



Unitaid's Vector Control Portfolio: an overview and update

15 April 2024





Unitaid: Saving lives faster



Who we are

Unitaid saves lives by making new health products available and affordable for people in low- and middle-income countries. We identify innovative treatments, tests and tools, help tackle the market barriers that are holding them back and get them to the people who need them most – fast.

“Thanks to Unitaid, more people across Africa have access to the best HIV treatments at a fraction of the original price. Young children have been cured of tuberculosis with high-quality formulations that are easy to administer. Millions of young people are better protected against malaria through large-scale seasonal delivery of medicines, an approach that has dramatically reduced child mortality without raising costs.”
United Nations Secretary-General António Guterres



Groundbreaking solutions

Develop better products

Child-friendly medicines, fixed-dose combinations

Simplify care

Self-testing & self-collection, better tolerated treatment

Reach those most at risk

Children in Sahel have access to effective malaria prevention tools

Advance women's health

Effective test and treat solution for cervical cancer

Bring products faster and make them affordable

Dolutegravir, rifapentine, bedaquiline etc.



170 million people use
Unitaid-supported health
products every year



100+ groundbreaking
products introduced
since 2006



Our approach helps
reach global health targets
three years faster



US\$8 billion in savings
by 2030

Strategic Objectives

Products, Access and People

1

Accelerate the introduction and adoption of key health **products**

2

Create systematic conditions for sustainable, equitable **access**










3

Foster inclusive and demand-driven **partnerships** for innovation



Unitaid's Programmatic Priorities New Strategy 2023-2027

Saving and Improving Lives through Unitaid Investments

 HIV & co-infections	 TB	 Malaria	 Women & children's health	 Respond to global health emergencies
Sustain effectiveness of prevention, treatment	Enable TB prevention tools for high-risk groups	Introduce and optimize prevention tools	Improve access to better tools for safe pregnancy, birth for women & newborns	Improve quality of clinical care packages for COVID-19
Optimize and enable scale of AHD packages of care	Accelerate access to new detection tools	Improve access to quality case management		
Drive HCV elimination through testing, prevention	Accelerate adoption of new drugs and regimens			
Increase access to screen & treat for cervical cancer, STIs	 Improve child survival with triage and treatment tools			
 Accelerate access to self-testing and integrated diagnostics			Decentralize testing and treatment for COVID-19	
 Long-acting and new technologies				
 Intellectual property, regulatory and innovative supply models				

Current malaria portfolio

	Grant (Consortium lead)	Amount (Timeline)	Countries	Focus
Prevention	The Plus Project (PSI)	\$35m (2021-2025)	Benin, Cameroon, Cote d'Ivoire, Mozambique	Large-scale pilot delivery of co-designed PMC strategies
	MVIP (WHO)*	\$13m (2017-2023)	Ghana, Malawi, Kenya	Impact, feasibility, cost-effectiveness of RTS,S malaria vaccine
	New Nets Project (IVCC)*	\$66m (2018-2022)	14 countries in SSA	Large-scale introduction of dual AI ITNs, incl. evidence on efficacy, effectiveness, and cost
	AEGIS (UND)	\$34m (2019-2025)	Kenya, Mali, Sri Lanka, Uganda	Evaluate spatial repellents as a new vector control product class
	BOHEMIA (IS Global)	\$25m (2019-2024)	Kenya, Mozambique	Evaluate ivermectin mass administration as a vector control product class
Case management	PAVE (MMV)	\$25m (2021-2025)	Ethiopia, Indonesia, PNG, Peru, Vietnam	Introduce new screening and treatment tools to support the elimination p. vivax malaria
	TIMCI (PATH)	\$28m (2019-2024)	India, Kenya, Myanmar, Senegal, Tanzania	Integrated and appropriate fever management of sick children
	AIRE (ALIMA)*	\$15m (2019-2023)	Burkina Faso, Guinea, Mali, Niger	
Cross-cut	Supply Side Grant (MMV)*	\$5m (2017-2023)	Global	Overcome severe malaria and prevention supply barriers

*Recently closed

New Nets Project – partnership with The Global Fund



**Lead
Grantee**

Innovative Vector Control Consortium (IVCC)



**Grant
Period**

2018-2022



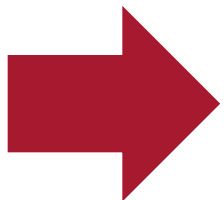
**Grant
Value**

US\$66M



**Project
countries**

Benin, Burkina Faso, Rwanda, Mali, Mozambique, Nigeria, Cote d'Ivoire, Liberia, Ghana, DRC, Malawi, Niger, Cameroon, and Burundi



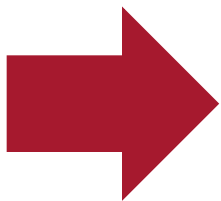
**Grant
Impact**

Introduce new long-lasting insecticide-treated nets (LLINs) in areas of insecticide resistance

Broad One Health Endectocide-based Malaria Intervention in Africa (BOHEMIA)



	Lead Grantee	ISGlobal
	Grant Period	2019 - 2024
	Grant Value	US\$ 25M
	Project countries	Tanzania, Kenya







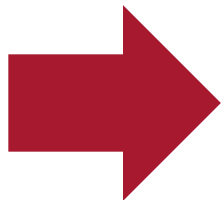
Grant Impact

Develop a complementary new-class vector control tool, ivermectin (endectocides)

Advancing Evidence for the Global Implementation of Spatial Repellents (AEGIS)



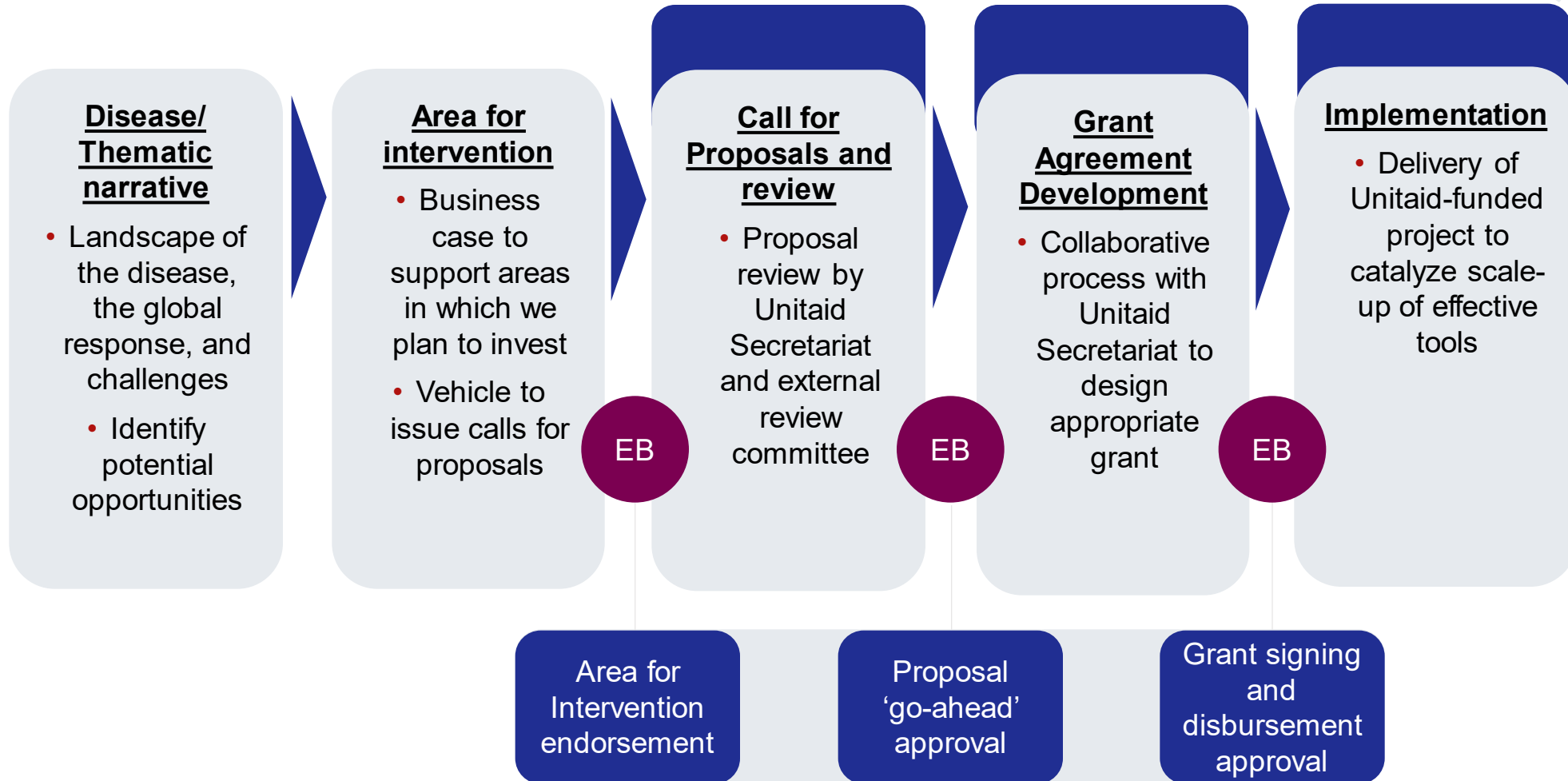
	Lead Grantee	University of Notre Dame
	Grant Period	2019 - 2025
	Grant Value	US\$ 34.7M
	Project countries	Kenya, Mali, Sri Lanka, Uganda



 **Grant Impact**

Evaluate spatial repellents as a new vector control product class

Unitaid's Model



Call for proposals: *Catalyzing adoption of an expanded vector control toolbox to fight malaria*

Call
scope



Multi-country implementation work to accelerate demand and adoption of new vector control tools and effective deployment strategies, and establish healthy market conditions

Objectives

Generate evidence to inform deployment and integration of tools within the wider toolbox



Establish healthy market conditions, including supply security and sustainable pricing



Closed: 25 August 2023

Community and Civil Society Engagement (CCSE)



Unitaid's vision and mission

Our vision: Equitable access to health innovations to ensure healthy lives and promote well-being for all.

Our mission: We expand the reach of the best health products for those who need them most.

We can deliver on this vision and our mission:

- By designing and investing in innovative approaches to make quality health products available and affordable in LMICs
- By inspiring and promoting collective efforts with partners, countries and communities, unlocking access to the tools, services and care that can deliver the best results, improve health and address global health priorities

STRATEGIC OBJECTIVES

1

Accelerate the introduction and adoption of key health products

- Boost the **development** of fit-for-purpose health products
- Use **market shaping approaches** to enable suitable, affordable, quality supply
- Support **product adoption and scale up** in countries as part of simple, effective and evidence-based models of care

2

Create systemic conditions for sustainable, equitable access

- Establish an **enabling environment** for access, including IP and regulation
- Support innovative **supply models & approaches**, including local manufacturing and technology transfer
- Disseminate **knowledge and evidence** on access

3

Foster inclusive and demand-driven partnerships for innovation

- Maximise the engagement of **affected communities** and responsiveness to their needs
- Maximise alignment and synergies with **governments, in-country stakeholders, affected communities and civil society organizations**
- Further develop **global alliances** for product scaleup

The engagement of communities and civil society across our work is essential

Benefits and successes of engaging communities



2

Increased awareness, demand and information dissemination

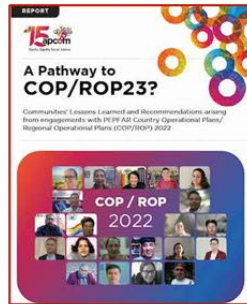


3

Ensures communities are informed and ready to ask for the best health innovation



More ambitious commitments in scale up partner funding proposals



Stronger translation of scientific and normative results into treatment or health literacy



Community voices in committees, conferences and technical meeting



Regional Manufacturing for Equitable Access (RMEA)



Regional Manufacturing in Africa and Latin America & Caribbean

Africa suffers more than its fair share of communicable and non-communicable diseases, while having the lowest production capacity for health products in the world.



African countries currently import more than 79%⁽³⁾ of their pharmaceutical supply from outside the continent.



This dependency is unsustainable - particularly in the face of the expected population growth. Roughly half of its 1.1 billion people lack regular access to even the most essential medicines, according to the WHO.

¹World malaria report 2022. Geneva: World Health Organization; 2022.

²Preventing and responding to HIV drug-resistance in the African Region: regional action plan 2019-2023. Brazzaville: WHO Regional Office for Africa; 2019.

³WHO Africa, (2021) "Inside Africa's drive to boost medicines and vaccine manufacturing". <https://www.afro.who.int/news/inside-africas-drive-boost-medicines-and-vaccine-manufacturing>.

⁴Dong J, Mirza Z. Supporting the production of pharmaceuticals in Africa. Bull World Health Organ. 2016; 94(1):71-2.

Latin America's access to essential medicines and health technologies is a complex endeavor, necessitating considerations for safety, quality, affordability, and timely availability



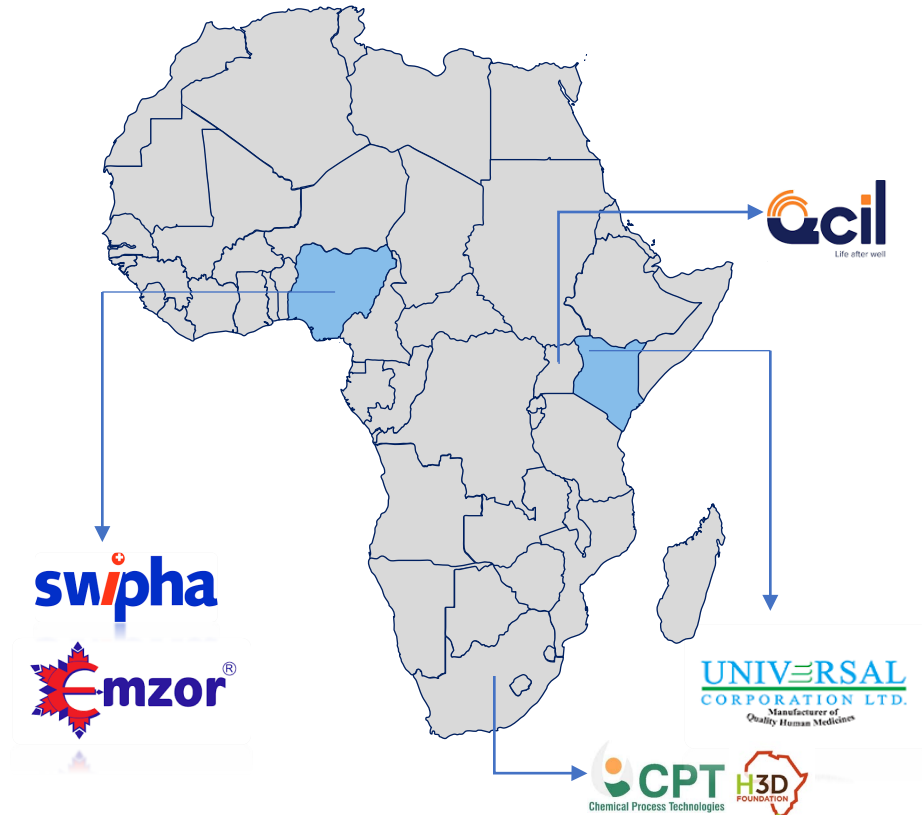
LATAM countries currently import about 50% of their pharmaceutical supply from outside the continent.



While the continent has relatively more manufacturing, there are many inequalities. LATAM experiences higher instances of IP and affordability barriers affecting a significant proportion of its 700 million population's access to essential medicines.

Malaria | Africa manufacturing value chain already being nurtured

Emerging Capacity in Africa



Product Development	Regulatory Review	WHO PQ
Sulfadoxine – pyrimethamine Emzor Pharmaceuticals	Sulfadoxine – pyrimethamine SWIPHA	Sulfadoxine – pyrimethamine Universal Corporation (UCL)

New API Manufacturing capacities emerging on-continent

- In technical collaboration with Mangalam, Emzor is developing the first API manufacturing facility in West Africa for production of 5 anti-malarials - Artemether (A), Dihydroartemisinin (DHA), Lumefantrine (L), Sulfadoxine (S) and Pyrimethamine (P).
- Advanced laboratory-scale synthesis of multiple APIs, including Amodiaquine by CPT in South Africa
- H3D and CPT partnership to pilot promising products and new synthesis pathways.

- **Swipha and Emzor** with support from MMV and Unitaid are developing a quality-assured child-friendly, dispersible formulation of **SP** to protect women, children and infants from malaria. **Swipha is expected to receive WHO pre-qualification for this product soon.**
- **UCL** is the first African manufacturer to gain **WHO prequalification for SP** to prevent malaria in pregnant women with support from MMV and Unitaid. In October 2023, UCL received **prequalification from WHO for SPAQ.**
- **QCIL Uganda** is listed as a **manufacturing site** for Cipla’s WHO prequalified **Artemether/Lumefantrine 20/120mg** finished pharmaceutical product.

Climate and Health













Climate related challenges

- **Climate variability** (changes in temperature and rainfall), can impact the **behaviour and survival** of the malaria-carrying *Anopheles* mosquito.
 - Vector adaptability > geographical spread to new environment, resistance
 - Spread of vector due to climate changes over time could put 700 million more people at risk by 2050.
 - Increased flooding > more breeding sites
 - Outdoor living > exposure to insect biting and transmission
 - Seasonality and variation impact programme designs, modelling difficulty and disrupt effectiveness of scheduled prevention (e.g. IRS, extreme heat > sleeping outside nets)
- **Extreme weather** events such as heatwaves and flooding may lead to increases in the **transmission and burden** of the disease.
 - Population displacement and migration > exposure in endemic areas
 - Malnutrition > risk factor for severe malaria, anaemia
 - Conflict and humanitarian crises
 - Floods could limit access to nets due to damage, loss or destroyed road network
- Drug and insecticide **resistance**
 - Heat stability of treatment/diagnostic products > potential impact on product expiry and labelling
 - Efficacy of vector control tools
 - Supply chains disruptions to reach most remote/climate-affected areas

From milligrams to megatons:

A climate and nature assessment of ten key health products

Figure 1. 10 priority health products have been selected based on relevance for & representativeness of the Unitaid portfolio and disease space

Archetypes	Typical products	Focus products
Small molecule medicines	Oral medications Injectable medicines	 Heat stable Carbetocin
		 Long-acting injectable Cabotegravir
		 Dolutegravir-based first line regimen
		 Bedaquiline, Pretomanid, and Linezolid (BPaL)
		 Artemisinin-based combination therapy
Rapid diagnostics	Lateral Flow Assay products (Rapid tests)	 HIV Self-Testing
Point-of-Care diagnostics	Point-of-Care PCR testing platforms	 Point-of-Care PCR platform for MTB test
Integrated diagnostic platform	Lab-based PCR testing platform	 High-throughput PCR platform
Vector control products	Insecticide-based vector control products	 Long Lasting Insecticide- treated Net (dual active ingredient nets)
Others	Production of medical oxygen	 Pressure swing adsorption oxygen generating plant (PSA O ₂ plant)



Women & Children's health



HIV & Co-infections



Tuberculosis



Respond to Global Health Emergencies



Malaria

Unitaid response

- Board-approved Climate and Health Strategy
 - New aspiration for health products – climate smart health products (with 4 dimensions)
 - Climate concept mainstreamed into all our investments
- Unitaid response (evolving):
 - Decarbonization efforts across our Secretariat and Portfolio: climate commitments made (-50% by 2030 on portfolio and Secretariat, Board-facing KPI on Secretariat CO2 emission reduction)
 - Value-chain decarbonization focused on specific products
 - Carbon action included in our proposal and procurement forms, selection criteria but also budget to support implementers;
 - “doing our part” supported by the Climate Action Accelerator partnership
- Adaptation response
 - Deploying bed nets based on climate-informed data/programming
 - Suitability to different settings – e.g., for displaced populations/migrants, spatial repellents (SRs), attractive targeted sugar baits (ATSBs)
 - Co-benefits protection across various vector borne diseases- Dengue, Zika
- Collaborative action of partners and stakeholders

How Unitaid defines climate-smart health products



Not harmful

Products that are not harmful to climate and nature, globally and locally, all along their life cycle – from minimized greenhouse gas emissions during manufacturing to responsible recycling.



Resilient

Products that can be manufactured, delivered, stored and used in a way that is resilient to climate and nature risks.



Responsive

Products that address the evolving needs of communities in low- and middle-income countries that are impacted by climate change, including health risks exacerbated by climate change and increases in infectious diseases.



Locally adapted

Products that are delivered as part of locally adapted interventions, based on local context and knowledge, delivered through community-led models, and produced regionally.

Industry/ partners' response

- Resilience / climate risks on supply chains:
 - “Milligrams to megatons” report has surfaced issues in terms of resilience:
 - Plant-source for Artemisinin
 - heat stability (ACTs) and other products
 - manufacturing concentration, risk to in-country supply chains, extreme events
- Industry collaboration mitigation response:
 - High CO2 emission (plastics mostly)
 - Downstream plastic pollution- recycling and reuse as input, greening the input , explore alternatives
 - Solutions and levers- 10 technical solutions, 40% without increasing COGs
- Partnership: criticality of partnerships; WHO ATACH as a strong platform

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Thank you