



David Jacobs

## Driving development and adoption of malaria diagnostic tools

PATH is a leader in the innovation, promotion, and adoption of diagnostic technologies to support malaria elimination and ultimately eradication. Taken as a whole, malaria-related projects and programs at PATH form a core of organizational expertise and strong infrastructure to accelerate the development and adoption of new and improved malaria diagnostics.

PATH works to identify evolving needs and facilitate the development of game-changing solutions to diagnose malaria and guide treatment of the disease and reduce transmission to the point-of-elimination, and ultimately eradication. PATH accomplishes this by partnering with countries, the private sector, and global stakeholders to innovate, promote, and adopt technologies and program strategies aimed at reducing the health and economic burden of malaria.

PATH's Malaria Center of Excellence (MCOE) takes a collaborative approach to disease elimination. The MCOE helps maximize PATH's collective impact by aligning our malaria work across platforms—from diagnostics to system and service innovations to vaccines. The PATH MCOE serves as an interdisciplinary platform that engages internally and externally to leverage PATH's deep technical expertise, strong partnerships, and broad range of competencies to create high-impact solutions that will reduce and eliminate malaria transmission.

## MALARIA DIAGNOSTICS AT PATH

PATH has deep capacity and expertise across the product development chain for malaria diagnostics. We have the ability to guide new malaria diagnostics products from development through to scale-up, with special attention on the middle of the product development chain, where PATH excels in accelerating innovative technologies.

The MCOE supports research and development, product demonstration, and expansion of the use of malaria diagnostics through a collaborative approach with partners and stakeholders. PATH brings our expertise in product development, procurement, quality assurance, and supply chain logistics to ensure malaria diagnostics reach the places where they are needed most.

These programs and projects represent the core of PATH's malaria diagnostics capacity:



### THE PATH DIAGNOSTICS PROGRAM

partners with diagnostic and drug developers and works with global stakeholders to facilitate the successful and rapid rollout of diagnostic tools. Such tools can enable best clinical practice for malaria treatment and support aggressive elimination strategies through rapid detection of low-density infections.

- **Diagnostics for Malaria Elimination Toward Eradication (DIAMETER)** enables access to cost-efficient malaria diagnostic tools to support accelerated elimination.
- **The G6PD Project** is accelerating development of a test for glucose-6-phosphate dehydrogenase (G6PD) enzyme deficiency, a condition that complicates elimination of *Plasmodium vivax* malaria.



**MALARIACARE** promotes the accurate diagnosis and appropriate treatment of malaria in high-burden countries by working with governments and private organizations to expand parasitological testing using rapid diagnostic tests (RDTs) and microscopy.



### MALARIA CONTROL AND ELIMINATION PARTNERSHIP IN AFRICA (MACEPA)

works with countries to plan appropriate and cost-effective interventions to eliminate malaria. Diagnostics are an essential tool for guiding these efforts.



### MALARIA VACCINE INITIATIVE (MVI)

works in vaccine development and has exposure to the leading analytical tools and assays for vaccine efficacy. Clinical trials for malaria vaccines also involve case detection through diagnostic testing.



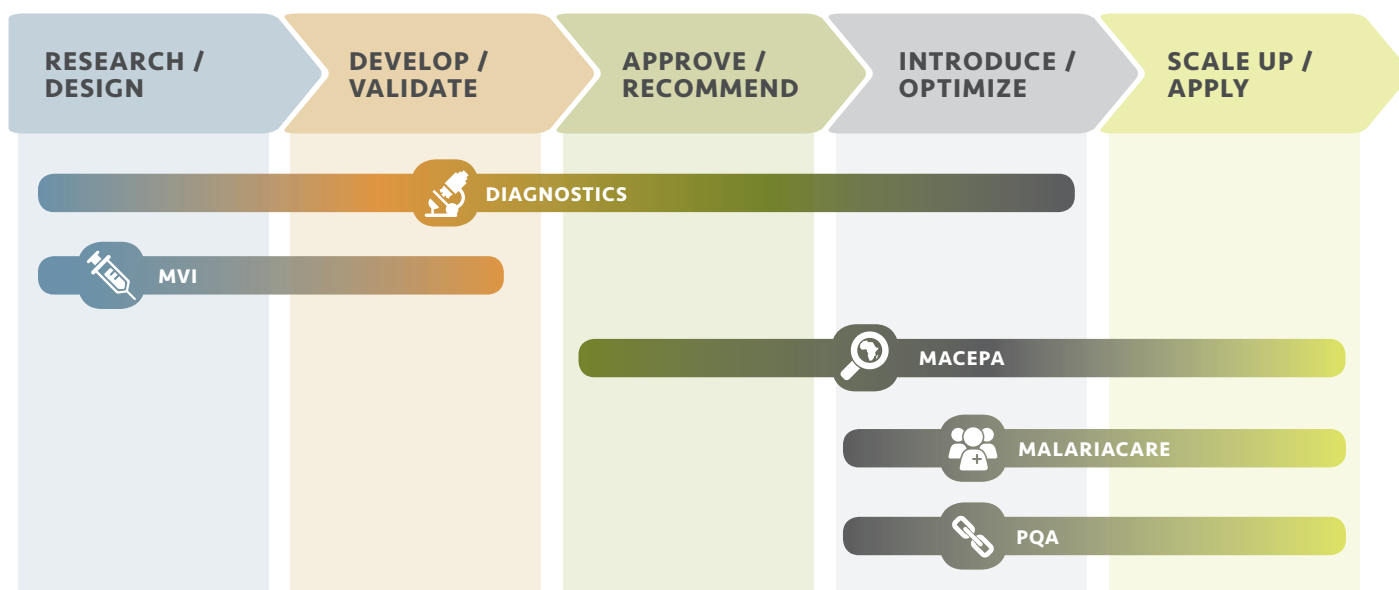
### PROCUREMENT AND QUALITY ASSURANCE (PQA)

has expertise in supply chain management, procuring over 2 million RDTs annually for PATH's malaria projects. PQA also provides technical assistance in procurement and quality assurance to the USAID | DELIVER PROJECT, which supplies RDTs for the U.S. President's Malaria Initiative.

## PATH'S WORK ACROSS THE PRODUCT DEVELOPMENT CHAIN FOR MALARIA DIAGNOSTICS

PATH partners with malaria-endemic communities, diagnostic developers, national malaria control programs, the World Health Organization, donors, research institutions, and implementers to ensure effective product development and accelerated adoption.

Feedback is integrated across all stages of the product development chain to ensure evolving needs are identified and addressed.



## PATH'S CAPACITY AND EXPERTISE IN MALARIA DIAGNOSTICS ACROSS THE PRODUCT DEVELOPMENT CHAIN

PRODUCT DEVELOPMENT PHASE	PATH'S STRENGTHS IN MALARIA DIAGNOSTICS
<b>CONCEPT AND NEEDS IDENTIFICATION</b>	Technical expertise in current and emerging diagnostic platforms and tests. Exposure to emerging needs through field projects and country support. Capacity to develop target product profiles and product requirement documents.
<b>RESEARCH AND DEVELOPMENT</b>	Expertise and laboratory capacity to manage R&D for diagnostic tests. Laboratory capacity to evaluate early analytical tools and develop specimen panels for test evaluation.
<b>CLINICAL EVALUATION</b>	Expertise and capacity to design and, with in-country partners, implement rigorous evaluations of current and emerging diagnostics.
<b>OPERATIONAL RESEARCH</b>	Unique operational expertise and research tools relevant to accelerated adoption of diagnostic tests.
<b>POLICY AND ADVOCACY</b>	Expertise and partnerships to support adoption of new diagnostic tools and approaches into national and global policy and guidance.
<b>INTRODUCTION</b>	Capacity to identify and mitigate risks of product introduction strategies and support product registration process.
<b>SCALE-UP AND IMPACT</b>	Ability to develop pragmatic strategies for new diagnostic products at scale and measure impact.



PATH/Gabe Bienczycki

## ADVANCING MALARIA DIAGNOSTICS AT PATH

With the support of the MCOE and the strong competencies of PATH's malaria programs, PATH is well-placed to take new malaria diagnostic products from development to scale. Alignment of resources, sharing of technical expertise, and collaboration at the programmatic level will allow PATH and our partners to continue to advance our impact on increasing the availability of effective malaria diagnostics.

## FOR MORE INFORMATION

Learn more about PATH's work in diagnostics: [dxinfo@path.org](mailto:dxinfo@path.org).

Learn more about PATH's work in malaria: [malaria@path.org](mailto:malaria@path.org).



[www.path.org](http://www.path.org)

PATH is the leader in global health innovation. An international nonprofit organization, we save lives and improve health, especially among women and children. We accelerate innovation across five platforms—vaccines, drugs, diagnostics, devices, and system and service innovations—that harness our entrepreneurial insight, scientific and public health expertise, and passion for health equity. By mobilizing partners around the world, we take innovation to scale, working alongside countries primarily in Africa and Asia to tackle their greatest health needs. Together, we deliver measurable results that disrupt the cycle of poor health. Learn more at [www.path.org](http://www.path.org).

**STREET ADDRESS**  
2201 Westlake Avenue  
Suite 200  
Seattle, WA 98121 USA

**MAILING ADDRESS**  
PO Box 900922  
Seattle, WA 98109 USA