TESTED SOLUTIONS FOR

Fever Case Management

Photo credit: Breakthrough ACTION
Encouraging Adherence to Case Management Guidelines

Diagnosing and treating the causes of fever correctly is essential for reducing morbidity and mortality, and for the appropriate use of medicines. In settings where malaria is over-diagnosed and over-treated, other illnesses may be left untreated, and there may be shortages of antimalarial drugs.

In collaboration with health care providers and local and national government partners, we used behavioral design to develop new solutions to improve fever case management in Nigeria. A pilot at 12 health care facilities showed improvements in provider knowledge, attitudes, and behavior, suggesting that the solutions may have improved case management practices.

Photo credit: Breakthrough ACTION
Our solutions were designed for the Nigerian context, where national guidelines recommend testing every fever case for malaria, and treating those who test positive with Artemisinin-based combination therapies (ACTs). There is also great diversity in health facility size, staffing, and services offered:

**Primary health care facilities** range in size from Health Posts that serve a single community to Primary Health Centers with teams of staff members that serve entire wards. PHCs are often staffed by Community Health Extension Workers (CHEWs) and nurses, and typically offer a limited array of services that can be performed without specialized equipment.

**Secondary facilities** are typically General Hospitals administered by state governments, though many are privately operated. Intended as referral facilities for PHCs, they are typically staffed by trained medical professionals, equipped with laboratories, and offer microscopy for malaria diagnosis.

The solutions in this primer were designed for use in larger primary health care facilities and secondary facilities, but may be adapted for other contexts.
How to Use This Guide

This tool guides you through the “how-to” of the solutions, so you can see if you may want to adapt and implement these solutions in your own settings.

1. Learn more about the six different solutions that were tested
2. Consider if these could be useful for your programming
3. Download solutions for implementation, along with implementation guides
4. Find links to resources with more information about our formative research and pilot test results
Clients with a fever or history of fever are tested for malaria before consulting with a provider.

A group discussion to address providers’ misperceptions and increase trust in the reliability of RDTs.

A job aid to guide facility staff across departments to counsel clients with fever.
Tested Solutions (2)

Fever Evaluation Job Aid
A tool to prompt more comprehensive client evaluations.

Data Validation Tool & Supervision Checklist
Tools to help facilities monitor case management performance and navigate challenges.

Performance Tracking Poster
A graph tracking the case management performance of the entire facility over time.
“Why RDTs are Reliable” is a group discussion for all providers at a health facility. The discussion emphasizes that malaria rapid diagnostic test (RDT) kits are reliable; that testing is necessary for effective fever case management; and that antimalarial drugs are not effective at treating illnesses other than malaria.

Health care providers often express concerns about adhering to national guidelines.

Common misperceptions result in providers being overconfident in their ability to identify malaria from symptoms, skeptical of the reliability of test results, and wary of the consequences of failing to treat malaria, which they know to be prevalent in their locality.

The “Why RDTs are Reliable” discussion guide provides a framework to address their concerns by refuting common misperceptions.
How the “Why RDTs are Reliable” Discussion Works

1. All health care providers within a facility assemble to participate in the discussion.
   - Makes the contribution of all providers to a facility’s adherence to guidelines salient.

2. Facilitator poses questions to providers about malaria, fevers, and RDTs.
   - Helps fill gaps in providers’ knowledge, and brings their uncertainties to light.

3. Facilitator responds to misconceptions and concerns using the fact-based guide.
   - Counters misconceptions with facts that resonate with providers.

4. Refresher sessions address additional concerns or challenges as they arise.
   - Reminds providers about the messages and exposes new staff to the content.
Keys to success:

- All staff members should attend the discussion, especially those with seniority who may be opinion leaders and have difficulty adhering to guidelines.
- Facilitators should establish “ground rules” for participation and strive to engage all participants in the discussion.
- Hold refresher sessions within 1-3 months of the discussion.
- Hold sessions for local government officials or other individuals in supervisory roles whose knowledge may be out-of-date, and who may unknowingly perpetuate provider misperceptions.

Possible adaptations:

- Ensure that the discussion guide addresses providers’ most important concerns.
- Discussion sessions may be facilitated by national or local government stakeholders, or by health facility officers-in-charge or other personnel.

Resource considerations:

- Time and cost of a 45-minute discussion with facility staff. This can be integrated into a standing supervision visit or an existing staff meeting.

"Why RDTs are Reliable" Discussion

Considerations for Adaptation and Implementation
Testing Before Consultation
Ensuring test results are available for consultations

Testing Before Consultation is a simple change to common client flow patterns. Instead of testing clients for malaria after an initial consultation with a provider, facilities offer malaria testing during client intake or triage, to ensure clients have test results when they consult with a provider.

When consulting with clients, health care providers in Nigeria are supposed to request malaria parasite tests for all clients with fever or a recent history of fever. However, providers often have to rush through consultations to see all of their clients. Waiting for clients to return with test results before prescribing treatments can seem unnecessarily burdensome. As a result, many providers treat their clients for malaria presumptively—before test results are available.

Testing Before Consultation makes malaria testing the default practice for eligible clients, so providers can easily factor test results into their fever management plans.

“It’s a process to help both the provider and the patients [...] The idea will reduce the time that patients will spend at the health center.”
—COMMUNITY HEALTH EXTENSION WORKER
How Testing Before Consultation Works

1. A malaria testing station is set up near the reception or triage unit within a hospital or clinic, to be managed by a dedicated staff member.
   - Creates a dedicated moment and space for testing to occur.

2. During triage, staff collect clients’ weight, blood pressure, and temperature, and their reason for visiting. Clients with a history of fever are also tested for malaria.
   - Eliminates the need for the provider to decide whether to test a client, and creates a perception among clients that they are being served while waiting.

3. Malaria test results become available while clients wait for their consultations.
   - Eliminates hassles associated with malaria testing by integrating testing into client intake processes.

4. Clients bring their test results to consultations.
   - Enables providers to factor test results into their assessment of clients.
Testing Before Consultation
Ensuring test results are available for consultations

Considerations for Adaptation and Implementation

This design is best suited to:

- Situations in which facility staff can easily identify clients who should be tested.
- Health facilities that record vital statistics such as temperature during the client intake process, making it easy to identify clients who should be tested.
- Health facilities that divide the responsibility for conducting client intake tasks and clinical consultations among different staff members.

Keys to success:

- Malaria testing stations can be as simple as a table or desk, as long as they are supplied with testing equipment.
- Staff members responsible for malaria testing should be trained in the correct procedure for administering RDTs and interpreting RDT results and be prepared to manage several tests simultaneously.

Possible adaptations:

- While a dedicated testing station is recommended to streamline the flow of clients through the facility, facilities may choose instead to direct clients to their existing laboratory for testing before seeing the provider.

Resource considerations:

- Facilities should expect that their consumption of malaria RDT kits and related commodities will increase and take steps to ensure that they do not experience a shortage.
The Fever Evaluation Tool is a 10-step job aid to help health care providers conduct comprehensive evaluations of their clients. Based on the Integrated Management of Childhood Illness (IMCI) recording form, it includes additional elements to make it easy for providers to assess the causes of fever in patients. Versions of the tool are available for adult and pediatric clients.

In Nigeria, where malaria is endemic, malaria is often the first illness that comes to mind for providers trying to diagnose the cause of a client’s fever.

To encourage these providers to explore other possibilities, especially in instances where test results indicate a client does not have malaria, the Fever Evaluation Tool prompts providers to ask additional questions and suggests courses of action for common symptoms.
How The Fever Evaluation Tool Works

1. Copies of the Fever Evaluation Tool are placed in locations where providers see fever clients. Allows timely access to tools when needed during consultations.

2. Tool prompts providers to take 10 assessment steps for all fever clients. Offers an in-the-moment reminder of steps that may otherwise be forgotten or skipped.

3. Tool offers a clear course of action after each step. Makes next steps clear and reminds providers of other illnesses that a fever may suggest.
Considerations for Adaptation and Implementation

This design is best suited to:

• Providers who are willing to consult job aids during the course of a consultation.

Possible adaptations:

• The Fever Evaluation Tool is available in a large, one-page format that can be left out on a table to be consulted, or a two-page double-sided format that can be printed to stand upright on a desk, or to hang from a wall.

• To encourage use, the Fever Evaluation Tool can also be used as a form for providers to quickly fill out during consultations. The form can be included in each clients' folder during intake or added to the folder during consultations.

Resource considerations:

• Costs for printing the tool. Forms may be more likely to prompt providers to follow a differential diagnosis process with patients. However, job aids require fewer printings.

• A brief orientation on IMCI for providers that combines case studies and direct practice with handling the tool.
The Whole-Site Counseling Tool is an illustrated desktop counseling aid. As clients move through the facility and visit triage, testing, consultation, and pharmacy units, providers from each unit can draw on this tool to give clients a short set of messages to encourage acceptance of testing and adherence to treatment. Dividing counseling between departments makes it easier for providers to deliver a single message quickly and effectively, and avoids overloading clients with too much information at once.

Providers sometimes face pressure from clients to provide malaria medicines regardless of their test results, and they worry that clients will not come back if they need further treatment.

This solution helps providers manage client expectations, while also educating clients about appropriate care-seeking, and managing fevers in young children.
# How the Whole-Site Counseling Tool Works

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Copies of the tool are placed at triage, testing, consultation, and pharmacy or dispensary units within a health facility. Allows timely access to the tool when needed during case management.</td>
</tr>
<tr>
<td>2</td>
<td>At triage, clients are informed of changes to the case management process. Sets client expectations for the case management process.</td>
</tr>
<tr>
<td>3</td>
<td>During testing, clients are told about the importance of testing, and about the process it entails. Helps clients understand the need for testing and prepares them for different testing and treatment outcomes.</td>
</tr>
<tr>
<td>4</td>
<td>During consultations, providers explain test results, treatment recommendations, and use illustrations to explain when to seek further care. Facilitates clients’ understanding, and alleviates providers’ concerns about clients not returning for further care.</td>
</tr>
<tr>
<td>5</td>
<td>At the pharmacy, providers explain that ACTs only treat malaria, and the importance of completing doses of medication. Anticipates clients’ dissatisfaction with not being issued ACTs.</td>
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</tbody>
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*ACTs refer to Artemisinin-based Combination Therapies.*
Considerations for Adaptation and Implementation

**Keys to success:**
- When used as a client-facing tool, it should be printed in color to make visuals easier to interpret.

**Possible adaptations:**
- The Whole-Site Counseling Tool can be printed in different formats, including:
  - Single-sided tool for providers only;
  - Double-sided tool for providers as well as clients;
  - Laminated tool, to be reused at facilities;
  - Brochure, to be distributed to clients.
- The tool may be supplemented with other key messages relating to case management.

**Resource considerations:**
- Costs of printing.
Data Validation Tool and Supervision Checklist
Creating channels for accountability and joint problem-solving

The data validation tool is used by facility managers or supervisors to monitor the number of malaria-positive cases and ACTs used at each facility, and to assess the quality of facility record-keeping. The checklist is used by supervisors during supportive supervision visits to ensure that facilities are following guidelines and protocols. Supervisors are then able to help facilities identify and navigate the challenges they are facing.

Incomplete data at facilities makes it challenging to monitor testing and treatment behaviors. By calculating accurate data relating to these metrics, this solution highlights discrepancies between data sources to encourage providers to reflect on their actions and provides supervision to encourage problem-solving and accountability within facilities.

“This activity will reduce illegality in the system.”
—PHARMACIST
How the Data Validation Tool and Supervision Checklist Work

1. Facility managers or supervisors review laboratory records of test results and stock records of drugs dispensed. Comparing indicators for test results and drugs dispensed allows facilities to measure problems with adherence.

2. Facility officers or supervisors review official reporting data of test results and drugs dispensed. Comparing reports of the same indicators from different sources highlights issues with data quality.

3. Supervisors use the Supervision Checklist to review data validation outcomes and help officers in charge identify solutions to challenges facing the facility. Help staff uncover challenges and identify ways to improve their processes.
Considerations for Adaptation and Implementation

**This design is best suited to:**
- Larger facilities in which records maintain separate records for tests conducted, and drugs dispensed.
- Facilities with poor record keeping practices.

**Keys to success:**
- Sustained use of data validation and supervision processes over time.

**Possible adaptations:**
- Either of these tools may be integrated into existing data validation or supervision tools and processes.

**Resource considerations:**
- Costs for conducting supervision visits, which may be reduced if the tools are integrated into existing processes.

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**Materials**

- Download Data Validation Tool
- Download Supervision Checklist
The Performance Tracking Poster uses a facility’s administrative data to track facility performance over time, and to communicate that progress to staff.

Many providers noted a lack of feedback about their performance, or the outcomes of cases they have treated. Additionally, providers at some facilities seemed to underestimate how often they and their colleagues issued antimalarial drugs to clients who tested negative for malaria.

The performance tracking poster creates a feedback mechanism for staff to monitor their behavior, together with that of their colleagues, over time.

“I will not like to be associated with failure, so I will strive to have a good performance that can be displayed publicly.”
—LAB TECHNICIAN
How the Performance Tracking Poster Works

1. Posters are updated with monthly performance data and signed by the heads of each unit within a facility. Engages the different units that can influence a facility's performance.

2. Posters are displayed in locations visible to all staff. Reminds staff of their commitment to improving their performance.

3. Data on posters and provider signatures are updated on a monthly basis. Helps staff track changes over time and reaffirm their commitment to the facility's performance.
Considerations for Adaptation and Implementation

This design is best suited to:
• Facilities with reliable data. If data is not reliable, this solution may be paired with the data validation tool.

Keys to success:
• The poster should be visible to all staff.
• Staff should be briefed on the sources of the data, and how to interpret the graph on the poster.
• Frequent and regular staff reviews of the data. It is ideal to integrate these reviews into existing staff meetings.

Possible adaptations:
• If printing is a challenge, facilities may draw posters on flip-chart sized paper.
• While designed to be updated monthly, the poster could be adapted for more or less frequent updates.
• Facilities may consider making posters visible to clients as well as providers.

Resource considerations:
• Printing or drawing a new poster, annually.
• Organizing a staff orientation to the poster.

Download the Performance Tracking Poster Template

EXPLORE MORE TESTED SOLUTIONS
Additional Resources

LEARN MORE:

• Applying Behavioral Economics to Improve Malaria Case Management in Nigeria
  Lessons from our formative research and program pilot

• Detailed Implementation Plan
  Guidance on implementing the solutions at health facilities

• Training Plan and Checklist for Roll Out
  Guidance on training health facility staff on the tools

Photo credit: Breakthrough ACTION
People deserve to have their illnesses properly diagnosed and treated. Take action now.

For more information about our tested solutions for Encouraging Adherence to Case Management Guidelines, contact the ideas42 Global Health Team at gh@ideas42.org

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