

STOP-AMDR Project

Scaling the Optimal Use of Multiple ACTs to Prevent Antimalarial Drug Resistance (STOP AMDR)

Project summary

Antimalarial drug resistance threatens Africa's progress against malaria. Partial artemisinin resistance and increases in parasites carrying Pfkelch13 mutations have been documented in Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Tanzania, and northern and southern Uganda; resistance may be circulating undetected elsewhere. Resistance to both artemisinin and ACT partner drugs could undermine effective treatment and increase malaria illness and deaths. WHO's 2022 Strategy to Respond to Antimalarial Drug Resistance in Africa calls for stronger surveillance, early response, measures to delay resistance, and research and innovation. Modelling suggests that multiple first-line therapies (MFTs) for uncomplicated malaria could help delay ACT resistance. **Yet policy has outpaced access:** dihydroartemisinin-piperaquine (DP) and artesunate-pyronaridine (ASPY) remain underused at service delivery points despite their inclusion in many sub-Saharan African treatment policies.

STOP-AMDR turns MFT policy into practice. Scaling the Optimal Use of Multiple ACTs to Prevent Antimalarial Drug Resistance brings together country-led implementation, embedded research and market shaping to address barriers to supply, delivery, adoption, quality and affordability. Its catalytic investment generates evidence to support wider ACT diversification and uptake, with the aim of preserving ACT efficacy and contributing to fewer malaria illnesses and deaths in Africa.

STOP-AMDR's target-and-influence model connects implementation in six target countries with learning for wider adoption. Embedded implementation research is collecting evidence on feasibility, acceptability, costs and cost-effectiveness, alongside molecular surveillance data and information on private-sector ACT use in study areas. This evidence guides adaptation and scale-up. Jhpiego leads the project with National Malaria Programmes (NMPs), research organisations, and Community and Civil Society Organisations (CCSOs) in the target countries.

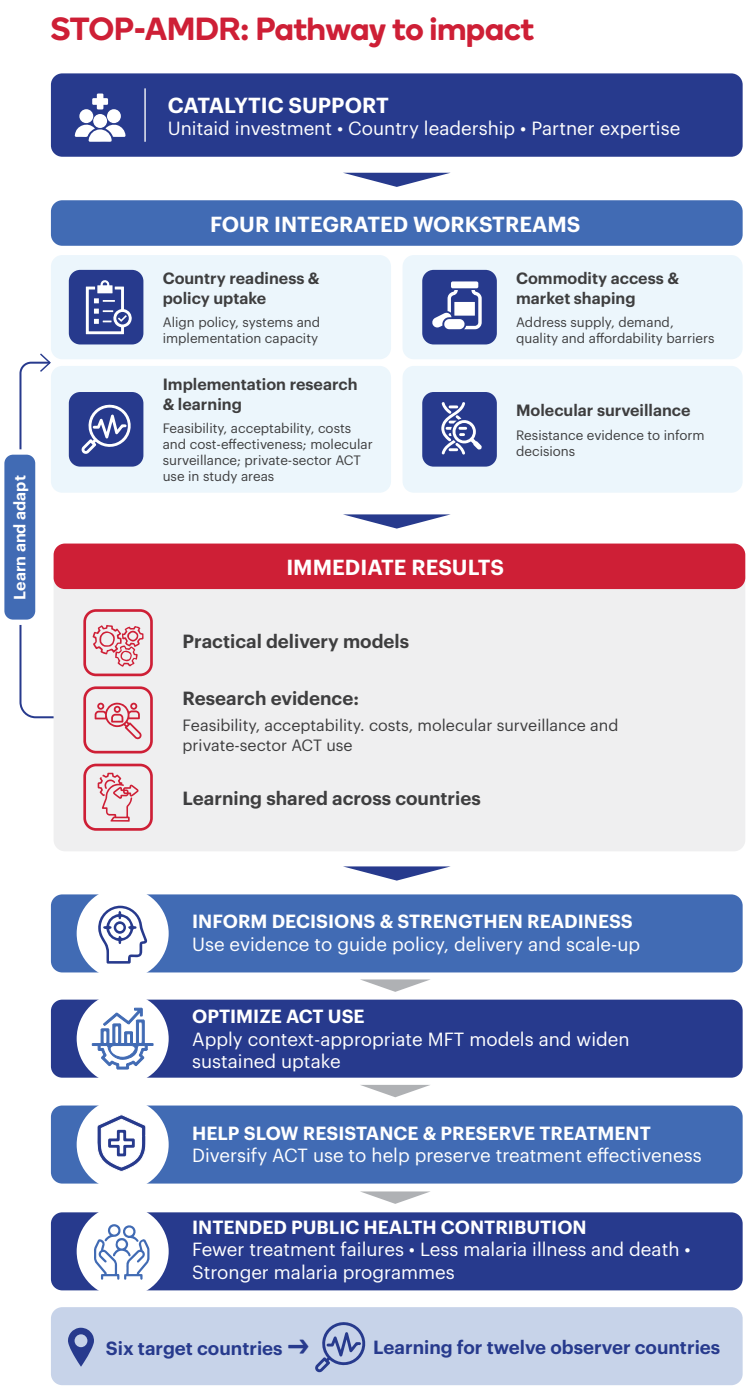
Pathway to impact

Catalytic support → integrated workstreams → immediate results → intended outcomes and impact. Unitaid investment, country leadership and partner expertise support country readiness and policy uptake, commodity access and market shaping, implementation research and learning, and molecular surveillance. These workstreams generate practical delivery models; evidence on feasibility, acceptability, costs, molecular surveillance and private-sector ACT use; and learning shared across countries. The evidence informs decisions, strengthens readiness and supports context-appropriate MFT uptake, with the aim of slowing resistance, preserving treatment effectiveness and contributing to fewer treatment failures, less malaria illness and death, and stronger malaria programmes. Learning feeds back into implementation to support adaptation.



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Figure 1. From catalytic investment to wider MFT uptake and lasting health impact: STOP-AMDR's intended contribution, not results already demonstrated.



Six countries. Practical evidence. Wider uptake.

Transition and accelerator countries—Burkina Faso and Kenya. Burkina Faso is building on earlier pilots, with scale-up plans and funding to procure recently introduced ACTs. STOP-AMDR captures lessons to inform wider implementation. Kenya is finalising its MFT strategy, with support focused on quantification, phased scale-up planning, securing funding and documenting learning.

Demonstration countries—Democratic Republic of the Congo (DRC), Nigeria, Rwanda and Uganda. Four countries are generating evidence on distinct MFT deployment models. Rwanda and Uganda plan nationwide adoption, with research guiding scale-up and course correction. Nigeria's simultaneous model assigns AL, DP or ASPY to three age groups in six districts across Kwara and Enugu; STOP-AMDR supports strategy finalisation and research in demonstration states. DRC's rotational model covers Kingasani, Kenge and Vanga: two districts initially use AL and one uses ASAQ, before all three switch to ASPY after two years. The study assesses one rotation cycle. Together, these studies examine how MFT strategies can be adapted to country needs.

Country MFT strategies at a glance

Country	MFT model and deployment
Burkina Faso	**Rotational | AL · DP · ASPY** Nationwide deployment. Regional blocks rotate every two years.
Kenya	**Rotational | ASPY · DP** Nationwide deployment, starting in four counties. Phased ASPY scale-up, followed by DP after two years.
DRC	**Rotational | AL · ASAQ · ASPY** Kingasani, Kenge and Vanga districts. Two districts initially use AL and one uses ASAQ; all three switch to ASPY after two years. Study: one cycle.
Nigeria	**Simultaneous | AL · DP · ASPY** Six districts across Kwara and Enugu. Three age groups are assigned AL, DP or ASPY.
Rwanda	**Rotational | AL · DP · ASPY** Nationwide deployment but STOP-AMDR IR in 4 districts. Blocks rotate annually. Study: two cycles.
Uganda	**Rotational + simultaneous | AL · DP · ASPY** Buikwe: AL for adults and DP for children. Busia: ASPY, followed by a new ACT after two years. Study: one cycle.

Wider learning and project information

Learning beyond the six countries. Evidence informs MFT introduction in twelve observer countries: Angola, Eritrea, Senegal, Cameroon, Côte d'Ivoire, Ethiopia, Ghana, Liberia, Madagascar, Malawi, Mozambique and Tanzania. Unitaid funds the 48-month project, from June 2025 to May 2029.

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