Unitaid
Innovation in Global Health

Two-year old Kamaragi's life was saved in Uganda, thanks to effective treatment with injectable artesunate (Image: Pierre Hugo/MMV)

IMPACT STORY: **IMPROVING SEVERE MALARIA OUTCOMES** (ISMO)

To reduce malaria mortality in children by at least 22 per cent.

The problem

Malaria kills one child every two minutes.

Severe malaria causes death in nearly all cases without treatment, especially in children under five years of age.

Though injectable artesunate is far more effective than quinine for treating severe malaria, Unitaid identified that it was not being adopted on a large scale by national health programmes despite a strong recommendation from the World Health Organization (WHO).

The solution

What did Unitaid do?

Through Medicines for Malaria Venture (MMV), Unitaid invested US $20 million over 2013-2016 to accelerate demand and adoption of quality-approved injectable artesunate in six countries (Cameroon, Ethiopia, Kenya, Malawi, Nigeria and Uganda). MMV partnered with the Clinton Health Access Initiative (CHAI) and the Malaria Consortium (MC) to update treatment guidelines; to quantify, procure and distribute injectable artesunate at affordable prices; and to train healthcare workers to use injectable artesunate in the project countries.

What did the project deliver?

Demand for injectable artesunate increased substantially. Annual procurement increased from very low levels to **10 million vials in 2015**, through funding from Unitaid, the Global Fund and the US President's Malaria Initiative (PMI). Donor commitments are expected to exceed **20 million vials per annum** in the future. And demand continues to increase. In 2011, only **9 countries** in Africa had changed their severe-malaria policy in favour of injectable artesunate. By 2016 this had increased to **30 countries**.

What impact will the project have over the long-term?

Based on current projections of demand, injectable artesunate could save an additional 66,000 children's lives each year by 2021 - it is more effective than quinine and potentially cheaper for health systems.

Overall, the ISMO project has delivered an excellent return on investment (>$100 for every dollar invested).

Additional impact of the ISMO project - rectal artesunate

Where prompt treatment with injectable artesunate isn't available, the WHO recommends the use of rectal artesunate before a child is referred to a healthcare facility for treatment.

Access to rectal artesunate is low due to limited operational guidance, a lack of evidence of its use in real-world settings, and a lack of quality-assured products. The ISMO project supported the **acceleration of two rectal artesunate products through WHO prequalification**. A complementary investment by Unitaid (through CHAI) is now exploring whether rectal artesunate can be delivered and used safely and effectively in community settings.

The main contributors to Unitaid are: France, United Kingdom, Brazil, Norway, Chile, South Korea, Mauritius, Madagascar, Spain and Bill & Melinda Gates Foundation.

IMPACT DATA:
IMPROVING SEVERE MALARIA OUTCOMES

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For no extra cost, injectable artesunate can save an additional 2 lives for every 100 children treated

	MORE EFFECTIVE	EASIER TO ADMINISTER	FASTER OUTCOMES	EQUIVALENT COST
PREVIOUSLY **Quinine**	Saves around **90** lives out of every 100 children treated.	**Painful, toxic** and **difficult** to administer, lasting **many hours**.	**Slower-acting**, patients discharged after several days.	Whilst the cost of a treatment course of quinine is lower than injectable artesunate, when factoring in additional costs related to severe malaria case management,* injectable artesunate is the same or potentially lower cost than quinine.
NOW **Injectable artesunate**	Saves around **92** lives out of every 100 children treated.	Treatment can be delivered in only a **few minutes**, with **fewer life-threatening side-effects**.	**Faster-acting**, patients can be discharged after 1-2 days.	

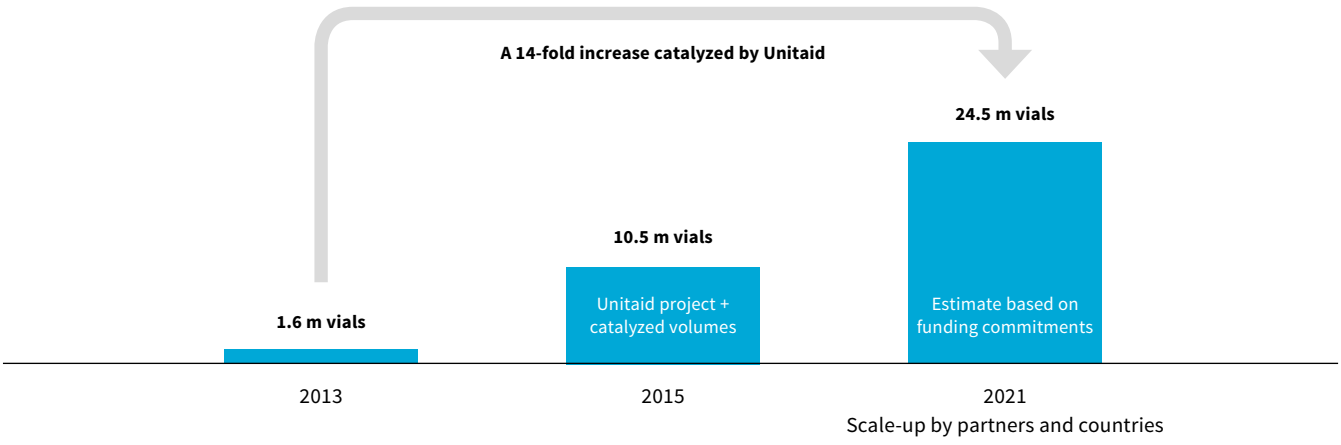
*The total cost including commodity costs, in-patient costs and the cost of health care worker time.

A further 66,000 children's lives saved annually by 2021*

Additional **4,500** children's lives saved

Additional **28,000** children's lives saved

Additional **66,000** children's lives saved



*Demand projections developed for the final evaluation of the ISMO project, based on demand across Africa.

Selection of references:
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