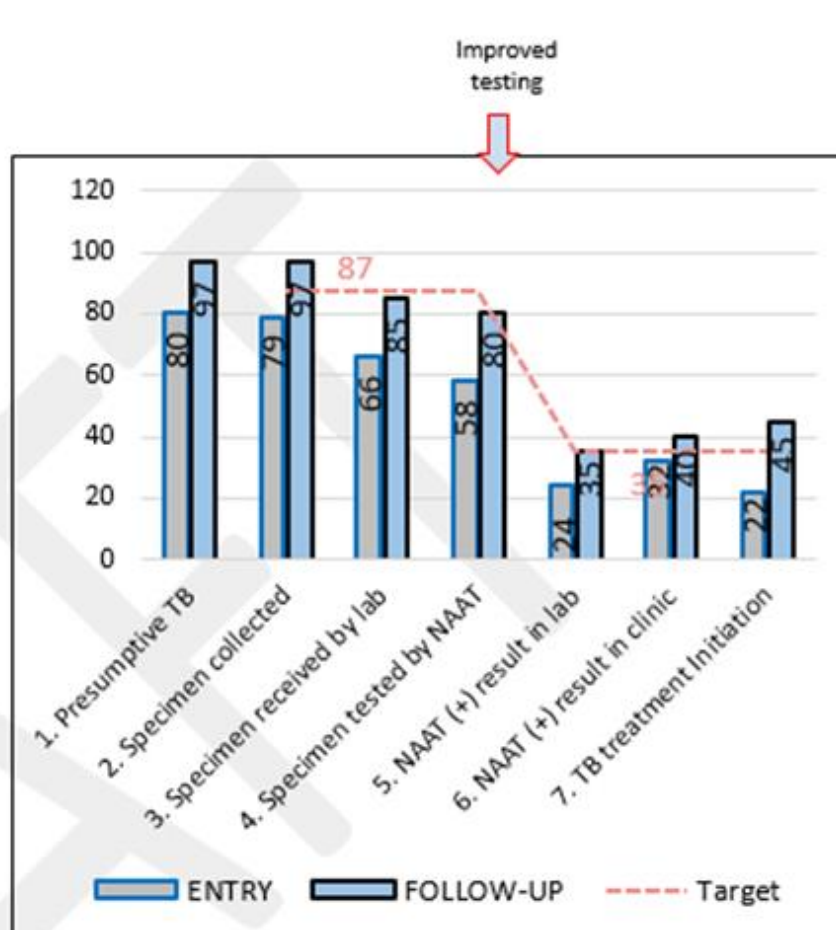
Increase the number of TB patients that initiate appropriate TB treatment in the DiCE+CLICQ facilities



DiCE RESULTS: Patient Level



Patient Level – DiCE



Patient Level - DiCE + CLICQ!

DiCE+CLICQ! facilities

- At entry, only 69% (22/32) NAAT positive patients recorded in the clinic were initiated on treatment.
- At follow up, we observed more patients (45 NAAT positive) initiated on treatment than those recorded in the TB laboratory register (35 NAAT positive)
- Documentation gaps in the laboratory & the project could not ascertain the overall number of NAAT positive patients tested in the laboratory that missed being linked to treatment

Challenges

- Change management: - e.g., when making changes in patient flow
- Incomplete data: -missing, partial or without right tools for collection
- Laboratorian industrial action: decline in TAT for GeneXpert from 100% to 0% for 2 consecutive weeks
- Staff transfer and attrition: one refugee facility had all the staff transferred to another facility.



Successes

- Improved working relationship between the Laboratory and clinical staff at facilities (team work)
- Improved facility adherence to NTLP recommended patient flow
- Improved TAT of Laboratory results
- Increased number of TB Positive patient initiated on TB treatment
- Improved TB treatment outcomes as result of facility weekly review meetings



Next steps & future plans

Next steps

- Partner dissemination meeting (s)
- Scale up CLICQ-ECHO to control sites (DiCE only)

Future plans

- Mainstream CLICQ-ECHO in NTLP CQI program implemented under the TB Active Case finding (ACF) Package

