

India Health Fund supports faster & accurate diagnosis of mosquito-borne diseases

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Industry-first innovations designed by Ameliorate Biotech and Medprime Technologies



India Health Fund (IHF), a Tata Trusts initiative focused on improving health outcomes in infectious diseases, has announced funding for two pioneering platform tools that can be used for diagnosis of multiple diseases.

Developed by Ameliorate Biotech (a startup by alumni of the Indian Institute of Technology- Kharagpur and incubated at the Atal Incubation Centre, NITTE University, Karnataka) and Thane-based startup Medprime Technologies respectively, the innovations, a fever panel to detect dengue, chikungunya, and malaria; and a microscope-agnostic artificial intelligence (AI)-enabled diagnosis software that is applicable across diseases.

Ameliorate Biotech has developed an accurate, multiplexed rapid diagnostic test (RDT) for dengue, chikungunya and malaria (with malaria falciparum and vivax differentiation). The simple 15-min test uses a single test kit and a single blood sample and can be easily used by minimally trained workforce at primary level.

The 12-month funding from IHF will enable prospective, multicentric performance and cost-effectiveness evaluation of the RDT, to be made available at a discounted price of Rs 200/pc to the public health system for government procurements. This is far less than existing fever panel priced at Rs 3000-4000.

On the other hand, Medprime Technologies has developed an artificial intelligence-powered software for faster, more cost-effective and more accurate microscopy for disease diagnosis that deploys an algorithm, locally trained by machine learning, which automatically detects, identifies and differentiates between malarial parasites (*P. falciparum* and *P. vivax*).

IHF's 24-month support to Medprime will enable the development and pilot testing of this AI/Machine Learning (ML)-led multiplex diagnosis software.

