TASK SHIFTING TRAINING FOR POINT-OF-CARE TECHNOLOGIES : THE SAMBA EXPERIENCE IN ZIMBABWE

Sekesai Mtapuri-Zinyowera, Douglas Mangwanya, Raiva Simbi, Neha Goel, Jose Paolo Magbanua, Peter Gumbo, Ellen Munemo, Lourdes M. Nadala, Angela Mushavi, Vasco Chikwasha and Helen Lee.

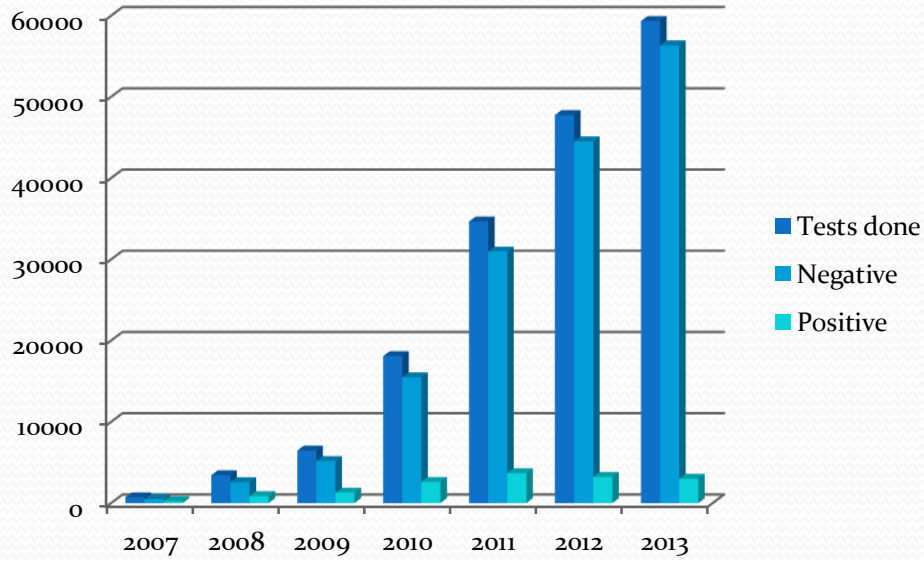
Zimbabwe HIV Epidemic

- Population: 12,9m
- A country hardest hit with HIV epidemic; 1,4 million PLHIV
- HIV Prevalence: 15% (ZDHS 2010/11) 15-49 yrs.
  - Female 18%
  - Males 12%
- As of March 2014, a total of 621,000 (72%) adults and 50,000 (50%) children receiving ART (based on the 2013 WHO HIV
- Guidelines).

BACKGROUND

EID

- EID – 2013, 59 343 HIV DNA PCR tests done.
- 45% coverage of the EID services.



Viral load

- 11 892 Viral load tests done -2013
- Targets :-

YEAR	VL TESTS EXPECTED	% Coverage
2014	46 640	5%
2015	236 417	21%
2016	563 608	50%

- How do we achieve these targets?

CENTRALISED TESTING

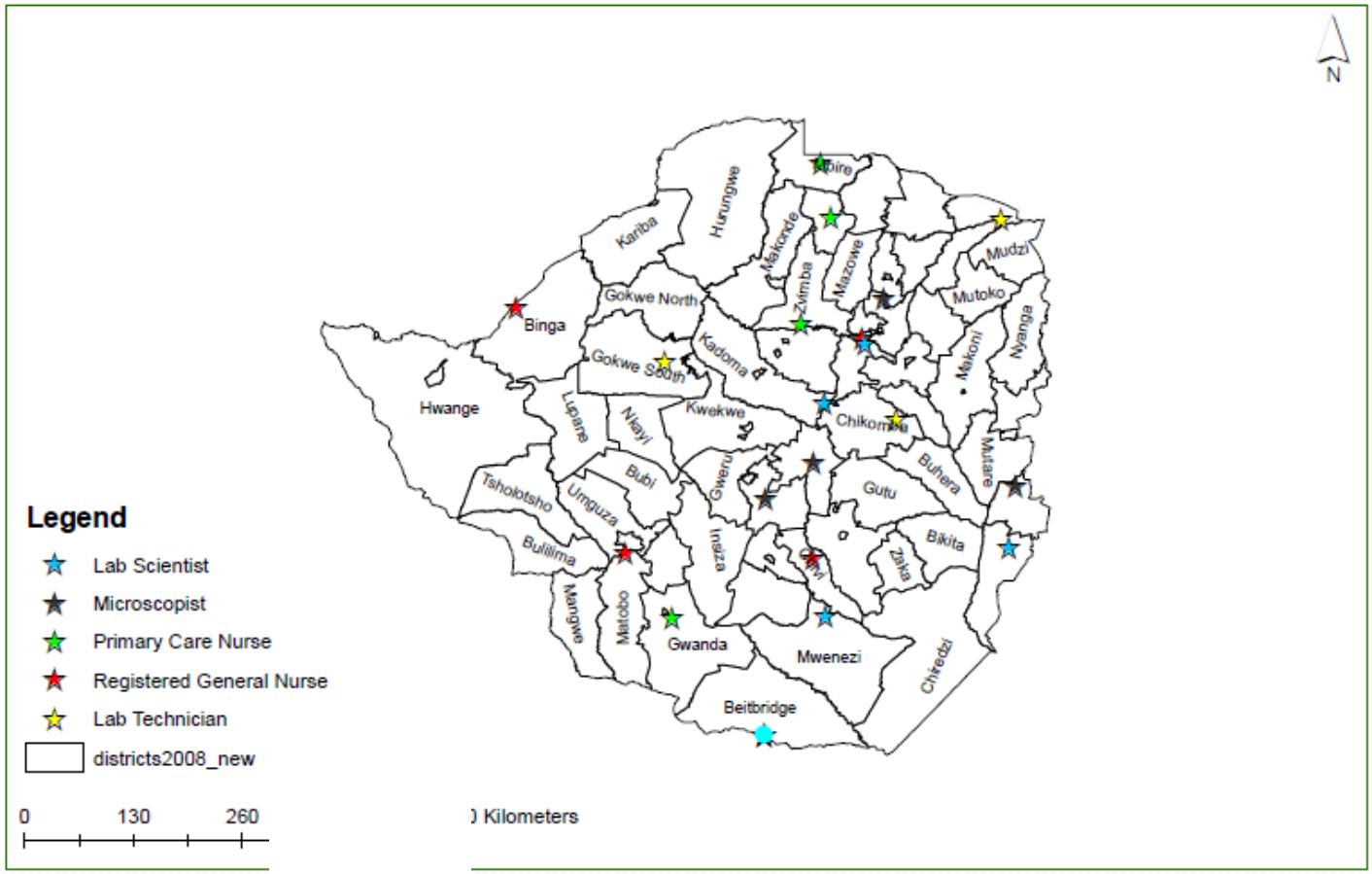
HARD TO REACH SITES

TASK SHIFTING

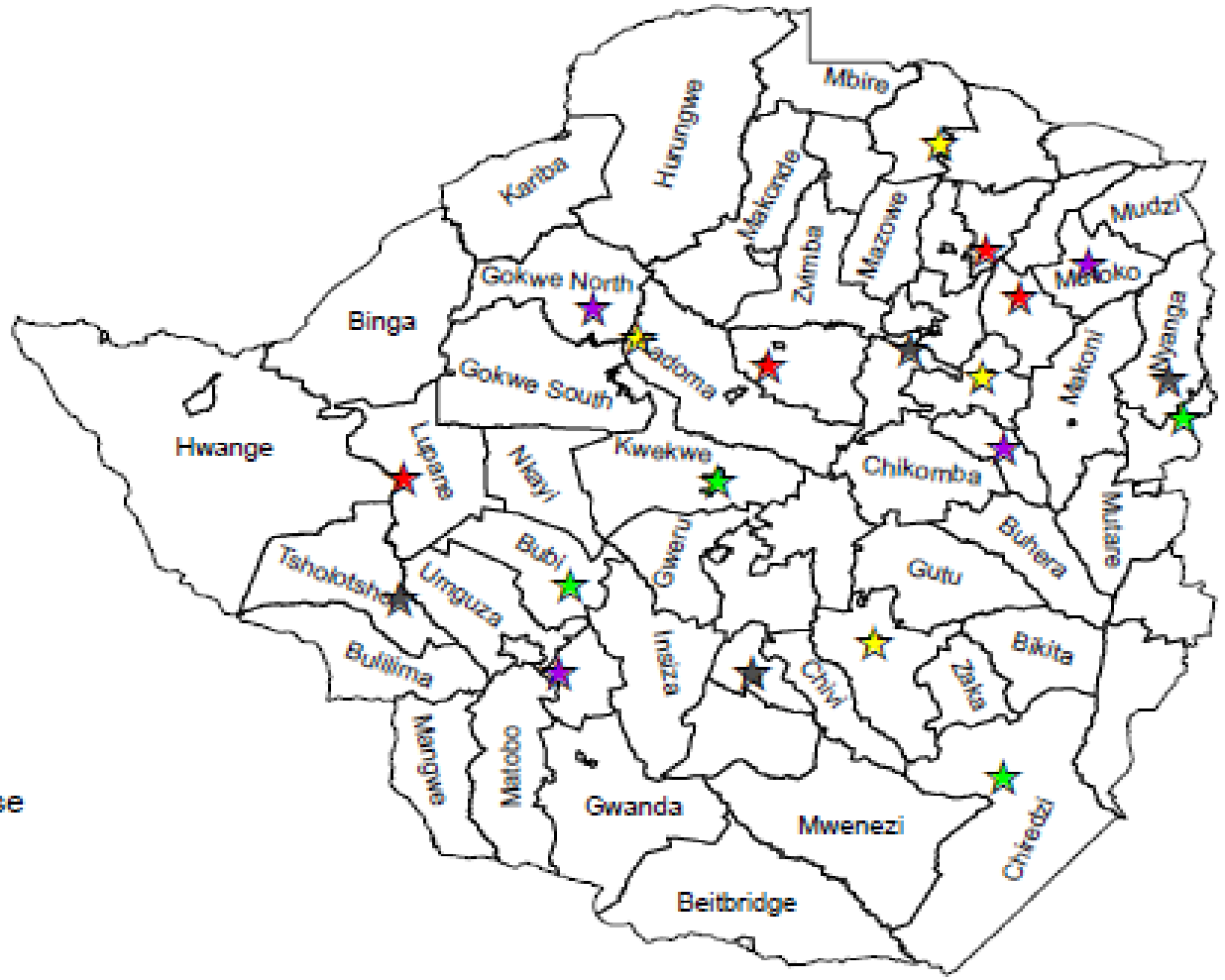
- WHO indicated that sub-Saharan Africa has 3% of the worlds health workforce and yet with two thirds HIV and AIDS burden.
- Definition of task shifting according to WHO is 'the rational redistribution of tasks among health workforce teams. Specific tasks are moved, where appropriate, from highly qualified health workers to health workers with shorter training and fewer qualifications in order to make more efficient use of the available human resources for health.'

UNBIASED SELECTION OF CANDIDATE SITES from 62 districts

GROUP 1 HEALTH CADRES



GROUP 2 HEALTH CADRES



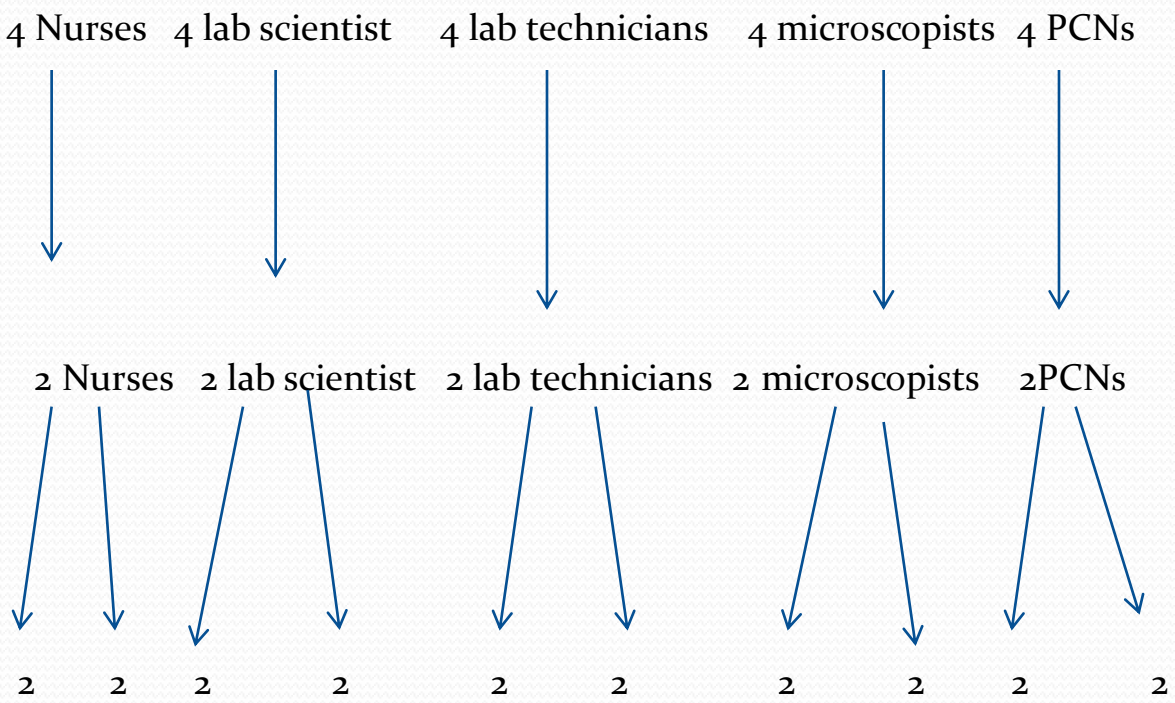
Legend

- Microscopist
- Primary Care Nurse
- Registered General Nurse
- Lab Technician
- Lab Scientist
- District Boundary

METHODOLOGY

Trainers of trainers (TOT) workshop – Cadres were trained then examined using a blinded proficiency test (PT).

Two of these trained 2 cadres each in their same grade, who were also examined using blinded PT samples



METHODOLOGY

- Day 1 - Group 1, 20 people trained by scientists from Cambridge
- Day 2 - Running 3 blinded proficiency panel samples
  - Examination given including user feedback
- Day 3 – 2 from each level from group 1 trained group 2, also composed of 20 people from 5 qualification levels.
- Day 4 – Group 2 run blinded proficiency levels, exam and user feedback.
- In total 40 (+3 observers) were trained and examined in 4 days

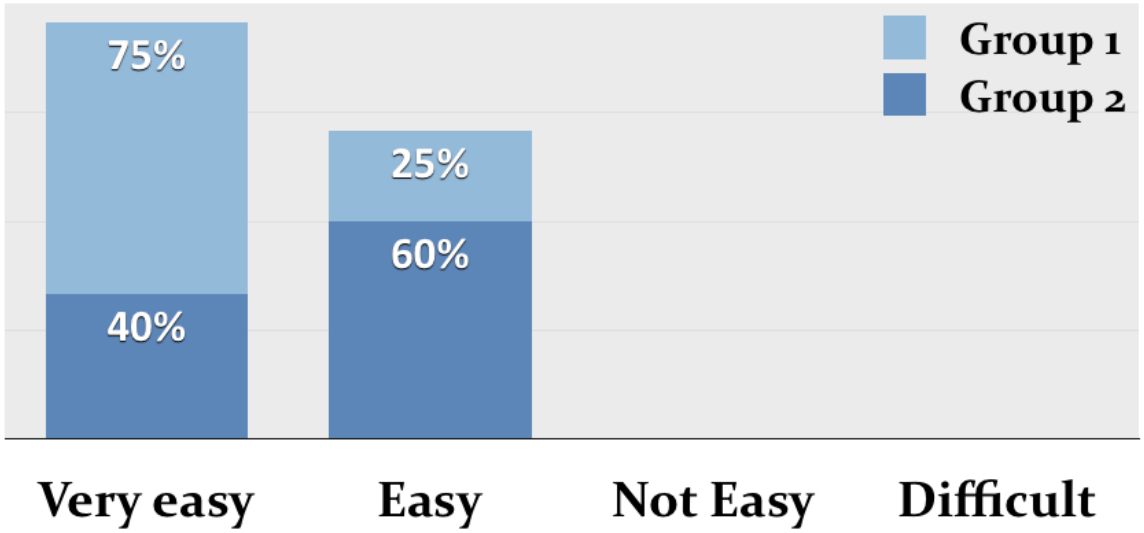
METHODOLOGY

COMPOSITION OF THE TRAINEES

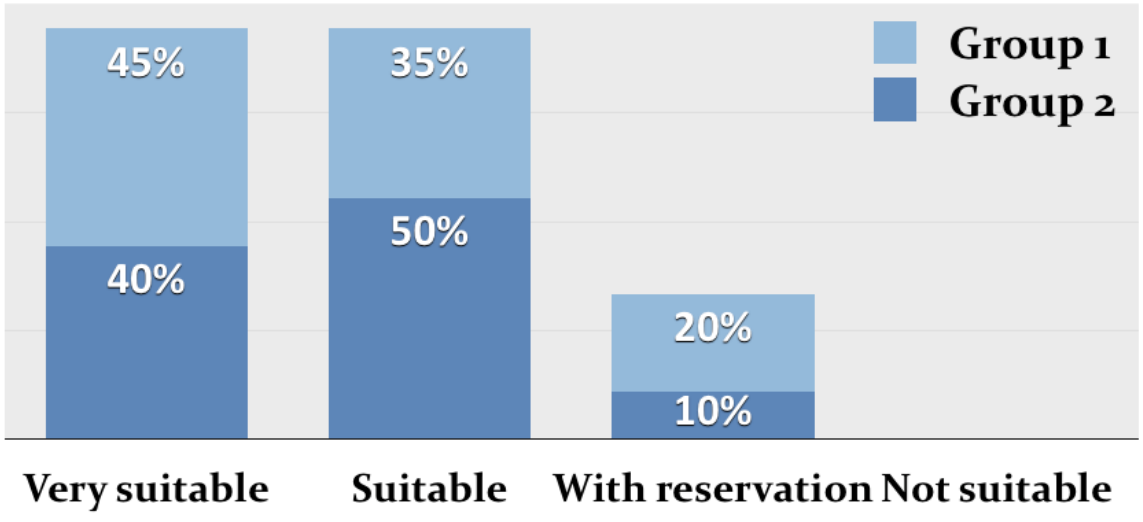
	Group 1	Group 2
Gender	55% female	45% female
Mean age	36.7	36.3
Educational level		
<5 O-levels	1 (5%)	0
>5 O-levels	19 (90%)	14 (70%)
A-Level	6 (30%)	3 (15%)
University	2 (10%)	3 (15%)
Performance		
Proficiency panels	**100% passed**	**100% passed**
Written exam	**17.7/24** **19/20 (95% passed)**	**18.3/24** **19/20 (95% passed)**

Results of questionnaire

Ease of use of SAMBA

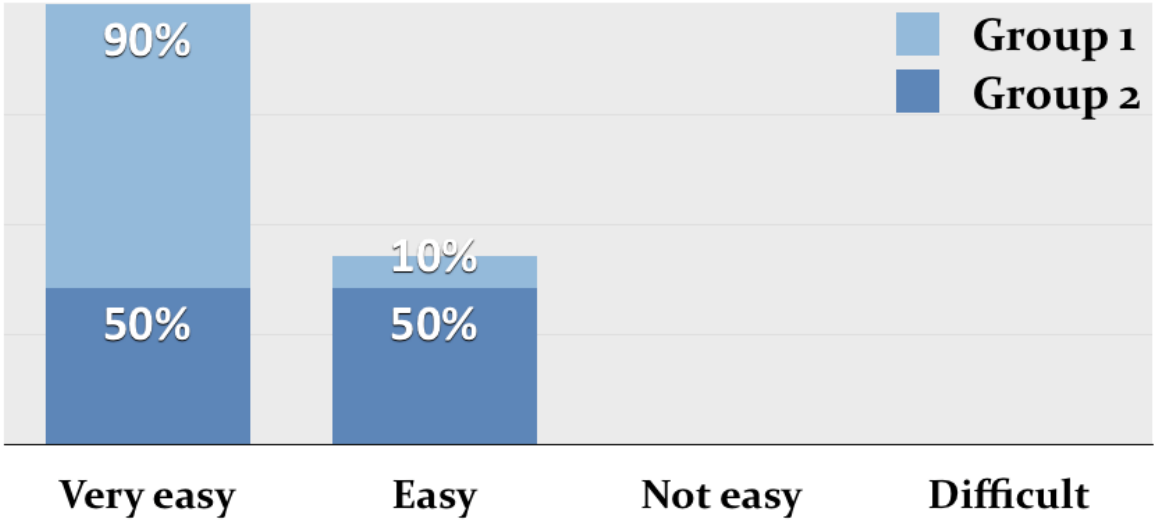


SAMBA suitable for non-lab staff

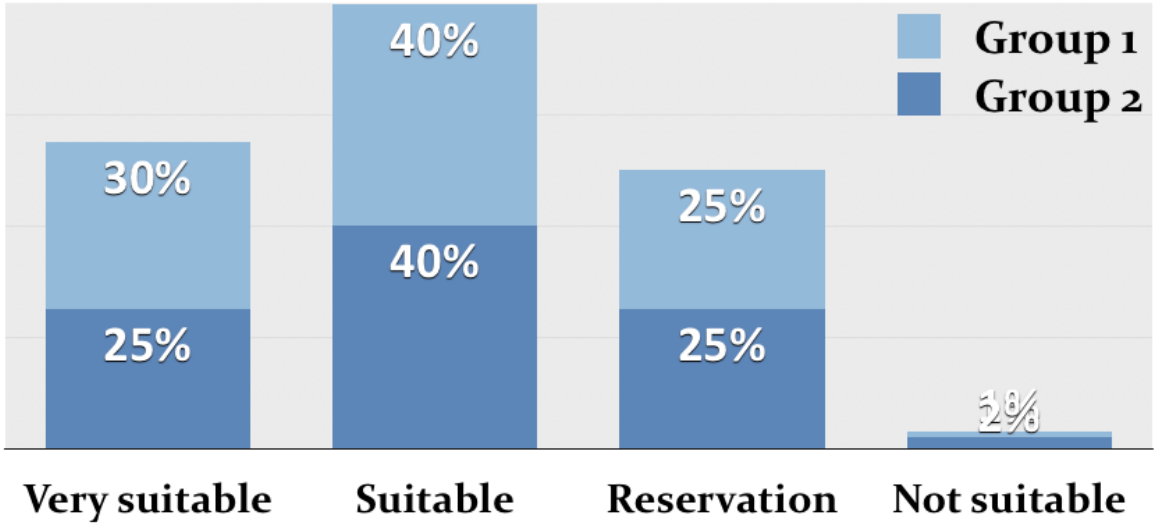


Results of questionnaire

Easy to interpret SAMBA result

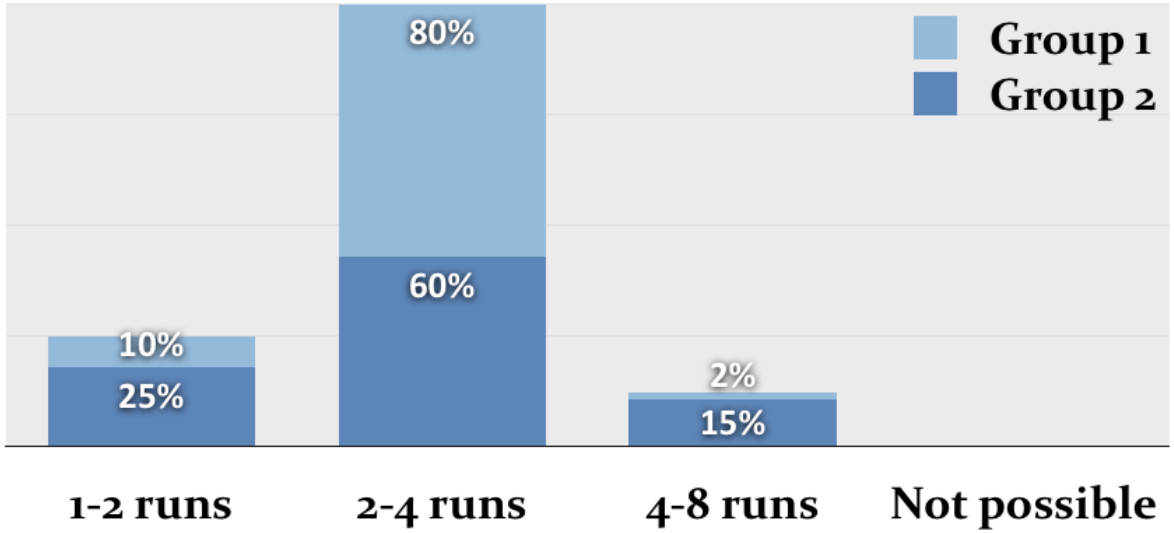


Suitable for resource limited settings

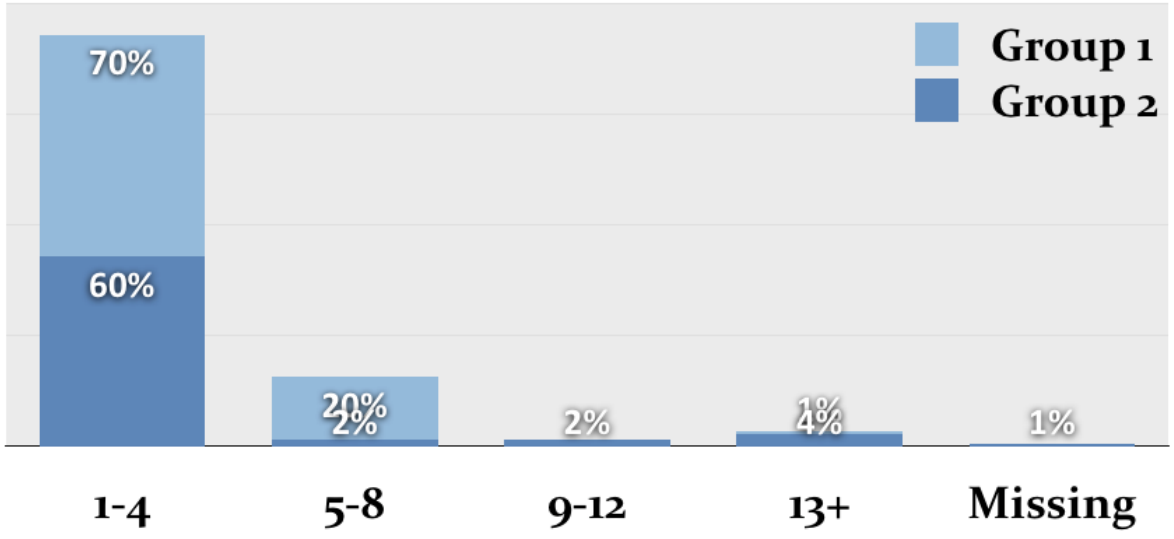


Results of questionnaire

Number of runs required to train non-lab staff



Ideal number of test runs per day



CONCLUSION

- SAMBA II is very easy to use and suitable for resource-limited settings
- They can be operated by lower level cadres such as microscopists and primary care nurses
- These cadres can be easily trained in 2 days with almost perfect results (100% correct proficiency panel, and 95% passed written examination)
- Those trained are capable of training other cadres with equally good results
- Once implemented, recommend site monitoring with provision of EQA panels.
- Last phase of the project – Operational research – how does it work on the ground once implemented.

CERTIFICATION CEREMONY

2 TIERS OF TRAINED CADRES

THANK-YOU