



A holistic approach to malaria & fever diagnostics

FAST FACTS

Management of fever (febrile illness) is a huge medical challenge. In Africa alone, over 600 million childhood fevers occur every year. Many febrile illnesses, especially in children, present with highly non-specific and overlapping signs and symptoms that are difficult to distinguish clinically. This is largely because the tools available to health professionals for diagnosing and managing childhood illnesses are limited in resource-poor settings.¹

In some countries – particularly in Africa – the cause of the fever is very often malaria. Malaria is ambitiously targeted for global elimination by 2030, but every year, hundreds of millions of new cases still occur, and hundreds of thousands of people die from the disease.²

Diagnostics underpin malaria elimination efforts, enabling both symptomatic and asymptomatic patients to be treated appropriately. Distinguishing between the various species of malaria parasite responsible for the infection is increasingly important to guide differentiated treatment strategies, as new drugs that target specific parasites become available.

The World Health Organization (WHO) recommends that **all patients suspected of having malaria should be tested before receiving treatment.** But when the test is negative, prescription of a broad spectrum antibiotic is often the default course of action – even though the fever may be due to a virus, in which case the antibiotic will be ineffective. Taking inappropriate drugs is not only bad for patients, it can also contribute to the development of antimicrobial resistance.

1. Unitaid. Fever diagnostic technology landscape, 1st Edition, 2018. https://unitaid.org/assets/Fever_diagnostic_technology_and_market_landscape.pdf (accessed 18 March 2019)

2. WHO. World Malaria Report 2018. <https://apps.who.int/iris/bitstream/handle/10665/275867/9789241565653-eng.pdf?ua=1> (accessed 20 March 2019)

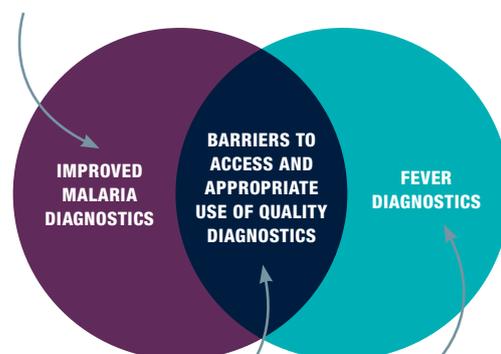
A patient will seek care because he or she has fever. Ensuring that healthcare professionals have the tools to find out the cause of that fever at every level of the health system is critical, so that the patient can receive the most appropriate treatment, whether for malaria or something else.

– Sabine Dittrich, Head of Malaria & Fever, FIND

FIND MALARIA & FEVER STRATEGY

Our approach starts with the patient, irrespective of whether or not they have malaria. While supporting malaria elimination efforts, we are also working on diagnostic solutions that can inform optimal treatment solutions for all patients presenting with fever. For example, combination tests that not only check for malaria but also differentiate between viral and bacterial infections could change the diagnostic landscape.

- Detection of malaria in hard-to-diagnose populations, such as pregnant women
- Differentiation between parasite strains to inform treatment decisions and support the introduction of targeted treatments
- Support elimination strategies with appropriate diagnostic tests



- Enabling use and impact of both existing and new tests
- Deployment of technological solutions to support implementation
- Identification of the cause of fever when it is not malaria, based on likely pathogens in specific geographic areas
- Help to guide appropriate treatment and support patient care
- Antimicrobial stewardship