The impact of SLMTA on Proficiency Testing (PT)/ External Quality Assessment (EQA) participation and performance

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Presentation Outline

- Introduction
- Laboratory system strengthening in Zimbabwe
- Proficiency Testing (PT)
- Methods
- Results
- Challenges
- Lessons learnt
- Recommendations

Introduction

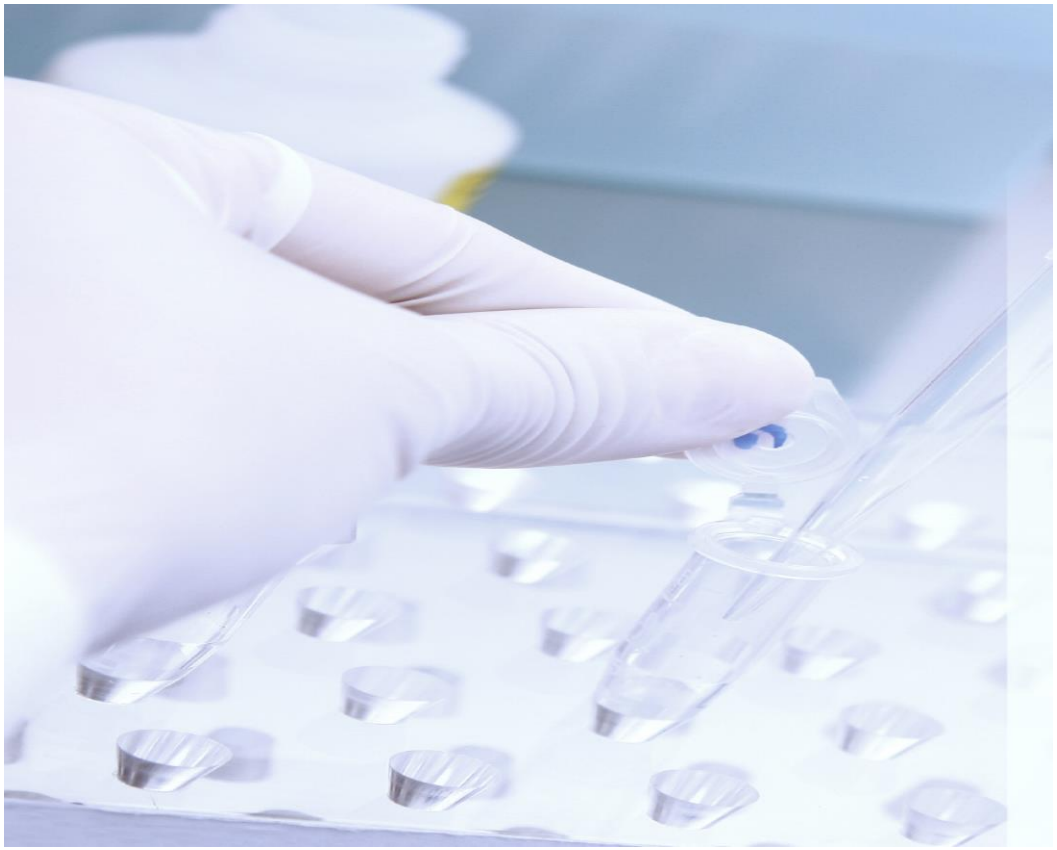
- Laboratories key to the health delivery system
  - Disease diagnosis
  - Monitoring treatment
  - Disease surveillance
  - Research
- Numerous challenges face laboratories in Africa
  - Resource limitation
  - Sub-optimal quality systems & infrastructure

Laboratory system strengthening in Zimbabwe

- Numerous initiatives
- Establishment of a local PT programme 1998
- Development of SOPs 1999, revised 2006
- MoHCC laboratory directorate
  - Set policy, strategic plan

PT Services Provided by ZINQAP

- Clinical chemistry
- Full blood count
- CD4
- Microbiology
- Serology
- POCT systems



Laboratory system strengthening in Zimbabwe - SLMTA

- Piloted in 2010
  - 11 laboratories
  - 3 workshop series
- Rolled out 2012
  - Imbedded mentorship
  - 2012 19 laboratories
  - 2016 31 laboratories

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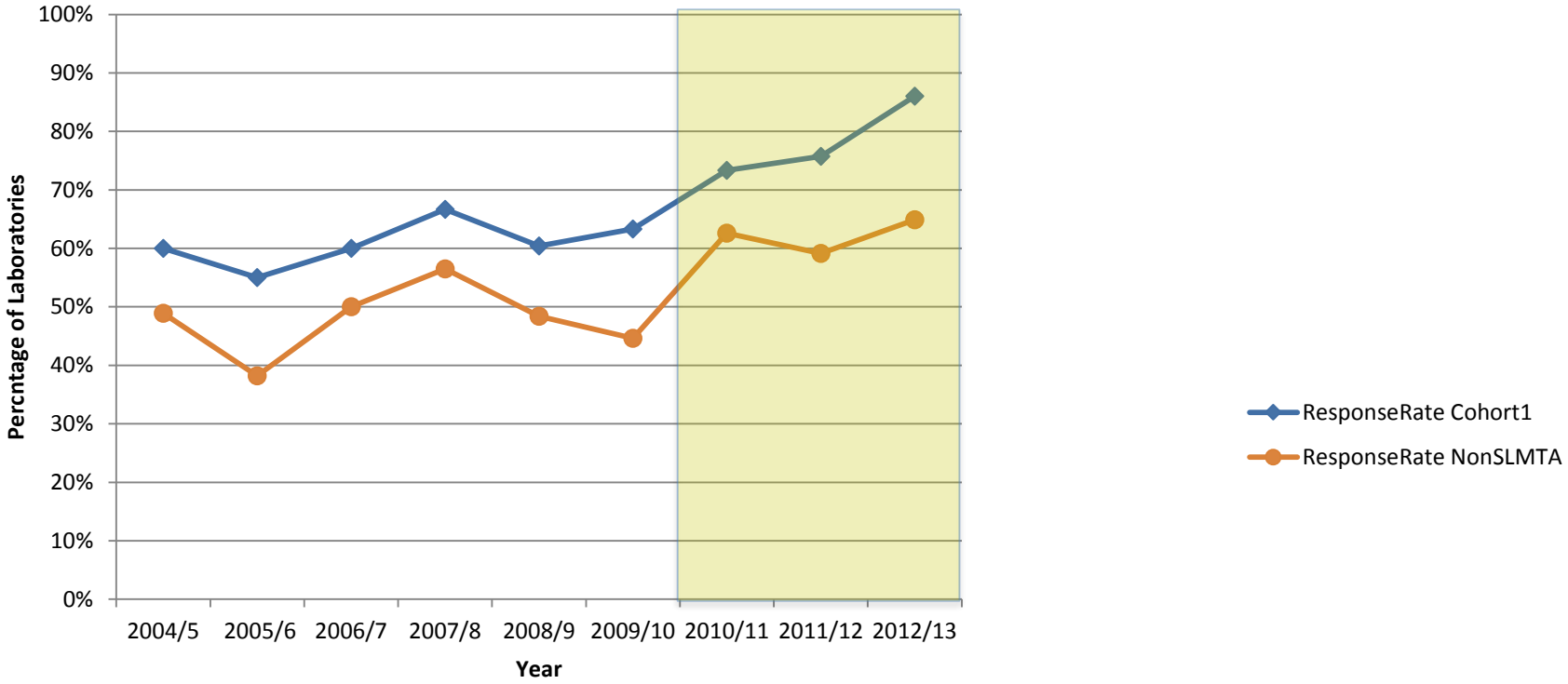
Proficiency Testing (PT)

- External quality assessment (EQA)]
- Key indicator of laboratory quality and service delivery
- Zimbabwe – unique position PT Programme running since 1998
  - PT data available prior to the implementation of SLMTA

Methods

- Retrospective analysis of PT data prior to and post SLMTA implementation
- Determine participation
  - Before, during after the implementation of SLMTA
  - Comparison of SLMTA & non-SLMTA labs
- Assess performance in selected analytes

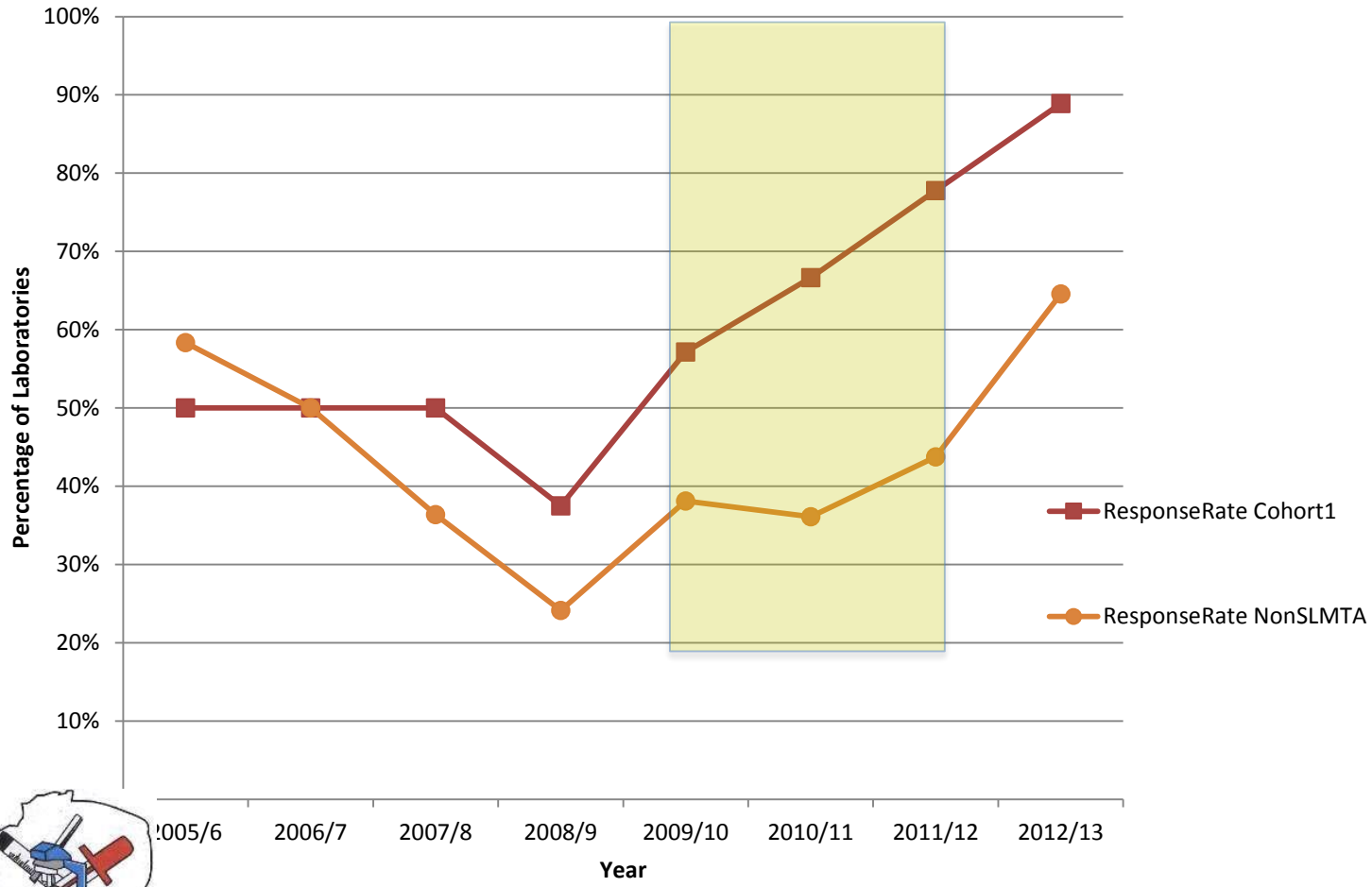
Results: Participation - FBC



Results – Participation FBC

- General increase in participation in PT in all laboratories
  - Pre-SLMTA 48% (40% - 49%)
  - Post SLMTA 62% (60%-65%)
- Comparison of SLMTA and non-SLMTA labs
  - Non-SLMTA labs 61% (55%-63%)
  - SLMTA - 78% (73% - 88%)

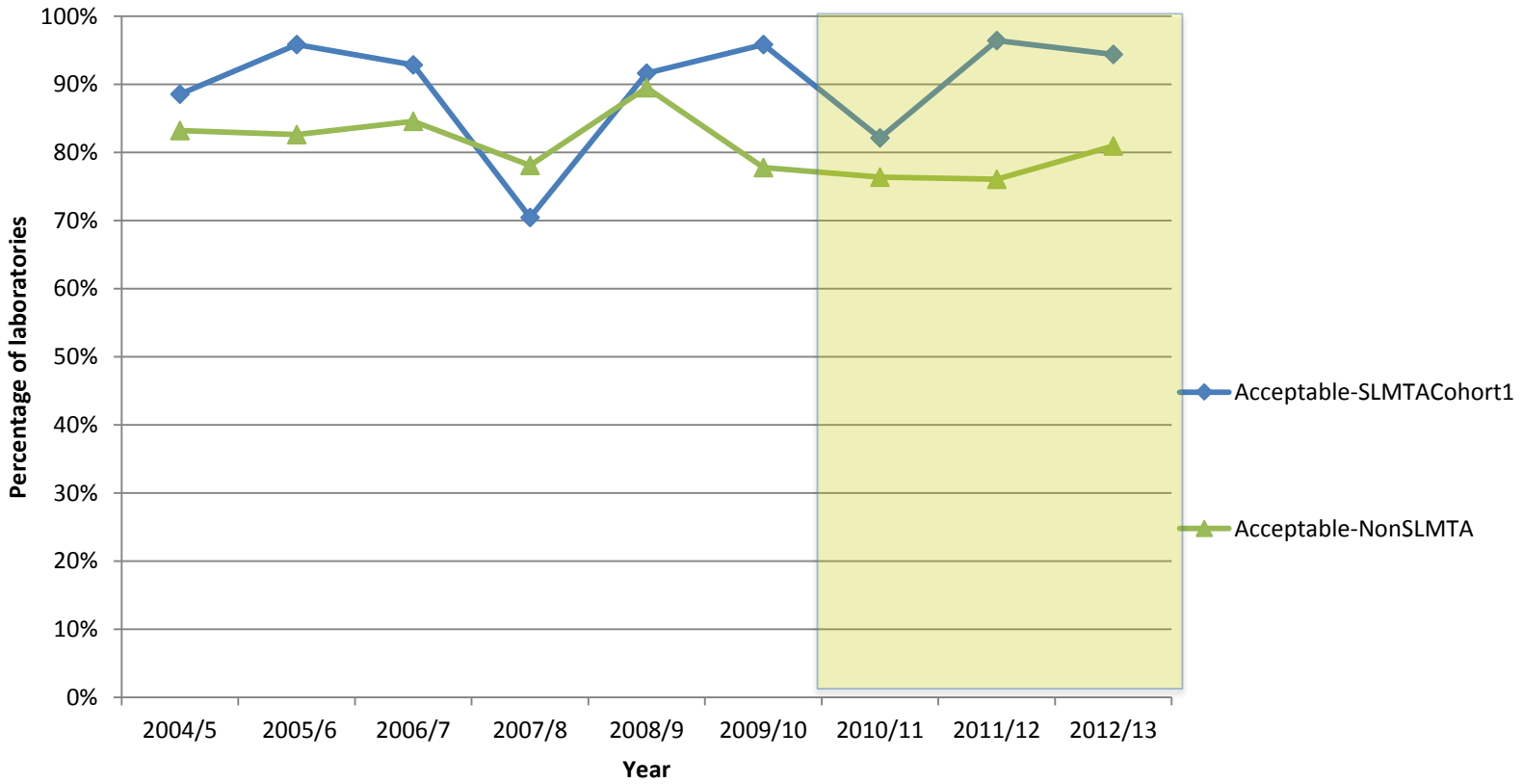
Results – Participation Clinical Chemistry



Results: Participation Clinical Chemistry

- Similar observation for Clinical Chemistry - General increase in participation in PT in all laboratories
- Comparison of SLMTA and non-SLMTA labs
  - Non-SLMTA labs improvement from 41% to 55%
  - SLMTA laboratories improvement 61% to 78%

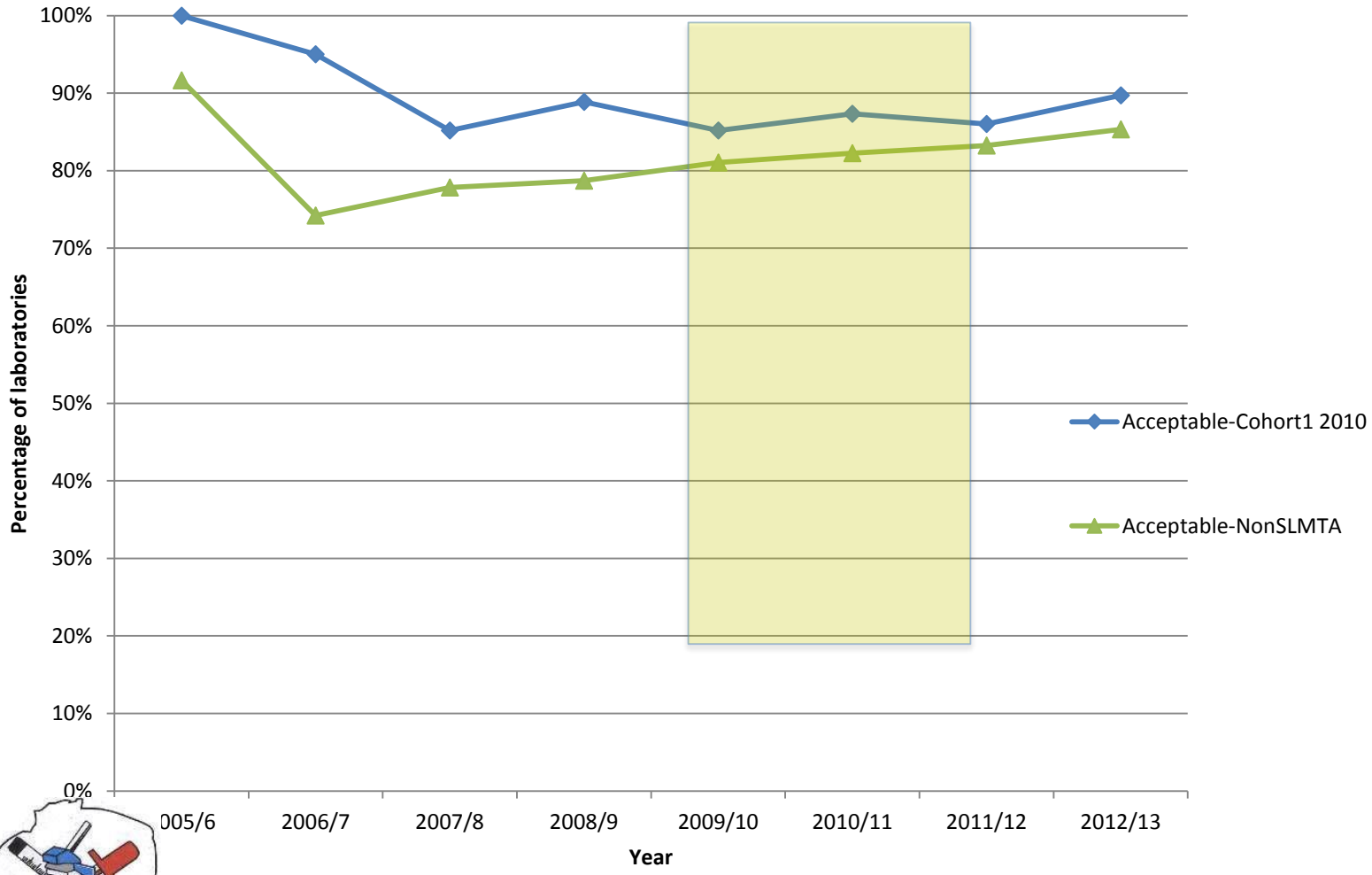
Results: Performance Hb



Results: Performance Hb

- SLMTA labs generally performed better than non-SLMTA laboratories,
  - Eve prior to piloting SLMTA
- Improvement in performance observed after implementing SLMTA

Results: Performance ALT



Challenges

- Limited appreciation of PT
- Limited transport infrastructure and courier systems for the distribution of panels
- Poor communication systems for submission of results
- Limited oversight

Discussion

- Implementation of SLMTA had a positive impact on PT participation and performance
  - NB: Participation was quite good even prior to SLMTA
- Performance of non-SLMTA laboratories also seemed to improve
- Concern over the laboratories not participating – no means of determining the quality of testing

Lessons Learnt

- PT is a useful tool that can be used to monitor the quality of testing.
  - Can be used to determine the impact of interventions implemented
  - Identify gaps or challenges in the system
- Laboratories & testing sites must participate in PT to monitor quality of testing
- PT must be cost efficient for wide up-take

Recommendations

- Mandatory participation in PT
- Establishment of local PT programmes
  - More cost efficient
  - Allows for more effective remedial action
- Supervision and monitoring of PT participation and performance

Thank You

Improving laboratory and testing Quality Systems for quality health service delivery

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