



# Diagnosis Work Stream Update

RBM Case Management Working Group  
Annual Meeting  
Annecy  
March 5-7, 2013

# Diagnosis Work Stream

## 2013 Work Plan

<b>1. Advocacy for increased priority for RDTs in country planning</b>
<b>2. Support PSMWG &amp; HWG to roll out quantification guidance</b>
<b>3. Support WHO to update microscopy QA manual</b>
<b>4. Improve provider use and adherence:</b>
4.1 Develop advocacy paper on outcomes of withholding treatment in test negative patients'
4.2 Organize state of the art meeting on technical and programmatic issues on non malarial fevers
4.3 Review training and supervision tools
<b>5. Develop guidance on scaling up diagnostics testing in private sector</b>
5.1 Coordinate with market dynamics advisory group (GF) to identify key areas for investigation
5.2 Convene meeting to review experiences and best practices /challenges
<b>6. Explore with MERG approaches to capturing diagnostic test results in routine surveillance</b>

# Support PSMWG to roll-out quantification guidance

## Manual for Quantification of Malaria Commodities

Rapid Diagnostic Tests and Artemisinin-Based Combination Therapy for First-Line Treatment of *Plasmodium Falciparum* Malaria

- Disseminated through RBM, WHO, and RBM mechanisms
- PMI mobilizing TA from SIAPS and DELIVER Projects to support implementation of this manual in PMI countries



# Support WHO to update diagnostic QA manual

- Planned for late 2013/early 2014
- Andrea?

# Improve provider use of and adherence to diagnostics

- Develop advocacy paper on outcomes of withholding treatment in test-negative patients
  - Information note developed by WHO/FIND
  - Cover letter to be developed
- Organize state of the art meeting on technical and programmatic issues on non malarial fevers
  - WHO hosted meeting in Jan 2013
  - Report following this presentation
- Review training and supervision tools
  - Review completed of 13 countries by MCHIP
  - Report following this presentation

# Develop guidance on scaling up diagnostics testing in private sector

- Coordinate with Global Fund Market Dynamics Advisory Group to identify key areas for investigation
  - Input provided
  - CMWG to participate in next MDAG meeting
- Convene meeting to review experiences, best practices, and challenges
  - Planned for April/May 2013

# Explore with **MERG** approaches to capturing diagnostic test results in routine surveillance

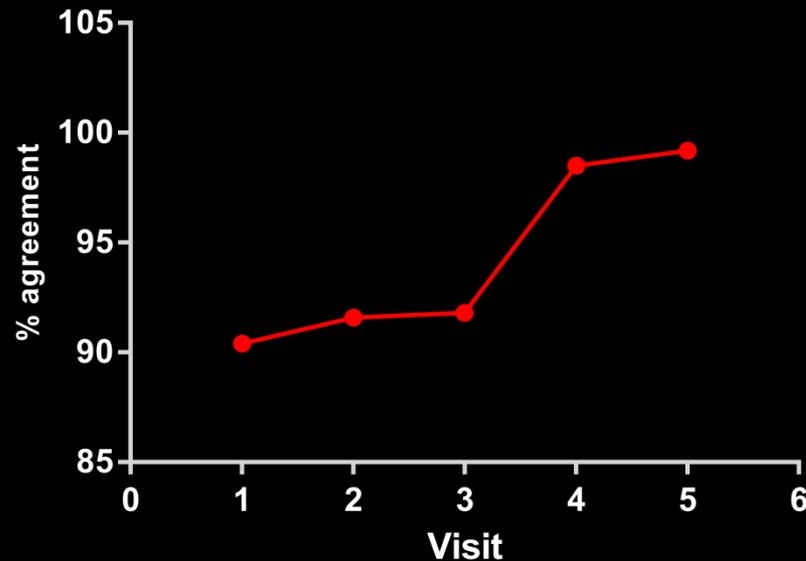
- CMWG Co-Chair now represent CMWG on MERG
- Case management indicators currently under discussion in MERG
- Analysis plan for malaria indicators for the Service Provision Assessment (SPA) under development with support of PMI

# **Document and disseminate best practices for scaling up diagnostic testing for malaria in the public sector**

- Initially planned to perform in-country assessments in one to two countries
- Because of limited resources, a symposium convened instead during ASTMH Annual Meeting, December 2012
- Presentations by four countries who have made significant progress in scaling up diagnostic testing and systems for quality assurance
  - Liberia, Ghana, Malawi, and Rwanda
  - Also, presentation by PSI on experiences with scaling-up in private sector

# Accuracy of microscopy based on cross-checking during supervision, Malawi

Percent Agreement between Supervisor and HF

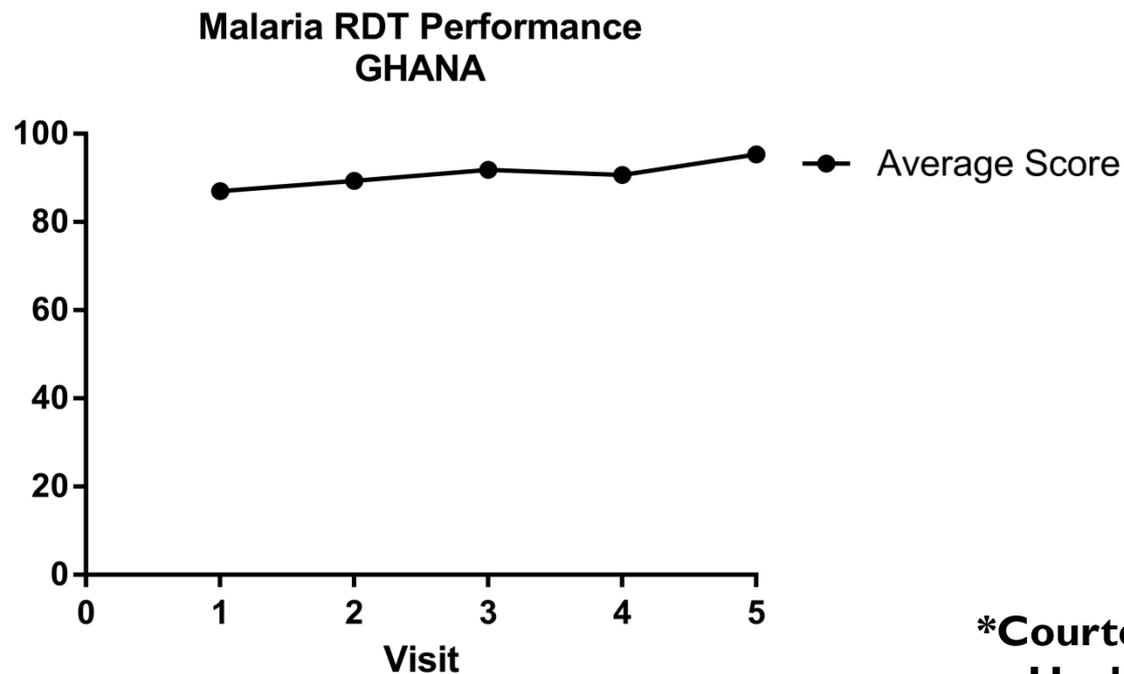


Visit	Agreement	Facilities
1	90.40%	24
2	91.60%	66
3	91.80%	56
4	98.50%	39
5	99.20%	13

**\*Courtesy of Malawi NMCP**

- Laboratory Supervisors (with known competency in malaria microscopy) re-check 10 slides from each health facility (5 negatives and 5 low positives).
- Agreement between the supervisor and laboratory staff has been above 90% for all visits.

# RDT Performance by Laboratory Staff, Ghana



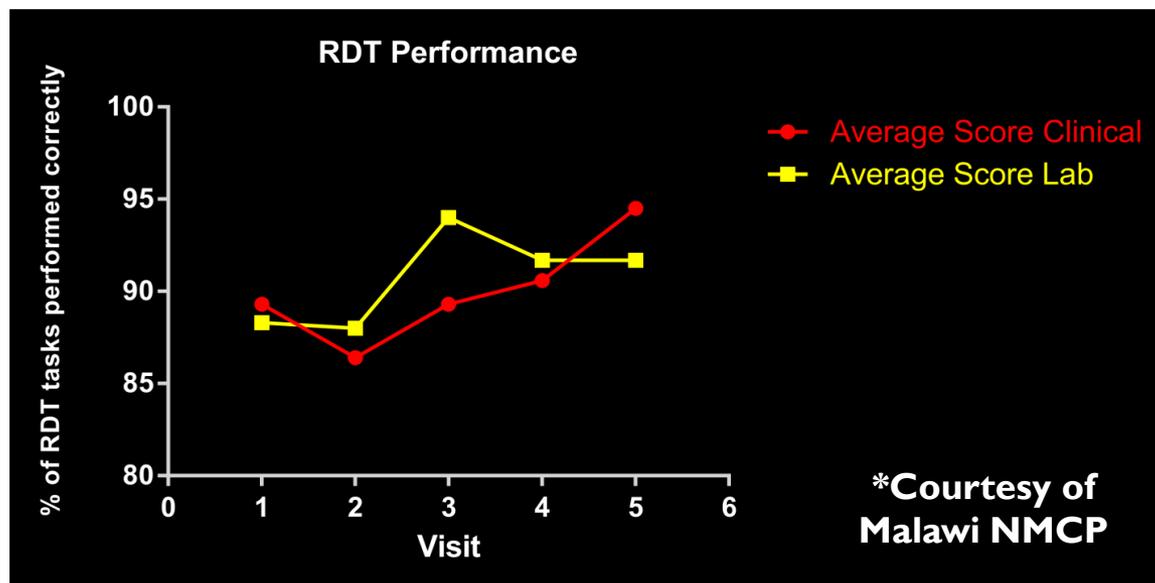
**\*Courtesy of Ghana  
Health Service**

Visit	Average Score	Facilities
1	87.00%	107
2	89.40%	88
3	91.90%	81
4	90.70%	61
5	95.40%	26

# Accuracy of RDT Performance, Malawi

Average Percentage score in RDT Task Performed to Protocol		
Laboratory Health Workers		
Visit	Average Score	Facilities
1	89.30%	51
2	86.40%	54
3	89.30%	54
4	90.60%	48
5	94.50%	22
Clinical Health Workers		
Visit	Average Score	Facilities
1	88.30%	41
2	88.00%	33
3	94.00%	55
4	91.70%	39
5	91.70%	13

**\*Courtesy of Malawi NMCP**

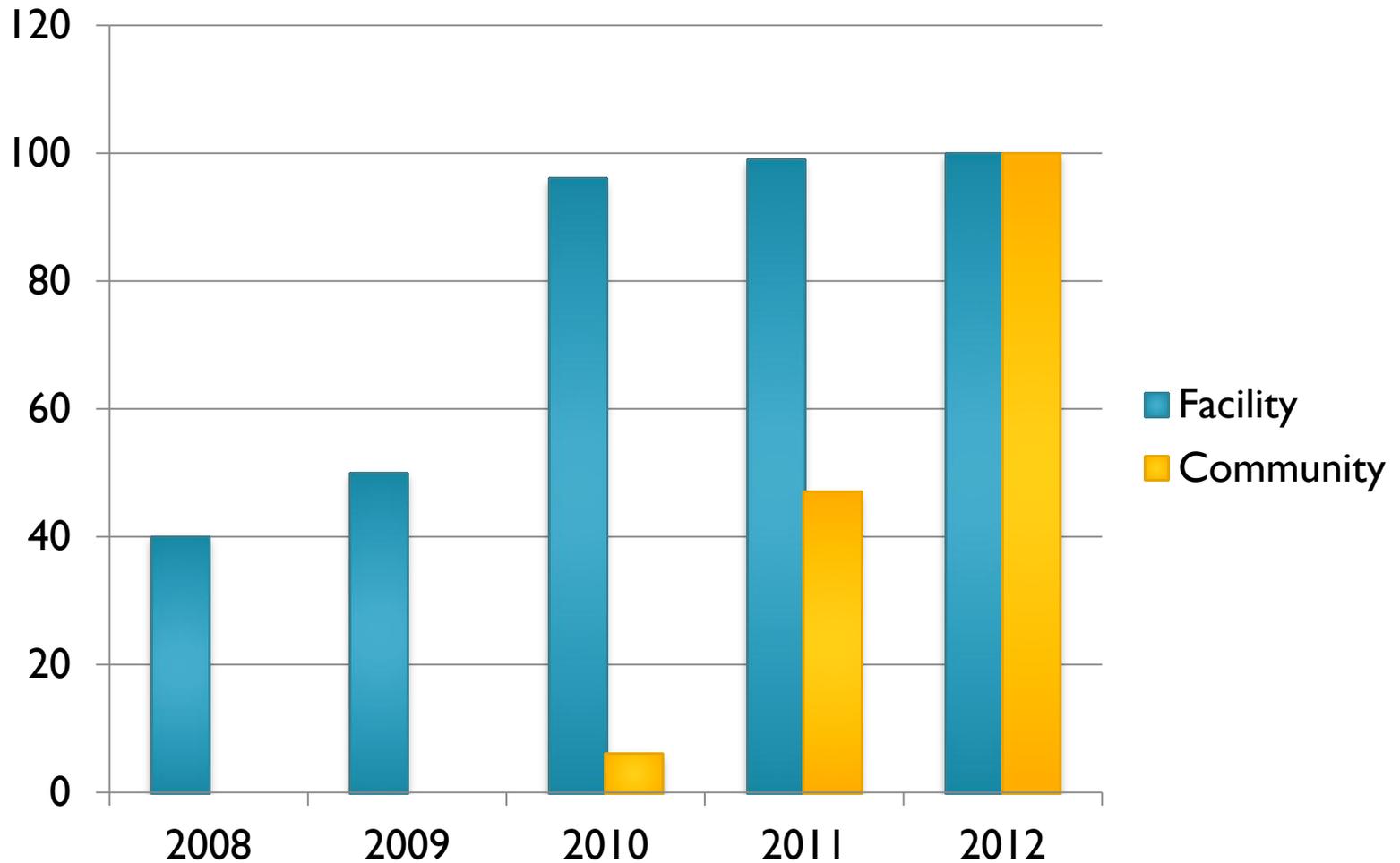


# Utilization of Diagnostics, Malawi

- **August - December 2011:**
  - Approx. 1.3 million cases of suspected malaria were reported
  - Approx. 58% of the suspected malaria cases were tested using either microscopy or RDTs
  - Approx. 46% tested positive
- **January -June 2012:**
  - Approx. 4.8 million cases of suspected malaria were reported
  - Approx. 67% percent were tested using either microscopy or RDTs
  - Approx. 49% of them tested positive
- **Roughly 1 year after the roll out of RDTs:**
  - approx. 6.8 million suspected malaria cases have been reported
  - 64 percent of the cases were tested using either microscopy or RDTs
  - Overall, among the cases tested 48% tested positive for malaria

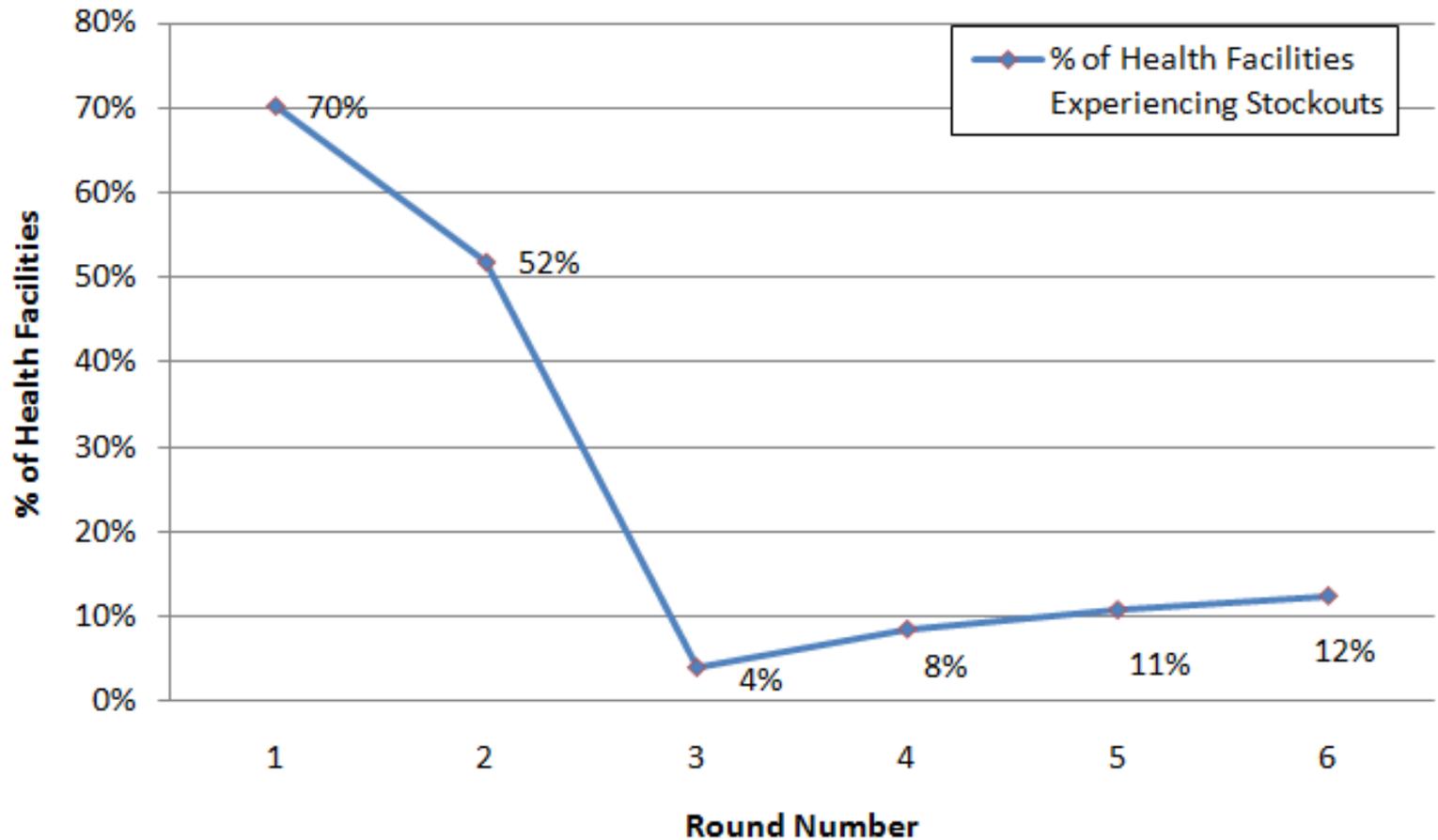
**\*Courtesy of Malawi NMCP**

# Proportion of malaria cases confirmed by diagnostic test, Rwanda



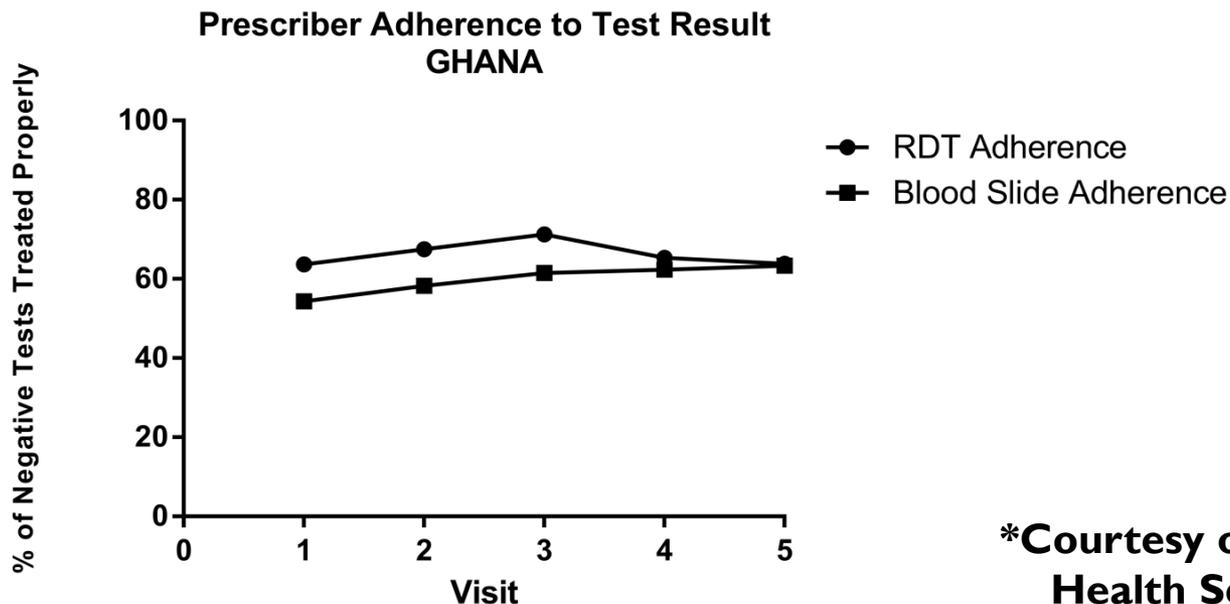
\*Courtesy of PNL, Rwanda

*Number and Percentage of Health Facilities Reporting Stock-outs that Limited Performance of Malaria Diagnostics*



**\*Courtesy of Ghana Health Service**

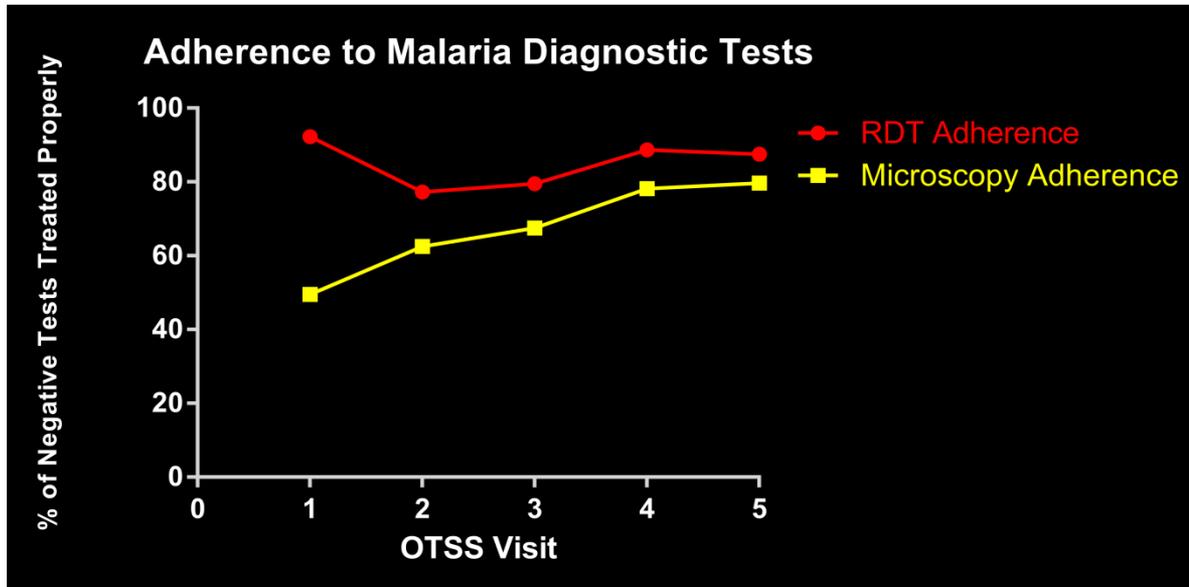
# Prescriber Adherence to Diagnostic Test Result, Ghana



**\*Courtesy of Ghana Health Service**

Visit	RDT Adherence	Blood Slide Adherence	Facilities
1	63.70%	54.40%	319
2	67.50%	58.30%	295
3	71.30%	61.50%	272
4	65.40%	62.40%	217
5	63.90%	63.40%	109

# Adherence to diagnostic test result, Malawi



\*Courtesy of Malawi NMCP

Visit	RDT Adherence	Blood Slide Adherence	Facilities
1	92.30%	49.50%	139
2	77.30%	62.50%	112
3	79.50%	67.50%	85
4	88.70%	78.20%	62
5	87.50%	79.70%	38

- Data suggests that clinicians trust RDT results more than microscopy
- A 30% increase in prescriber adherence was observed between visits 1 & 5

# Conclusions I

- Progress is being made on scaling-up diagnostic testing and quality assurance systems
- Clinicians adherence to test results remains a challenge, although some countries have shown improvements
- Further advocacy is needed at all level to encourage prioritization of confirmatory diagnosis for improved case management, surveillance, etc.
- Ensuring continuous availability of high-quality RDTs and lab supplies continues to be a major bottleneck

# Conclusions II

- As diagnostic testing scales up, increasing numbers of patients with uncomplicated fever will not have a diagnosis.
- Current methods for monitoring progress on malaria control are insufficient for monitoring progress on case management
- The success of strategies to scale up diagnostic testing is heavily dependent on improvements in the functioning of the underlying health system