Annex C: Malaria implementation update

Section 1 - Executive summary

The Malaria Vaccine Programme (MVP), a 'must win' for Gavi 5.1, is advancing in response to strong country demand, meeting 2024 targets and remaining on track for 2025. Gavi's Independent Review Committee (IRC) has recommended 26 countries for sub-national introduction of the vaccine, with 15 of these also approved for scale-up in moderate and high malaria transmission areas. Through October, 24 countries have introduced the malaria vaccine, of which 8 have scaled up. Two additional countries are actively preparing for, respectively, introduction and scale-up in 2025. As countries steadily scale up programmes, Gavi and Alliance Partners continue to support countries in improving coverage, addressing challenges, and identifying lessons and good practices. Most countries have continued to increase the uptake of the vaccines, including using innovative strategies for integrated service delivery and increasing community demand for and uptake of the vaccine. The programme also continues to advance its learning agenda, wrapping its support for a case-control study in the pilot countries and supporting implementation research in seven countries. This annex describes programme performance and learning for the MVP. Details on the increased global health institutions collaboration are included in Annex F.

Section 2 - Country implementation

2.1 Progress update through October 2025

		Through late 18 Sep		Status	Cumulative Target (2025)	
Impact	Malaria deaths averted	Targets to be established in Gavi 6.0				
Outcomes	Number of Malaria vaccine introductions & scale up	23	6	●	23	9
	Malaria vaccine coverage in Gavi57 (annual figures)	NA			Targets to be established in Gavi 6.0	
	Number of children immunised	NA				
Output	Countries approved for: initial intro & scale up	26	15	●	26	14
	Countries with VIGs disbursed for: initial intro & scale up	24[1]	8	●	23	9
	Number of countries with TA deployed	Ph1: 22[1] Ph2: 25		●	Ph1: 23 Ph2: 24	
	Number of countries that received first shipment	24		●	23	

● On track ● Moderate delays / challenges ● Significant delays / challenges ● No update

1: VIGs and TA for vaccine implementation for 3 countries (Kenya, Ghana and Malawi) received as part of MVIP
2: Currently defined on Total Doses on Gavi Decision Letters up to 2025 for initial introductions
NOTE: Ph1 TA is for application support; Ph2 TA is for vaccine implementation support

The Malaria Vaccine Programme (MVP) continues to make rapid progress against its milestones and the vaccine roll out remains among the most rapid in Gavi's history. 30 countries have formally expressed interest in introducing malaria vaccines. To date, 26 new introduction applications have been recommended for approval by the Gavi Independent Review Committee (IRC). In addition, 15 countries have also been

recommended for approval to scale-up vaccine provision in additional moderate and high malaria transmission areas according to country priorities.

Between January and October 2025, 7 countries (Burundi, Uganda, Mali, Guinea, Togo, Ethiopia, and Zambia) introduced malaria vaccines, bringing the total number of countries that have introduced to 24. Of these 24, 8 countries (Ghana, Burkina Faso, Cote d'Ivoire, South Sudan, DRC, Uganda, and Liberia) have scaled up beyond their initial introduction phase. Through the remainder of Gavi 5.1, 1 additional new introduction and 1 additional scale-up are planned in 2025.

Technical assistance (TA) has been provided to numerous countries for application development and implementation support. The length of TA contracts coinciding with the end of Gavi strategic period results in potential risks to support for planning and implementation, with associated deliverables. To address this, continued discussions with countries need to take place on the integration of malaria vaccine support into the extended Targeted Country Assistance (TCA) foundations for 2026 to ensure limited disruption to TA and enable delivery of planning and implementation activities during the transition into the next strategic period.

2.2 Experiences and lessons from country introduction

As new countries introduce the malaria vaccines, and implementing countries continue to expand the uptake of the vaccines, Gavi and Alliance partners are continuing to work with countries to capture and disseminate the experiences and lessons from the introduction and implementation of malaria vaccines. Introducing and implementing of new vaccines, particularly those with novel schedules such as malaria vaccines, requires time for the vaccine administration and data capture processes to stabilise within administrative systems. Malaria vaccines were also initially approved for districts with high malaria transmission and mortality, often more challenging to reach children.

Table 1 (below) provides a snapshot of malaria vaccine coverage for the first half of 2025 for those countries that introduced the vaccine in 2024 and implemented the first three doses of the vaccine throughout 2025. Age eligible cohorts for the 4th dose are only consistently available in Ghana, Kenya, and Malawi during this period, hence the 4th dose is not presented. The table utilises national administrative data compiled by UNICEF and WHO AFRO and should be considered with care; the quality of admin data mid-year has not gone through the country reviews before the reporting to the electronic Joint Reporting Form eJRF and WUENIC. There may be challenges in estimating the denominator due to the subnational introduction and in validating the numerator due to the limited duration of implementation and the unique schedule. While noting the aforementioned challenges in data quality, and acknowledging malaria vaccines' requirement for additional vaccination touchpoints, the table suggests that countries are reaching a significant proportion of their targeted children. The table also suggests that the initial coverage levels are in broad alignment with what would be expected for a newly introduced vaccine across a range of settings. The Alliance continues to work with countries to improve coverage, reduce drop-out

and assess data as it becomes available and to bridge any gaps in reporting and coverage.

Table 1. Malaria vaccine coverage in early adoption countries, January-June 2025.

Country	Introduction date	# of reporting districts[2] [min, max]	Dose administered during S1 2025[1] MV1 n	MV1 %[3]	MV2 n	MV2 %[3]	MV3 n	MV3 %[3]
Benin	Apr-24	[38, 39]	87,045	83%	67,347	67%	50,974	44%
Burkina Faso	Feb-24	[26, 28]	107,912	77%	99,704	78%	92,053	72%
Cameroon	Jan-24		86,595	68%	73,243	57%	72,786	57%
Côte d'Ivoire	Jul-24	[35, 36]	75,559	63%	61,587	51%	51,838	43%
Ghana[4]	May-19	[136, 136]	245,569	80%	237,062	77%	229,800	75%
Kenya	Sep-19		108,229	62%	96,455	55%	102,302	58%
Liberia	Apr-24		11,954	65%	9,550	52%	8,311	45%
Malawi	Apr-19	[10, 10]	150,749	82%	139,406	76%	135,303	73%
Niger	Sep-24	[10, 10]	80,539	73%	66,658	60%	43,412	39%
Sierra Leone	Apr-24	[15, 15]	125,043	87%	109,469	76%	103,349	72%
South Sudan	Jul-24	[27, 27]	85,785	66%	60,263	46%	45,176	35%

1. Source: denominators and country administrative data from January to June 2025 reported by Member States to WHO Regional Office for Africa as of 3 Oct. 2025; Official country data will be reported and undergo quality checks through the annual WHO/UNICEF Joint Reporting Process, which may result in revised estimates
2. Reporting districts defined as having introduced MV1. Cameroon, Kenya and Liberia shared aggregated data only without the number of districts.
3. Coverage: the denominator has been restricted to the number of reporting districts only. Districts with missing target population data have been excluded.
4. In Ghana, MV has been scaled-up in an additional 43 districts in Sept 2024

Although administrative data make direct attribution challenging, implementing countries are reviewing their data and linking the rollout of the malaria vaccines with reductions in hospitalisations/clinic consultations for children under five, under-five deaths, and malaria-related deaths. Following a year of implementing malaria vaccination, Cameroon noted lower levels of malaria consultations and childhood deaths in implementing districts, and Ghana's Programme Manager for the National Malaria Elimination Programme has attributed that country's 45% reduction in malaria cases in children under-five to the country's successful implementation of malaria vaccines. Most child morbidity and mortality statistics aggregate across a broader age-range than the target group for malaria vaccines, meaning any impact may take time to appear—and direct attribution based on administrative data is further complicated by multiple contextual and data-related factors. However, the Alliance and implementing countries will continue to monitor malaria statistics and trends as the vaccines continue to be rolled out.

Countries are also continuing to explore avenues to expand the integration of malaria vaccine delivery with other malaria and child health interventions. Of the 17 countries that introduced malaria vaccines in 2024, 15 reported routinely provided insecticide-treated bed nets at the immunisation touchpoints. Ethiopia used the opportunity of the

vaccine launch in September 2025 to also launch Global Fund-supported dual active ingredient bed nets in 78% of the introducing woredas. In addition, at least 5 countries (including Benin, Burkina Faso, Chad, Niger and Nigeria) have used the provision of seasonal malaria chemoprevention as an opportunity to check the vaccination status of young children and refer them for catch up vaccination. The Alliance has identified these as good practices and approaches which likely contributed to increases in coverage and demand among the population.

Countries, with the support of the Alliance and technical partners are also continuing to build on active community mobilisation initiatives to raise awareness about the vaccines and address misconceptions and disinformation about the vaccines. For example, in the Democratic Republic of Congo, a youth initiative jointly supported by UNICEF and Program for Appropriate Technology in Health (PATH) the technical assistance partner is effectively monitoring web-based information/disinformation and working in the community to sensitise caregivers and manage vaccine refusals. In Kongo Central Province, this group managed 334 or the 370 vaccine refusals around malaria vaccines resulting in children receiving the vaccine in 90% of the initial refusal cases. The Alliance has continued to build on these lessons, as well as those previously identified and shared through the Malaria Vaccine Coordination Team (MVCT) meetings and implementing countries, including:

- Aligning vaccine schedules.
- Robust risk communication and community engagement (RCCE)
- Training health workers for capacity development in communicating accurate and timely information
- In-country coordination between malaria and immunisation programmes

Section 3: Scope of Gavi support, key design updates and outlook

3.1 Programme scope and age eligibility

The programme's steps to recalibrate the scope of the programme based on the outcome of the replenishment are covered in the paper title 'Follow up on Gavi 6.0 recalibration Board retreat' (see Doc 05a).

In keeping with current WHO guidance to countries and IRC recommendations, Gavi will also continue to provide limited support for countries to include slightly expanded age-cohorts (e.g. children up to 12 or 24 months) for the initial routine introduction of the vaccines. This expanded eligibility, when linked to routine catch-up policies, has been effective in increasing initial uptake of the vaccine and responding to community demand for protecting their children.

3.2 Gavi's role in managing product allocations, co-financing, and country affordability

Gavi continues to support both WHO-prequalified vaccines. Both malaria vaccines are safe, effective, cost-effective and perform similarly. To ensure supply security and

sustain a two-supplier market, Gavi will continue to implement its “no brand choice” policy through Gavi 6.0, temporarily restricting elective switches and continuing to utilise Alliance-endorsed Product Matching Principles, considering preferences, affordability, and supply availability and security. Although both vaccine manufacturers have announced price reductions for Gavi 6.0, there will remain a significant price difference between the two vaccines for the near term.

Based on their domestic demand for the vaccines, three countries (Burkina Faso, Cote d’Ivoire, and Togo) have now committed to self-finance the remaining 15% of their vaccine needs for moderate and high transmission populations (additional to the 85% supported through the current scope of Gavi’s programme). This investment reflects a strong domestic commitment to the vaccines on the part of the countries. The Secretariat will continue to work with countries to balance the market health with country affordability for the vaccines.

Section 4- Malaria Vaccine Programme Learning Agenda

The malaria vaccine learning agenda supports evidence generation to inform the optimisation of the malaria vaccine programme. Drawing from learnings from the Malaria Vaccine Implementation Program (MVIP) and peer-learning workshops, the learning agenda supports one case-control study and 7 implementation research studies.

4.1 Case-control study

Gavi supported the extension of the case-control study in Ghana, Kenya, and Malawi, examining the impacts of the third dose of RTS,S, the incremental impacts of the fourth dose of the vaccine, and the potential for rebound. The results from the study were presented to the WHO Scientific Advisory Group of Experts (SAGE) and the Malaria Policy Advisory Group (MPAG) in September 2025.[1] Results from the case–control study showed that the protection against severe malaria provided by the first three doses until the scheduled age for the fourth dose was 56%. From the age when the fourth dose was due, among children who did not receive the fourth dose, vaccine effectiveness of three doses against severe malaria was 35%, while vaccine effectiveness among children who received four doses was 54%, the incremental effectiveness of the fourth dose against severe malaria was 30%. There was no evidence of a rebound effect in children who only received three doses. These results confirm the important impact of the vaccine in reducing severe malaria. The results further show that, even while the WHO continues to recommend the vaccine as a 4-dose schedule, children who receive only 3 doses will achieve significant protection from the vaccines.

1 https://www.who.int/news-room/events/detail/2025/09/22/default-calendar/strategic-advisory-group-of-experts-on-immunization-september-2025

4.2 Implementation research studies

Drawing from the WHO-issued *Global Research Agenda for Malaria Vaccine Introduction and Implementation* (https://iris.who.int/handle/10665/380228) and reflecting essential questions for the MVP, Gavi commissioned a set of implementation research projects through a competitive request for proposal process. In collaboration with Alliance partners, 7 research projects were selected and 4 consortia including global and local research institutions were contracted.

The awarded projects address the malaria learning agenda aims as follows:

1. Identify approaches and interventions to increase the uptake of malaria vaccine and other health interventions during routine visit timepoints/ touchpoints (Burkina Faso, Mozambique, Kenya and Liberia), including both supply and demand-related barriers and enablers for vaccine uptake.
2. Conduct a comparative assessment on the feasibility and effectiveness of alternative schedules and delivery strategies of malaria vaccines in areas of highly seasonal malaria transmission (Guinea, Benin and Nigeria)

Research is currently underway in all seven countries with preliminary results expected in Q4 2025 and the studies completed with final results in Q1 2026. A cross-project peer-learning workshop is being planned in Q1 2026 to share results and learning. Gavi and the consortia have taken steps to ensure that the projects run as effectively and efficiently in the available timeframe. The programme and Secretariat leadership are working to finalise a funding mechanism through Gavi 6.0 MEL funds to finalise activities in Q1 2026 and ensure effective Gavi investment to inform Gavi 6.0 strategies.