

Improving patient referral linkages through implementation of a sample transportation program in 7 districts in Malawi

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Introduction

- The Malawi Ministry of Health (MOH) is undergoing a rapid scale up of its HTC, ART, PMTCT, and Tuberculosis care and treatment programs
- A robust and efficient laboratory infrastructure, along with a coordinated sample transportation and referral network is essential in order to ensure access to these services at all levels of health care

Background

- In 2012, a national Sample Transportation (ST) program was implemented in 7 districts
- The program is a collaboration between MOH, Riders for Health , Howard University Technical Assistance Project (HUTAP), through support from CDC PEFPAR, CHAI, and other partners

Background (2)

- Previously ST was un-coordinated with 12 different ST modalities
- Long turnaround times for test results, particularly DNA PCR and CD4 testing, increasing LTF and delays in care and treatment
- Specimen quality compromised due to the delay in transporting samples from health facilities to laboratories

Background (3)

- Twenty-four (24) ST couriers and 3 motorcycle technicians were recruited, and 27 motorbikes were procured to support the initial roll-out of the ST the program
- Samples for EID, TB, and CD4 and other tests were transported by couriers from 181 health facilities on a routine scheduled basis
- Couriers record the number and type of specimens, test requested, and results transported; the date and time of collection; health facility; and district in the sample transport and patient tracker logbooks

ST Program Objectives

- To establish a reliable, consistent well-coordinated national ST mechanism
- To increase access to laboratory services through strengthened lab referral network
- To reduce TAT from sample pick up to return of results to health facility
- To increase access and to care and treatment services

Aim of the Study

- To assess the impact of ST on access to laboratory services and improving patient referral linkages to care and treatment

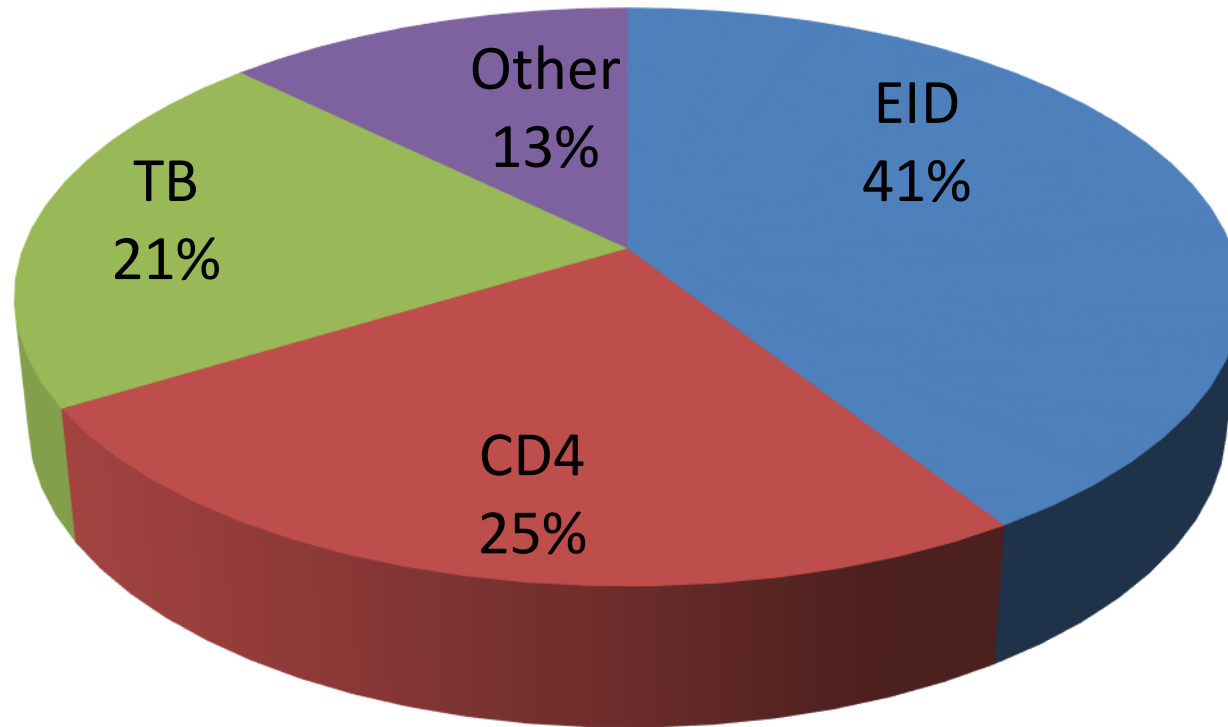
Methods

Data was collected from from specimen and patient tracker logbooks and lab registers on the first 8 months of implementation including:

- The number of specimens and results transported
- The number of specimens tested and TAT for test results
- The number and type of specimens tested before and during the sample transportation program was also compared

Results

Transported specimens



- During first 8 months 14, 316 specimens were transported
- The other specimens were for the following tests; hematology, serology, viral load, and chemistry

Results (2)

Impact on laboratory tests performed

Test	8 Months prior ST	8 months during ST implementation	%difference
EID	4,603	4,728	3%
CD4	6,446	8,451	31%
TB	5,639	6,676	18%

Results (3)

- The average TAT for test results returned to the health facility improved from 42 to 28 days for EID; 12 to 9 days for TB; CD4 7 to 6 days
- Analysis of data from Malawi ART report showed a slight increase (5%) in initiation of ART based on CD4 count in ST districts; and 34% increase in infants initiating treatment

Recommendation

- Further analysis of ST data being conducted to determine the significance of ST on patients returning for results and initiated on treatment and the impact of the program on improving referral linkages

Conclusion

- Findings suggest that a coordinated ST mechanism can increase access to lab services, reduce TAT for patients receiving results and improve referral linkages to care and treatment

Conclusions (2)

- Currently, the sample transportation program has scaled-up to 14 districts in Malawi and over 27,000 samples have been transported including VL (DBS) and Sputum for Gene Xpert and TB cultures
- TAT is being monitored from sample collection to sample pick-up, lab TAT, patient pick-up results and initiated on treatment

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