



Outreach supervision to improve malaria diagnostics and case management

Luis Benavente MD, MS
Director Improving Malaria Diagnostics

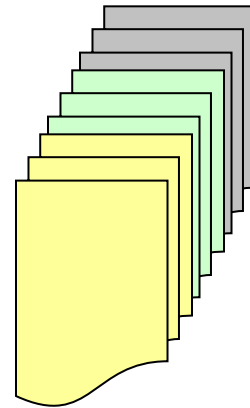
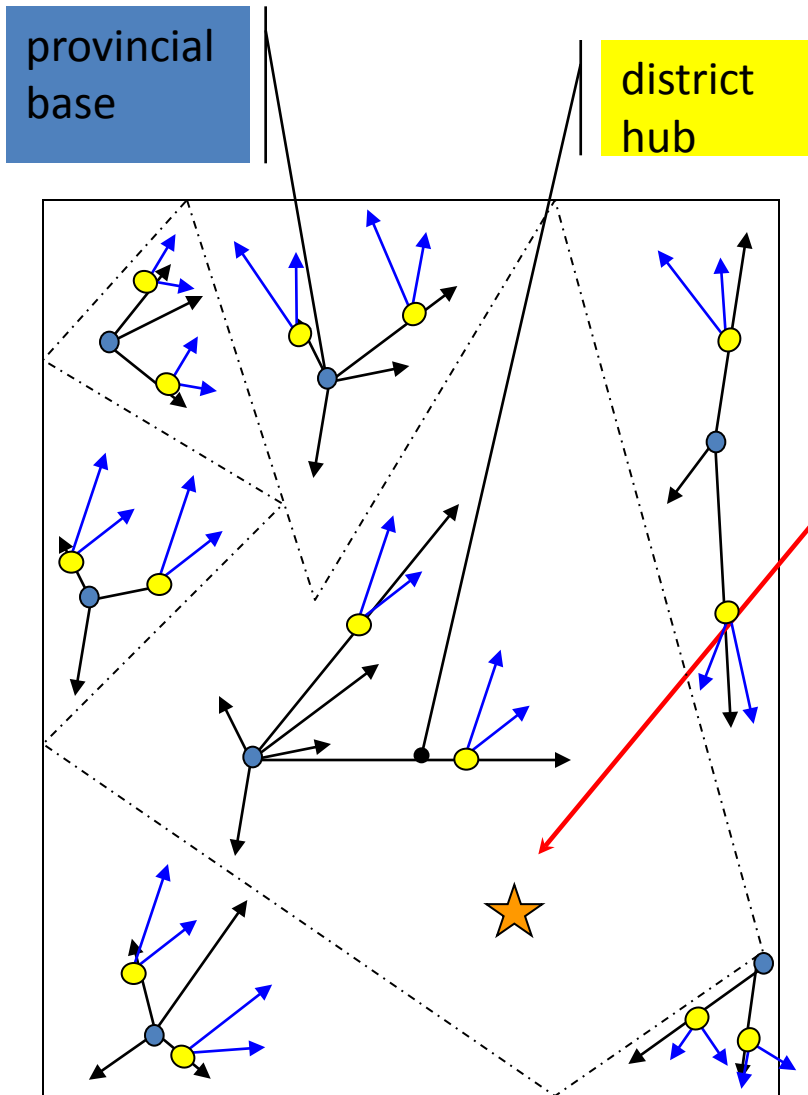
Luanda, August 26, 2009

Country Chart IMaD activities

	2008	2009	2010 (MOP09)
Angola	Assessment of diagnostic capacities	Adapt training materials Train supervisors	MOP: QC of lab diagnosis
Benin (IMad coordinator)	Assessment	Training in supervision, RDT and microscopy	QAQC diagnostics
Ethiopia	-	Assessment	Support QA schemes
Ghana (IMad coordinator)	Assessment, policy	Training in supervision, microscopy	Lab QC, supervision
Kenya	-	Assessment, policy	QAQC diagnostics
Liberia (IMad coordinator)	Assessment	Training	Nat ref lab, lab QA supervision
Madagascar	Assessment	Suspended: adherence to RDT results at health post level	-
Mali	Assessment	Training	Training lab diagnosis, QAQC diagnostics
Malawi (IMad coordinator)	-	Assessment, training	QAQC of diagnostics, adherence to RDT results
Zambia (IMad coordinator)	Assessment	Training	Strengthen diagnosis at health center level

Increase supervision to improve competence in malaria diagnosis and case management

- Training in a central location does not necessarily translate into better competence
- Classic cascade training frequently have had limited success in improving performance
- On-the-job training requires extensive travel
- Frequently provinces lack a skilled supervisor
- Supervision to promote adherence to test results by clinicians



Checklists:

- generated by OS
- initial, 2-3 day visit
- subsequent (1/quarter), 1 day visit
- passed to central admin

National Coordinator/supervisors

- Integral in planning of training OS
- receive completed checklists
- ensure visits are completed as scheduled
- compile results
- work with provincial Supervisors to optimize visit schedules
- work with NMCP, MoH and PMI coordinator to disseminate results of checklists and facilitate corrective actions

Laboratory Curriculum

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8.00-8.30	Introductions Joint	Recap	Recap	Recap	Recap	Recap
8.30-9.30	Ground rules Expectations Joint session	Module 3 Management of Lab Chemicals, Reagents & Supplies	Module J2 Malaria: Programmatic Issues Joint session	Module 10 Rapid Diagnostic Tests (RDTs): use & interpretation	Module J3 Training/supervisor visit to a health facility Joint session	Module J4 Sources of Errors in Patient Diagnosis Joint session
9.30-10.30	Module J1 Essential Health Facility Management Joint session	Module 4 Preparation of stains for blood films	Module J2 Malaria: Programmatic Issues Joint session	Module 10 Rapid Diagnostic Tests (RDTs): use & interpretation	Module J3 Training/supervisor visit to a health facility Joint session	Module J4 Sources of Errors in Patient Diagnosis Joint session
10.30 – 11.00 Tea Break						
11.00-12.00	Module 1 Standards of Laboratory Practice	Module 5 Blood film preparation, staining & examination	Module 7 Cleaning, Disinfect Sterilisation, Disposal & Safety	Module 11 Principles and concepts of QA/QC	Module J3 Training/supervisor visit to a health facility Joint session	Post - test Joint session
12.00-1.00	Module 2 Medical Laboratory Equipment	Module 5 Blood film preparation, staining & examination	Module 8 Laboratory Management Information Systems	Module 12 QA/QC for malaria diagnosis	Module J3 Training/supervisor visit to a health facility Joint session	Post - test Joint session
1.00-2.00 Lunch Break						
2.00-3.00	Pre-test Joint session	Module 6 Blood film examination: species identification	Module 9 Blood film examination: parasite quantification	Module 13 Principles; development and use of checklists	Module 14 Feedback from visit to a health facility	Way Forward Plan of action Joint session
3.00-4.00	Pre-test Joint session	Module 6 Blood film examination: species identification	Module 9 Blood film examination: parasite quantification	Module 13 Principles; development and use of checklists	Module 14 Feedback from visit to a health facility	Wrap up
4.00 – 5.00	Pre-test Joint session	Module 6 Blood film examination: species identification	Module 9 Blood film examination: parasite quantification	Module 13 Principles; and use of checklists	Module 14 Feedback from visit to a health facility	Closing

Microscopy QC Component

- Slide review
 - Not designed to affect individual patient diagnosis
 - Some reviewed on site, by OS, remainder returned to Regional Base for review
 - Select 5 low density pos and 5 neg / facility for each month
 - 120 slides/year target
- Results are analysed as:
 - Number of slides in agreement, i.e. percentage of positive and negative slides correctly identified
 - False positive rate, False negative rate
 - Labelling of each slide
 - Quality of staining
 - Counting of malaria parasites
- Remedial action
 - Further laboratory supervision and/or
 - Laboratory refresher training

RDT QC Component

- Observe adherence to manufacturer's instructions
 - RDT storage
 - Adherence to standard operating procedure
 - Biosafety
 - Interpretation of result
 - Registers
- Observe adherence to RDT results (if RDT-s are not treated)
 - Identify the proportion of febrile cases, RDT- that are treated anyway
 - Identify the causes: long turnaround time? Lack of confidence on RDT results?
- Remedial action
 - Further laboratory supervision and/or
 - Laboratory refresher training

Laboratory Checklist (Initial)

Tool One. Laboratory Outreach Training: Initial Visit

Identification: 1L—2008—08—12—Ashanti—Kumasi

- 1. Laboratory, location and contact**
- 2. Laboratory structure and facilities**
- 3. Major laboratory equipment**
- 4. Minor equipment**
- 5. Supplies, consumables**
- 6. Safety, disinfection, sterilization**
- 7. Quality assurance**
 - A. Internal QC, B. External QA, C. Reference materials*
- 8. Documentation**
- 9. Laboratory staffing**
- 10. Continuing Professional Development (CPD), training, and supervision**
- 11. Tests and techniques**
- 12. Specimen referrals**
- 13. Laboratory data and workload**
- 14. Clinical information (if there is no clinical counterpart present)**

Summary of work done during the visit

State and mission facilities surveyed in the 2009 Needs Assessment, Republic of Kenya

