Implementation experience: the Ugandan NTRL

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What are the tasks of the NTRL in Uganda?

1. To provide technical services for detection, identification and drug sensitivity testing

2. To provide leadership, support and supervision to the national TB laboratory network

3. Surveillance and (operational) research linked to NTLP
“You can design and create, and build the most wonderful place in the world. But it takes people to make the dream a reality.”

1 Dr. Moses Joloba on the 2nd of November 2009 during lunchtime
“I have a dream…..”

That everyone
• takes the responsibility offered
• makes use of the opportunities given to be responsive and critical
• and is loyal to decisions taken.

And this is my nightmare!

1 Dr. Moses Joloba on the 2\textsuperscript{nd} of November 2009 during lunchtime
Uganda NTRL Accreditation Objectives

- To perform reliable analysis on materials provided;
- To generate objective, complete and scientific evidence-based reports to those requesting;
- To validate all new methods and techniques.
- To timely deliver analysis, results, etc. within preset periods;
What is the inspiration?

• The need to have a common, clear and assessable target (standard) the laboratory was to aspire for.
• The need to have a standardized system that is not dependent on one individual, making it easy to train new people.
• The need to have a system that focuses on satisfaction of the customer
Preparation for Accreditation

Involved an improvement in many aspects:

- Establishment
- Infrastructure
- Training
- Technical assistance
- Financial support
- Government support
Process towards accreditation

Took off in 2008:
Course: “Introduction to quality management”
Vision and Mission

VISION
Tuberculosis and leprosy diseases are controlled until they are no longer a public health problem in Uganda.

MISSION
Our mission is to provide quality laboratory services and to strengthen the national tuberculosis laboratory diagnostic network through leadership and expert guidance in support of the National Tuberculosis and Leprosy Control Program to reduce the burden of tuberculosis and leprosy in Uganda.
Core Values (their own words!)

In working towards the mission of the NTRL

- We are committed to deliver quality work, to be professional, competent, knowledgeable, responsible and accountable

- We perform our work guided by ethical values, honesty, integrity, punctuality, and standards

- Important in our work is our relationship with our country, the community and each other as we value respect, trust, cooperation, loyalty, helping and caring for each other, friendship, pleasure and feeling secure.

- Furthermore, we value freedom, decidedness, creativity and having an independent mean of living

- We all share the responsibility to fulfil our mission and to fulfil our customer’s needs and expectations.
Process towards accreditation

- Baseline assessment
- Development of implementation plan
- Quality officer appointed
- NTRL introduced quality along the lines of the plan
- Regular site visits for coaching and assessments
- Course internal auditing in 2009
- Repeated course “Introduction to quality management” in 2010
Technical Assistance

Antwerp, Belgium (TB lab techniques):
  • Armand van Deun, Mourad Gumusboga..

KIT (Quality assurance and accreditation):
  • Paul Klatser, Mirjam Engelberts, Stella van Beers..

Borstel (DST proficiency):
  • Sabine Rüsch-Gerdes..

CDC (Biosafety and NDS):
  • Jonathan Y. Richmond
  • Anand Date
Anno 2011: a lot has been done

- Quality manual and biosafety manual
- Safety trainings
- Internal audit system implemented
- Many SOPs
- IQC
- EQA
- Inter-laboratory Testing
- Quality year plan
- Quarterly reports
- Management review
- ...
# Growth in NTRL Establishment

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<th>Position</th>
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<th>2011</th>
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<tr>
<td>Lab Manager</td>
<td></td>
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</tr>
<tr>
<td>Quality Assurance Manager</td>
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<tr>
<td>Lab network coordinator</td>
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<tr>
<td>Data manager</td>
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<td>Sample shipping coordinator</td>
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<td>Principal lab Technologist</td>
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<td>Senior lab technologist</td>
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<td>Administrative assistant</td>
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<td>Data entry clerk</td>
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<td>Lab assistants</td>
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<td>Volunteers and Trainees</td>
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<td>Drivers</td>
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<td>Total</td>
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Challenges

- Workload laboratory director -> appointment lab manager
- Change: oral to written tradition
- Consensuses technical work
- Communication -> regular meetings (staff, management, Q)
- LIS: many offered, which to choose?
- Competency testing: who will test whom?
- Completing action points -> explaining the tasks and visualization in minutes
- Lack of government full financial support for the NTRL activities
- Validation: currently
Lessons learnt

- QMS is more than SOP writing
- Change management needs attention
- Good communication within laboratory, with clients and providers is very important
- Everyone is involved and essential

Implementing a QMS is teamwork!
Gains from the accreditation process

- Positive personnel behavior change towards accreditation.
  - Involvement in SOP writing
  - Freely and actively suggesting points of Quality Improvement.

- Increased speed in follow up of action plans

- Unprecedented improvement on team work and motivation evident in joint effort toward accreditation, QC audits, corrective action logs and SOP development.

- Great improvement in TAT with many positive compliments from customers, NTLP, Ministry of Health and Donors
Aspects supporting the implementation

• Very competent staff, critical and open and in general very positive

• Staff understands the concept of quality
• Staff realizes positive effects of QMS
• Positive attitude towards quality improvement

• Increased team spirit as a positive side effect!
• Accepted that a cultural change takes time.
Inventing the wheel

Templates were needed for:
• Managerial SOPs
• Quality year plan
• Management review
• Forms and records
• ...

Conclusion:
Process would have gone faster with GLI Implementation Tool
Planning

- 4 weeks ago Uganda scored **3 stars** (205 out of 250 points) on WHO-AFRO steps wise accreditation assessment.
- August 2011: BSL3 lab fully functional
- September 2011: mock audit of complete QMS
- November 2011: apply for ISO15189 accreditation by SANAS
Bad quality

Suboptimal infrastructure

Low salaries

Dr. Moses Joloba