REPORT OF THE INDEPENDENT REVIEW COMMITTEE TO THE GAVI ALLIANCE ON THE REVIEW OF APPLICATIONS

November 2022

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List of Acronyms

2YL	Second year of life
ACSM	Advocacy, Communication and Social Mobilization
AEFI	Adverse event(s) following immunisation
bOPV	Bivalent oral polio vaccine
CCE	Cold-chain equipment
CCEOP	Cold-chain equipment optimization platform
CEO	Chief executive officer
CHW	Community health-worker
cMYP	comprehensive Multi-Year Plan (for immunization)
COVID-19	Coronavirus Disease 2019
cVDPV	circulating Vaccine-Derived Poliovirus
DHS	Demographic and Health Survey
EAF	Equity Accelerated Funding
DSA	Daily Subsistence Allowance
EPI	Expanded Programme on Immunization
EVM	Effective Vaccine Management
FED	Fragility, Emergencies and Displaced Populations Policy
FPP	Full Portifolio Planning
GII	Gender Inequality Index
HBR	Home Based Records
HCWM	Health Care Waste Management
HSCC	Health Sector Coordinating Committee (or Council)
HPV	Human papillomavirus
HR	Human resources
HSS	Health Systems Strengthening
ICC	Inter-Agency Coordinating Committee
IPV2	Inactivated Polio Vaccine 2nd dose
IRC	Independent Review Committee
IRMMA	Identify – Reach – Monitor – Measure – Advocate
JE	Japanese Encephalitis
MAC	Multi-age cohort
MCV	Measles-containing vaccine
MICs TI	Middle Income Countries Targeted Interventions
MR	Measles-Rubella
NNHS	National Nutrition and Health Survey
NITAG	National Immunization Technical Advisory Group
NVS	New and underused Vaccine Support
ODP	Operational Deployment Plan(s)
Ops	Operational Support
PCV	Pneumococcal conjugate vaccine
PCCS	Post-Campaign Coverage Survey
Penta	Pentavalent vaccine (DTP, Hib, HepB)
PFM	Portfolio Financial Management
PHC	Primary Health Care
PoA	Plan of Action
PSC	Programme Support Costs
RCM	Rapid Convenience Monitoring
RI	Routine Immunization
SAGE	Strategic Advisory Group of Experts on Immunization
SARS-CoV-2	Severe acute respiratory syndrome coronavirus 2
SCM	Senior Country Manager
SIA	Supplementary immunization activity
SFP	Strategy, Funding and Performance
TA	Technical assistance
TCV	Typhoid conjugated vaccine
TCA	Targeted Country Assistance
WUENIC	WHO and UNICEF estimates of national immunization coverage

Executive Summary

The Gavi Independent Review Committee (IRC) met in Geneva, Switzerland from 9 to 18 November 2022 and reviewed 16 applications from 13 countries. The applications were for Cold-chain optimization platform (CCEOP), Equity Accelerator Fund (EAF), Japanese Encephalitis (JE) vaccine, human papillomavirus vaccine (HPV), Malaria vaccine, Measles-Rubella vaccine (MR), Middle Income Countries targeted interventions (MICs TI), Targeted Country Assistance (TCA) and Typhoid conjugated vaccine (TCV). Thirteen IRC members participated throughout this round with a wide range of expertise that included measles and rubella disease epidemiology and vaccinology, human papillomavirus epidemiology and vaccinology, malaria epidemiology and vaccinology, supplementary immunization activities, health services delivery and strengthening, disease surveillance, field operations and emergency settings, vaccine supply chain and management, cold chain logistics, health economics, financial and budget analysis and programme monitoring and evaluation. Two IRC members conducted in-depth financial and budget reviews of the applications and two others on the supply chain, logistics, vaccine management and waste management. The IRC focussed on the following; (a) Review of countries' funding requests and supporting documentation for vaccine introductions and campaigns to support national efforts to improve immunization coverage and equity; (b) Production of country-specific review reports and recommendations; (c) Development of a consolidated report of the review round, including recommendations for improving funding requests and strengthening routine immunization; and, (d) Provision of recommendations to the Gavi Board and Alliance partners on improving processes relating to Gavi policies, governance, and structure. Review modalities included an independent desk review of each application by two or three designated members and discussion in plenary with the participation of the full committee.

Results

The IRC recommended approval for the applications MICs TI (Bolivia), EAF (Comoros and Solomon Islands), Malaria (Ghana, Kenya, Malawi), TCA (Comoros, Guinea), HPV (Nigeria) and CCEOP (Uganda). The applications recommended for re-review were TCV (Bangladesh, Kenya), JE (Bangladesh), EAF (Burundi), MICS TI (Indonesia), and MR (Mali). The main reasons for re-reviews included failure to translate previous key lessons in the planned activities (Mali, Kenya, Bangladesh), lack of differentiated strategies to reach zero-dose and missed communities (Bangladesh, Mali, Kenya), failure to align the budget with activities (Bangladesh, Kenya) and lack of alignment of activities with the objectives of MIC targeted interventions (Indonesia). Although the applications included some differentiated approaches, these were insufficient and choice and design of interventions remained weak as analyses of key quality issues from previous interventions did not feed into developing contextualized activities. As a result approaches remain generic and are unlikely to successfully vaccinate zero-dose children and reach missed communities. Countries also failed to follow the recommended standards for vaccinator workload by delivery strategy (Bangladesh, Kenya, Mali). Finally, the Gavi pre-screening process and interaction with countries continues to improve the quality of budgets although ensuring budgets are fully aligned with the activities in the plans of action remains a challenge in most applications.

Methods and Processes

The meeting agenda, allocation of countries for review, country applications, supporting documents and briefing materials were shared with the IRC on 31 October 2022, 10 days before the start of the meeting. IRC members reviewed the applications and prepared individual draft reports of their assigned countries. Additional documentation or clarifications were provided by the Secretariat prior to the meeting. Two members of the IRC served in additional roles: Benjamin Nkowane, interim chair and, Sandra Mounier-Jack, vice-chair. The meeting was opened by Mr Johannes Ahrendts, Director, SFP who welcomed the IRC members and outlined the expectations for the review. This was followed by updates by Secretariat and WHO on Malaria vaccine, JE, MICs TI, CCEOP, TCV and Human Resources guidelines. Additional briefing presentations provided to the IRC were Measles and Rubella, and UNICEF Supply Division update.

Review process

Each country proposal with the accompanying documentation was reviewed independently by a primary and a secondary reviewer (except for Kenya which had two secondary reviewers), each preparing an individual report. Cross-cutting issues (budgets, financial sustainability, supply chain and waste management) were reviewed in each application by one financial crosscutter and one IRC member specialized in supply chain management. The individual draft reports and recommendations were presented and discussed in plenary. The Gavi Secretariat and Alliance partners supported the plenaries by providing information and clarifications when needed on country-specific issues and context. The first reviewers then consolidated the reports from the secondary and cross-cutting reviewers in line with the outcomes of the plenary discussion, including decisions and recommendations. The IRC then developed recommendations of either approval or re-review (based on consensus) for each application. In each application, action points, or issues to be addressed, were agreed upon during the plenary. The reports were then finalized after editing, fact and consistency checking and quality review. Where a country submitted more than one request for support, a single report was provided with relevant recommendations for each request.

Criteria for review

Review of the applications was guided by the IRC Terms of Reference and key criteria in line with Gavi mission. These include justification for the proposed activities, soundness of approach, country readiness, feasibility of plans, contribution to system strengthening, programmatic and financial sustainability, and public health benefits of the investment. The IRC adhered strictly to these guidelines to ensure the integrity, consistency, and transparency of the funding decisions.

Decisions

There were two decision categories:

1) **Recommendation for Approval** when no issues were identified that would require re-review by the independent experts.
2) **Recommendation for Re-review** when there were critical issues that require a new review by the independent experts; this will entail detailed revision of the application and a submission to the IRC.

The recommendations of the November 2022 IRC reviews are summarized in Table 1.

Table 1: Summary of requests from countries and review outcomes

Countries		Types of support				
		NVS requests	Malaria support*	EAF/TCA/ CCEOP	Other requests	Recommendation outcomes
1	Bangladesh	TCV				Re-review
		JE				Re-review
2	Bolivia				MICs TI	Approval
3	Burundi			EAF		Re-review
4	Comoros			EAF, TCA		Approval
5	Ghana		Malaria			Approval*
6	Guinea			TCA		Approval**
7	Indonesia				MICs TI	Re-review
8	Kenya	TCV				Re-review
			Malaria			Approval
9	Malawi		Malaria			Approval
10	Mali	MR				Re-review
11	Nigeria	HPV				Approval
12	Solomon Islands			EAF		Approval
13	Uganda			CCEOP		Approval

*Approval to continue the malaria immunization support in existing districts
** Reviewed outside the plenary during the Nov IRC.

Thematic sub-committees

During the review, IRC members were organized into five sub-committees (New vaccine support; Equity, zero-dose focus, gender analyses, and strengthening routine immunizations; Health information systems and monitoring and learning; Supply chain and waste management; Equity Acceleration Funds and Middle Income Targeted Intervention support; Budget, financial management and sustainability; Full Portfolio Planning reviews. Each sub-committee identified issues in the applications that would be of general interest for Gavi and alliance partners.

Gavi Senior Management, Secretariat and Alliance partners debriefing and closing session

The de-briefing of the Gavi Secretariat and partners was held on 18 November 2022. A summary of the IRC meeting's outcomes and key issues and recommendations was presented. This was followed by a brief discussion, questions, comments, and responses. During the closing session, Dr Seth Berkley, Gavi CEO, expressed his appreciation to the IRC members for participating in the review and providing recommendations on the country applications. He also thanked the interim chair and vice-chair of the meeting, Benjamin Nkowane and Sandra Mounier-Jack for facilitating the meeting.

Key Findings and Recommendations

NVS (Routine and Campaign support)

Measles-Rubella vaccine, Typhoid Conjugate Vaccine and Japanese Encephalitis Vaccine requests

In this IRC review, three countries applied for new vaccine introduction with preceding catch-up campaigns: Mali, Kenya and Bangladesh. Mali requested support for introduction of rubella vaccine as a combination measles-rubella (MR) vaccine, Kenya for typhoid conjugate vaccine (TCV), and Bangladesh for introduction of TCV nationally and Japanese encephalitis (JE) vaccine sub-nationally. Catch-up campaign supports were requested for wide age-range target, 9 months to 14 years. Funds requested for campaign operational costs amounted to US$ 38.38 million, and requests for vaccine introduction grants were US$ 3.65 million. None of the applications were approved as plans of action were general, lacking contextualized operational detail or, in the case of Mali, necessary epidemiological information was missing and activities were not with the budget. In all applications there were uncertainties in relation to the high level of HR costs in the budgets.

Planning for campaigns

Gavi application guidelines require that all countries with experience from multiple past campaigns, should include in their plans of action a list of lessons learned that are based on a critical review of challenges and achievements from past SIAs and applications should also cover critical activities in a systematic way, with the analysis of issues that contribute to low-quality SIA, and should propose solutions to address them. Following WHO guidance, all countries presented the lessons by key programmatic components, however, the lessons remain generic, rudimentary, not prioritized, and mostly not matched by plans. For example, lessons learned illustrate the importance of government leadership and multi-agency involvement, but campaign organizational and coordination structure are not described (Kenya, Bangladesh). Importance of increased social mobilization activities and inclusion of and collaboration with community/non-health stakeholders are recurring items, however, the efforts described in all applications are high-level, not prioritized according to the context and intended intervention, underfunded, and left to be further developed in microplanning phase. In addition, all countries mention the need to allow more time for planning and preparation activities, but all apply too close to the planned campaign launch date for most interventions (Table 2). Of note, for the timely start of planning activities WHO guidance proposes 15 to 12 months prior to the SIA launch date.

Table 2: Time to intervention from applications presented for review at November 2022 IRC meeting

Country	Campaign type	Planned launch	Time left for planning and preparation
Mali	MR catch-up	March or June 2023	4 or 7 months
Kenya	TCV catch-up	October 2023	10 months
Bangladesh	JE catch-up (sub-national) TCV catch-up	October 2024 March 2024	22 months 16 months

Finally, although campaigns present severe strain on health systems and the workforce, if high-

quality in planning, preparation and implementation, they have the capability of quickly reducing disease burden and closing the immunity gap. This underlines the importance of reaching hard-to-reach and consistently missed communities, achieved best by applying differentiated strategies. However, TCV and JE applications did not sufficiently include differentiation of strategies, risking not to adequately support vulnerable communities to access important vaccination services.

Issue 01: Preliminary planning activities for campaigns lack critical, in-depth review of lessons learned from past campaigns, while identified and listed lessons remain mostly unapplied in plans of action.

Recommendations:

- Gavi and technical partners should encourage countries to identify key quality issues in previous campaign(s), analyze them, and design contextualized activities that will be included in the plan of action.
- Gavi and technical partners should emphasize to countries that the same requirements for MCV campaigns apply to all injectable vaccine campaigns.
- Gavi should request from countries to include at the minimum previous campaign technical report and post-campaign coverage survey as a part of their application.

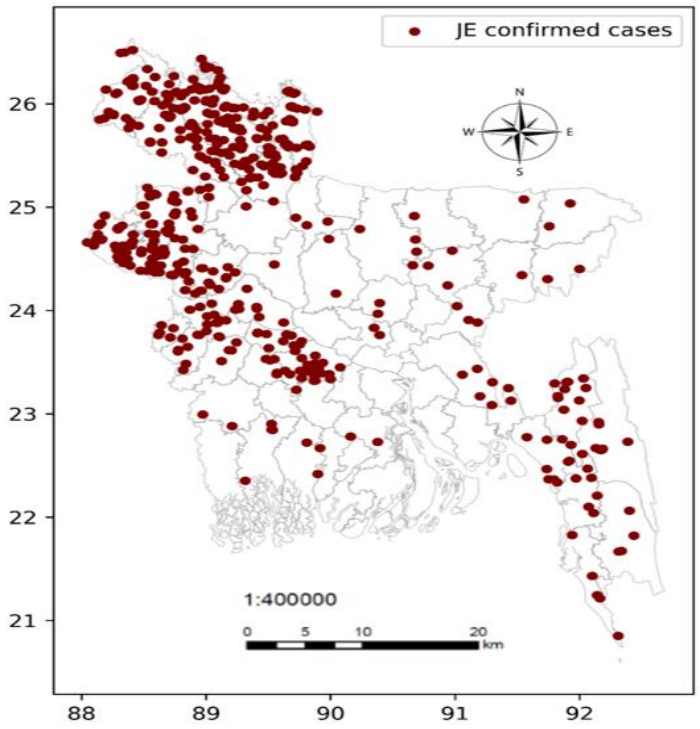
Guidance to countries on sub-national or phased introduction of Japanese Encephalitis Vaccine

Japanese Encephalitis in Bangladesh is endemic and in the presence of well-performing surveillance system, there is no evidence that Japanese encephalitis virus (JEV) transmission has been interrupted. Although JEV infections have been detected among residents of all age groups in almost every district, Bangladesh applied for support of phased introduction of JE vaccine into routine immunization programme at 9 months with preceding catch-up campaign targeting all between 9 months to 14 years of age, first in north-west districts of Rajshahi, Naogaon, Rangpur and Nilphamari.

The highest cumulative number of confirmed JE cases in the 10 year-period (2012-2021), with a majority of cases in Rajshahi and Rangpur (Figure 1), may have guided the NITAG's decision on the choice of districts for the initial sub-national phase of JE vaccine introduction. However, the PoA indicated that the SEAR Technical Advisory Group (TAG) recommended to consider vaccination where the number of JE confirmed cases is low.

The details of the regional TAG recommendation were not provided nor was the country's decision to diverge from the regional TAG recommendation elaborated. At the same time, the latest WHO position paper on JE vaccines from February 2015 recommends to countries considering phased or subnational introduction, to identify the areas of highest risk for conducting a one-time catch-up campaign in the primary target population, followed by incorporation of JE vaccine intro the routine childhood vaccination schedule.

Figure 1. Confirmed JEV cases in Bangladesh (2012-2021)



While risk factors generally include living near rice fields and higher concentration of pigs, wading birds or infected ducks and chickens, geographic distribution of JEV genotypes, and period of highest disease transmission, it remains unclear how risk assessment to determine the areas of highest risk in Bangladesh was conducted.

Further, while JE is considered primarily a childhood disease, the median age of JE cases in Bangladesh is 30 years, and >63% of cases occur in persons older than 15 years of age. The catch-up campaign would therefore prevent about one third of JE cases, and while introduction in the childhood vaccination schedule would reduce JE cases and help control JE, there would be very little immediate impact on reduction in adult cases as this would take years to accomplish.

Given the occasional interruptions of surveillance in some hospitals, and the fact that many patients never reach the surveillance hospitals due to long distance from home or are unwilling to seek care, it is likely that the true number of JE cases may be underestimated. Although unusual, this epidemiologic pattern showing more adults remaining susceptible to JEV infection is only mentioned in passing. It does not appear that the adult vaccination is considered, despite current WHO recommendation for such consideration when the disease burden in this age group is sufficiently high.

Finally, it is unclear what guided Bangladesh decision for scheduling the campaign in October which is the time of high JE disease activity in the country. Whenever possible, campaigns should be scheduled before the JE season, for best impact on disease reduction, along with reduction of suspicion of a relationship between encephalitis cases and vaccination.

Issue 02: Incomplete guidance and contrasting recommendations for phased or sub-national Japanese encephalitis vaccine introduction

Recommendations:

- Gavi and technical partners should further support countries in year-round case-based JE/AES surveillance with laboratory confirmation, improve their quality of data, and assist in the analysis and interpretation to guide the interventions.
- Technical partners should further refine the guidance and recommendations for countries considering phased or sub-national JE vaccine introduction, to ensure efficient JE prevention strategies and substantial decrease of disease burden.

Human papilloma virus vaccine request

Only Nigeria submitted an HPV application this round, a re-review from the September 2022 round. Issues with the application related primarily to the budget and insufficiently substantiated assumptions on vaccination team composition and coverage rather than technical aspects of the HPV vaccine. The country is planning an off-licence single-dose regimen and documentation of lessons learnt and efficacy of the regimen as well as concerns about costs and sustainability. The IRC approved the application as key issues raised in the September IRC review were addressed adequately.

Issue 03: Documentation of lessons learnt in single dose HPV implementation

Recommendation

- Gavi to work with Nigeria to document lessons from single-dose HPV implementation and efficacy of the 1 dose regimen.

Adverse Events Following Immunization Reporting

IRC has repeatedly called on increased support for AEFI surveillance in countries so that they would reach at least minimal capacity for AEFI surveillance, assessed through the AEFI reporting rate as a general indicator. A country is considered to have minimal capacity for AEFI surveillance if its AEFI reporting rate (i.e. ratio of AEFI reports per 100 000 surviving infants per year) is at least 10. This is important because a functional AEFI surveillance and response system greatly contributes to maintaining confidence in immunization programme. In this review cycle, IRC notes with pleasure that in 2021, 9 out of 12 applicant countries (Bangladesh, Burundi, Comoros, Ghana, Indonesia, Kenya, Mali, Nigeria, and Uganda) have demonstrated the capacity for AEFI reporting (Figure 2). However, only 5/12 countries (Burundi, Ghana, Kenya, Nigeria and Uganda) were able to achieve the proposed initial global milestone of reported serious AEFI in 2021 of ≥1 serious AEFI case report per 1 million population per year (Figure 3). This relatively new vaccine safety indicator was introduced with Immunization agenda 2030 (IA 2030) and is required for monitoring progress in AEFI surveillance in all age groups. Such slow progress is somewhat disappointing in the light of COVID-19 vaccination which in 2021 mainly targeted adults.

Figure 2: AEFI reporting rates in 12 applicant countries in November 2022 IRC plenary

(Source: JRF 2021)

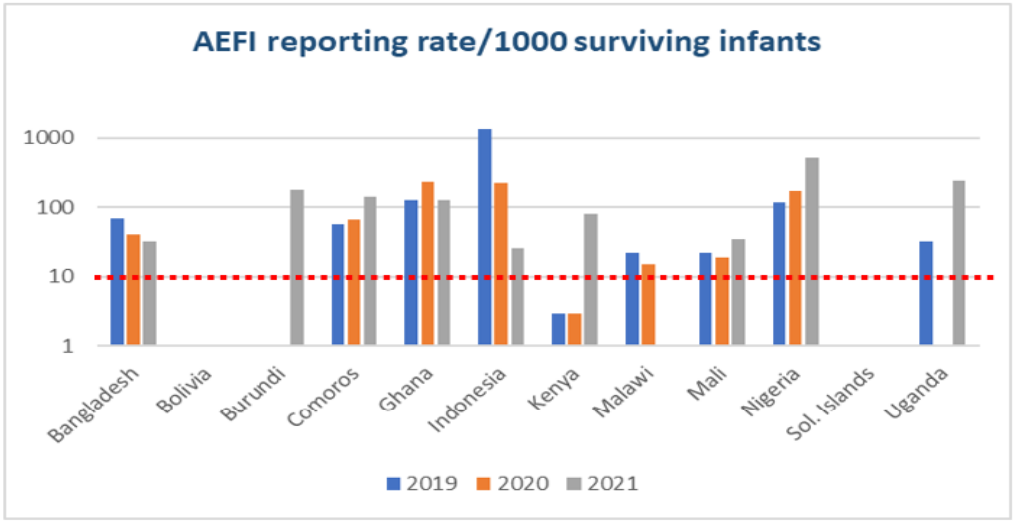
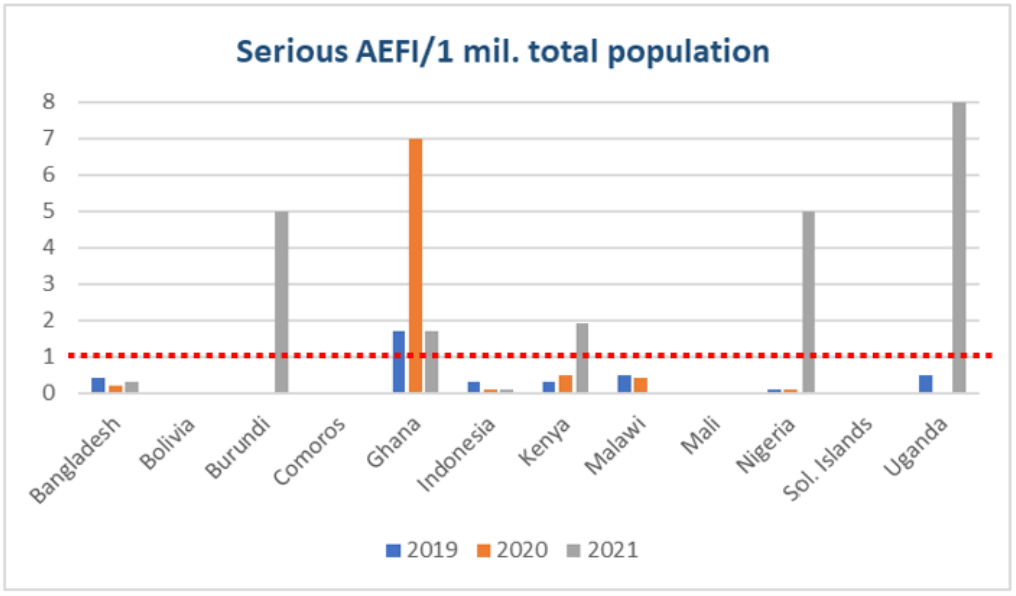


Figure 3: Rate of case-based serious AEFI in 12 countries discussed in November 2022 IRC plenary

(Source: JRF 2021)



IRC further notes that the countries, despite previous recommendations, do not report on actual performance, and do not provide the analysis of findings but rather describe their AEFI surveillance in general terms and still refer to strengthening of their AEFI surveillance capacity in an unstructured way. Similarly, when included in budgets, requests for AEFI surveillance strengthening refer mainly to training and printing of reporting forms.

The IRC notes with particular concern the lack of plans for monitoring of targeted AEFI for new vaccine introductions, despite its previous repeated recommendations. In this round of review, no countries planning to introduce new vaccines such as malaria (Ghana, Kenya, Malawi), TCV (Kenya, Bangladesh), and JE vaccine (Bangladesh), or HPV (Nigeria) aligned with IRC and WHO Global Advisory

Committee on Vaccine Safety (GACVS) strong recommendations to plan sentinel surveillance when introducing new vaccines, or at least enhanced passive AEFI surveillance with active follow up and causality assessment of AEFI of special interest. It is especially unclear why, in full awareness of their low reporting via the routine passive surveillance system and existing challenges to perform quality and timely investigations and causality assessments, and knowing the limitations of passive reporting, the countries continuing with malaria vaccination after the pilot projects are advised that no special mechanisms need to be put in place during expansion of vaccine use or adoption by other countries (Summary findings from the malaria vaccine implementation programme, background document for IRC November 2022). While this is not a pre-requisite or barrier for expanding the use of malaria vaccine, the countries should be encouraged to continue with existing networks of sentinel hospital sites to enable the sentinel hospital surveillance for AEFI/AESI, aligning thus with specific African Advisory Committee on Vaccine Safety (AACVS) and GACVS recommendations.

Issue 04: Despite improvement in AEFI reporting, countries do not report on performance or consider enhanced AEFI surveillance for new vaccine introductions

Recommendations:

- Gavi should request countries to report on AEFI surveillance system functionality and on its performance by providing an analysis of AEFI data.
- Gavi and technical partners should strongly support continuation of efforts to strengthen AEFI surveillance systems in countries, especially when new vaccines are introduced.
- Gavi and technical partners should encourage countries to follow GACVS recommendation and consider sentinel surveillance for all new vaccine introductions, or at least enhanced passive surveillance with active follow up and causality assessment of AEFI of potential interest.

Malaria Vaccine (RTS,S) requests

Three countries (Ghana, Kenya, Malawi) participate in the Malaria Vaccine Introduction Programme (MVIP) and have introduced the malaria vaccine sub-nationally during the pilot phase of the programme. They applied to Gavi for provision of vaccines to allow for continuation of vaccination against Malaria in MVIP sites. m. MVIP mechanism allows the 3 countries to access vaccine doses for use in MVIP areas until the end of 2023.

Critical factors for the introduction were political commitment and active involvement of community service organization especially in the area of communication and social mobilization. The IRC noted that all three countries reported a very high drop-out rate between the 3rd and 4th dose of the vaccine, which was as high as 30% in Ghana and Malawi and around 40% in Kenya However, there was limited information on how the lessons learned from the introduction period informed or improved programme design in particular for the 3rd and 4th dose uptake. There is also lack of clarity about management of late doses. Approaches to address the low uptake are through vaccination schedule realignment of the 4th dose to 2nd year of life (2YL) interventions such as measles-rubella, Men A and the provision of Long lasting Insecticide Nets (LLINs) to caregivers and children when they complete the 4th dose schedule. Ghana proposes providing the 4th dose at 18 months and Malawi at 22 months rather than the current schedule at 24 months. The IRC also noted that vaccine

forecasting was inadequate . Requested quantification of vaccine in Ghana and Malawi were based on assumptions of high coverage and high wastage rates rather than on evidence and experience gained from pilot introduction. In Kenya there was inclusion of high buffer stock for each year.

Issue 05: Poor uptake of 4th dose of Malaria vaccine

Recommendations

- Countries should document lesson learnt from the malaria vaccine introduction so as to design and evaluate approaches to increase the uptake off the 3rd and 4th dose of vaccine.
- GAVI to work with partners and countries to sustain the political commitment for continuation and expansion of the malaria vaccination and ensure active CSO engagement. Priority should be given to promoting demand side activities in support of the full immunization cycle.
- GAVI to continue to engage with partners to ensure technical support of both EPI and Malaria programs to address issues of forecasting, supply-chain and cold chain issues during the continuation and expansion phases.

Equity, gender analyses, zero-dose focus, and strengthening routine EPI

Equity and zero-dose focus

In this round of reviews, most applications demonstrated improvements in zero-dose focus and proposed differentiated strategies/approaches. However, strategies remain generic and do not appear to provide sufficient potential for improvement. While the IRC does not expect innovation for its own sake, the concern is that if proposals rely on more of the same unsuccessful approaches, countries are unlikely to improve significantly in efforts to reach and vaccinate zero-dose and missed children. It could help countries to document and disseminate interesting or successful approaches to identifying and reaching challenging target groups, e.g. Mali's strategy to involve women's associations and NGOs (CAFO, 'Maman Yele') and include at least one woman per vaccination team to help address women's differential decision-making power and contextualize proposed interventions.

Issue 06: Differentiated strategies to address equity and zero-dose children remain generic.

Recommendations:

- Gavi to work with partners and countries to design new approaches such as those that are appealing to caregivers or use approaches adapted to be more appealing according to socio-cultural specificities to reach more zero-dose and missed children.
- Gavi to work with partners to document and disseminate innovative and successful approaches to identifying and reaching challenging and hard-to-reach target groups.

Gender analyses

Despite repeated IRC recommendations, countries are not conducting deep or rigorous analyses and discussion of gender barriers and related issues in proposals. Where attempts have been made, the analyses remain superficial and relatively weak. Related gender-responsive strategies are thus insufficiently addressed in applications and may not be incorporated in action plans. An exception is

the Afghanistan remote FPP proposal where specific gender stipulations were included in an attempt to redress existing socio-political barriers.

Issue 07: Strategies to address gender barriers are not data driven.

Recommendations

- Gavi to continue engaging with partners and countries to clarify and embed the Gavi 5.0 gender strategy and highlight the added value of in-depth gender analysis and gender-informed implementation.
- Gavi and partners to provide additional technical support on how equity and gender analyses can be incorporated effectively in differentiated strategies to reach and vaccinate zero-dose and under-vaccinated children.

Strengthening routine EPI

Countries participating in this round did not propose integrated approaches based on a comprehensive primary healthcare package that includes immunisations services. Such integration could contribute effectively to routine immunisation strengthening, especially in countries with significant hard-to-reach areas (e.g. island-nations such as Comoros and conflict-affected areas such as in Mali). Such integration is important for routine immunisation strengthening, especially now that sub-Saharan African countries will introduce the malaria vaccine.

Issue 8: Lack of integrative approaches to strengthen routine immunisation.

Recommendations

- Gavi to continue working with countries to increase integration with appropriate primary healthcare approaches and interventions, especially in hard-to-reach areas.
- Gavi to continue working with partners and to support operational plans integration and updating of policies across relevant PHC programs (e.g. Malaria, Child Health, Community Health).

Health Information Systems and Monitoring and Learning

All countries whose applications were reviewed in this IRC review cycle made efforts to map zero dose children. Despite many difficulties and limited resources countries show a great appetite and interest in leveraging digital technology solutions and are slowly moving away from paper-based to digital information systems for managing immunization programs. This has included the use of mobile phones (SMS)for transmitting data from health facilities to the district. As technology continues to affect the daily lives of all countries, there is need to assess the adequacy of innovations and adopt those that are the best value for money, are scalable, relevant and sustainable. In the applications from India, Indonesia and Malawi, implementing partner organizations proposed technology solutions without sufficiently engaging EPI teams and end-users and without integrating their proposed solutions in existing systems such as the DHIS-2 platform. This may result in tools that would never be used and would therefore be unjustified and poor investments. The IRC also noted that experience

gained in developing and strengthening health information systems, tracking and tracing of cases and contacts, and analyses of surveillance data and data from outbreak investigations during the COVID-19 outbreak was not being leveraged for routine EPI.

Issue 9: Lack of coordination between partner/implementing organization and the country when deciding on technology solutions.

Recommendations

Gavi and Alliance partners should work with countries to ensure that proposed technology solutions are developed with the full participation of immunization/health programme during the design process so that they are relevant, interoperable with existing systems and appropriate for the end users.

Issue 10: Lessons learnt from COVID-19 pandemic management are not being leveraged in planning EPI operations

Recommendation:

- Countries should include in their plans of action lessons learnt from COVID-19 pandemic management, such as regular analyses of surveillance and outbreak investigation for data driven approaches in routine EPI.

Supply Chain and waste management

All countries that proposed to conduct either Typhoid Containing Vaccine (TCV) (Bangladesh and Kenya) or MR (Mali) catch-up campaigns have strong supply chain systems confirmed by recent EVMA with composite scores over the threshold of 80%. All applicant countries have adequate storage capacity to accommodate either TCV or MR vaccines and have contingency plans in place. However, despite general improvements, maintenance and temperature monitoring remain weak in all applications and the Inventory Gap Analysis was missing critical information such as "reason for non-functionality" and "source of funding".

Uganda Request: Uganda was the only country that applied for CCEOP support in this review cycle. The application included over 28 supporting documents, several of which were outdated and this made the review inefficient. The country conducted an EVMA in 2020 that showed a 12-point decline between 2018 and 2020 and a performance deterioration across five of the nine criteria. Noted specifically was poor performance in the collection, analysis, and utilization of cold chain equipment inventory at the national level. This will be partially solved by the current CCEOP application and the country has developed a cIP implementation tracker to monitor the level of implementation. Despite the above mentioned shortcomings, Uganda's CCEOP request complied with Gavi guidelines and included an updated (2022) analysis using the CCE Inventory Gap Analysis Tool. The requests of Remote Temperature Monitoring Devices (RTMDs) at the scale of 100% at the district and upper levels and up to 25% at the lower level were respected. As a good practice, Uganda is considering the integration of oxytocin within the immunization cold chain, by adhering to the 2020 "WHO/UNICEF joint statement on the integration of temperature-sensitive pharmaceuticals in the vaccine supply chain". The weaknesses in the Uganda application included, an incomplete performance framework

and CCE budget options with duplication of equipment. In addition, deployment plans, maintenance and decommissioning, were considered but not appropriately budgeted for.

Issue 11: Supporting documents are too many and often outdated or lack important information.

Recommendations

- Gavi to require key documents for applications and partners to ensure countries complete sections such as the performance framework table for all CCEOP applications and to insist on a full CCEOP proposal narrative submission
- Gavi and partners to ensure the reasons for non-functionality and source of funding columns of the Inventory Gap Analysis Tool are correctly completed to support monitoring equipment downtime and partners' respective contributions.
- Gavi should only provide supportive documents that are relevant to the application and only the their latest version in order to make the review efficient.

Waste management

Across all applications, open-air burning, incineration and landfill were the only proposed options for immunization waste disposal. Other environmental friendly alternatives such as shredding and autoclaving were not considered. In addition, (except for Nigeria) the countries did not provide information or documents giving the waste management policies and standard operating procedures compliant with the country legal frameworks.

Issue 12: Countries are still proposing old and non-environmentally friendly methods for waste disposal.

Recommendation

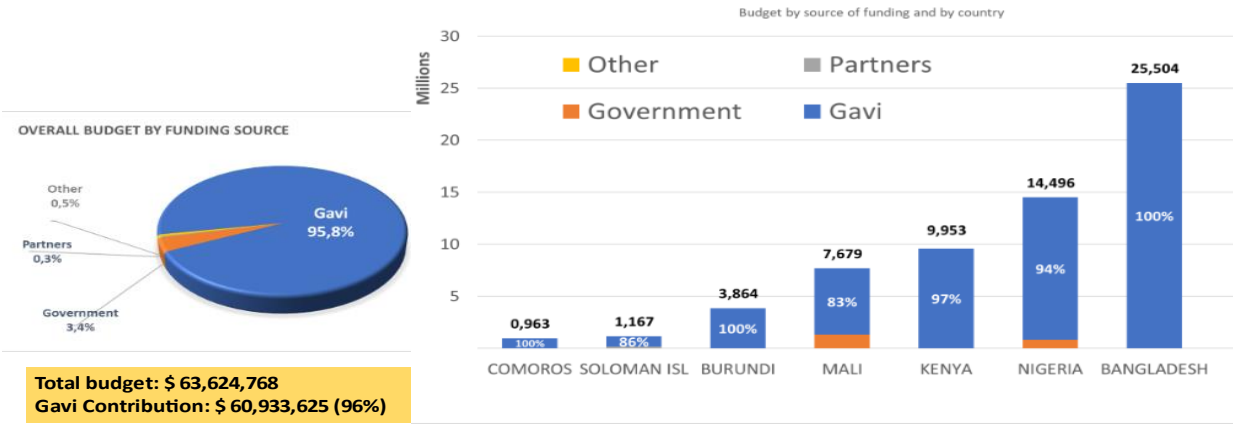
- Countries should be encouraged to develop waste management multi-year plans that consider shifting from open-air burning and landfill disposal to environmentally friendly waste disposal methods.

Budgets, Financial Management and Sustainability

Overview

Twelve budgets from 7 countries totalling US$ 63,624,768 were reviewed. The requested Gavi contribution of US$ 60,933,625 accounted for 96% of the total budgets. Government and other partners contribution accounted for 4%, with only the governments of Mali and Nigeria making contributions. The request for Malaria support from Ghana, Kenya and Malawi were for vaccine support only.

Figure 4. Budgets by source of funding



Of the total requested Gavi contribution, 42% accrued to Bangladesh, 22% to Nigeria, 16% to Kenya, 10% to Mali and the remaining 10% to Burundi, Solomon Islands and Comoros. The distribution of Gavi contribution by antigen was 55% (US$ 33.5 million) for TCV, 22 % (US$ 13.6 million) for HPV, 10.4% (US$ 6.3 million) for MR, and 3% (US$ 1.6 million) for JE. In terms of funding windows, the Gavi contribution of US$ 60.9 million was distributed as follows: 62% (US$ 37.8 million) for campaign operational costs, 28% (US$ 17.3 million) for VIGs, and 10% (US$ 5.8 million) for EAF.

Financial review process

The Gavi Secretariat's thorough pre-screening process and interaction with countries has resulted in significant improvements in the quality of budgets, and the impact is reflected in their greater alignment with the PoAs and better value for money. In addition, the re-review of Nigeria HPV request resulted in significant improvement of the quality and value for money and a more equitable allocation of resources to states with greater needs and numbers of out-of-school girls. However, some challenges remain and these include the finding that the new Gavi budget template was not always appropriately used by countries. For example, Bangladesh did not provide any detailed calculation worksheet(s), making it difficult to verify accuracy and appropriateness of budgeted amounts. Both Kenya and Mali did not provide budget assumptions in the main budget worksheet tab, nor explained them in other worksheet tabs or in the PoA. In the case of Nigeria, budget calculation details were scattered in more than 100 worksheet tabs making the review highly cumbersome and unnecessarily demanding. Budgeting by input rather than by activity remains an issue in this round, such as in the case of Kenya, resulting in an artificial inflation of budget lines (179 budget lines for 22 activities). In all budgets, the countries do not use the "activity reference" column which allows grouping budget items per activity. This column is important because it allows the linkage between budgeted activities and the PoA resulting in a better alignment.

Issue 13: Although the quality of budgets is improving, challenges remain, including the inappropriate use of the budget template, missing budget calculation assumptions and details, and budgeting by inputs rather than by activity.

Recommendations:

- Gavi to continue current efforts in-pre-screening budgets and requesting revision from countries before submission to the IRC, with focus on budget calculation details and assumptions and the adequate grouping of cost inputs under activities cross-referenced with the POA.
- Gavi to request countries to limit the budget calculation details to less than 20 worksheet tabs for each budget.
- Gavi and partners to sustain efforts to fully implement past IRC recommendations, including providing technical support to selected countries in planning and budgeting and involving fiduciary agents to support budget pre-screening if available.

Misclassification of activities and input costs

Misclassification of activities and input costs remain widespread in all budgets reviewed resulting in misleading patterns of resource allocation between activities and cost groupings. Most misclassification errors appear systematic and tend to hide the high share of HR costs. For example, in the case of Bangladesh, there is an allocation of US$ 3.4 million of transport allowances in the TCV campaign budget which qualify as HR cost, but has been classified as transport cost. There is also an allocation of US$ 5.04 million of refreshment cost paid as allowance in lieu of DSA which is classified under different cost grouping including US$ 1.9 million under "Health Products, Consumables and Equipment". Based on Gavi budgeting guidelines, refreshment costs may not qualify as an HR cost, but if they are paid as an allowance in lieu of DSA as it is the case in this budget, then they are likely to qualify as such. Per diems which should be classified as such under the cost grouping of "Per diems and allowances related to events" are often classified as "Other Events related costs". As a result, most of the per diem related costs of US$ 5.08 million in the TCV campaign budget and US$ 319K in the JE campaign budget are not classified as HR costs. A reclassification of these costs shows that the share of HR costs in the total Gavi contribution is 62% for the TCV campaign budget and 70.5% in the JE campaign budget. These rates far exceed the threshold allowed under Gavi budgeting guidelines.

In the case of Kenya, supervision costs at US$1.09 million (13% of total budget) were misclassified under "Governance, Policy and strategic planning" and in the case of Mali, campaign DSA and transport allowances at US$1.4 million (25% of the total budget) were misclassified under "Vaccine Preventable Disease Surveillance". In addition, the Kenya Campaign DSA and transport allowances at US$3.5million (41% of the budget) were misclassified under "Events related costs" instead of "Human resources" and "Transport" for Kenya, and the Mali budget had a very high share of transport costs (62%) but the actual share should be 29% which is still high.

Issue 14: Persistence of key challenges of misclassification of activities and input costs, most of which appear systematic and tend to hide high HR costs

Recommendations:

- Gavi Secretariat to continue current efforts in pre-screening budgets with focus, among others, on issues of classification of activities and input costs and the appropriate presentation of required information in the budget template.
- Gavi Secretariat to consider updating budgeting guidelines to include refreshment costs (when paid as allowance in lieu of DSA) in HR related costs, and to clarify guidelines in this matter.

Budget thresholds are useful guards but HR requirements matter

The IRC recognizes that the most important factor for a quality budget is to ensure that HR requirements are justified on grounds of efficiency, equity, and reaching the intended coverage targets more than the strict compliance with HR thresholds. It also affirms that these thresholds remain useful safeguards to guide the budgeting process and ensure a balanced budget and a good value-for-money. In this round, we have countries at different transition phases for Gavi eligibility and therefore for thresholds guidelines. Mali is classified as a fragile country, so no threshold is applicable, while Kenya, Nigeria and Bangladesh are in the accelerated transition phase and as such they are not supposed to budget for Gavi support in HR-related costs for campaigns. Both Bangladesh and Kenya requested a waiver for avoiding this threshold. Based on our reclassification of costs, Kenya and Bangladesh allocated respectively 62% and 61% of their respective budgets to HR costs, Mali allocated 55% and Nigeria allocated 36%. These high HR costs are often driven by over-estimation of HR requirements as shown below.

Issue 14: Budget thresholds are useful guards but HR requirements matter.

Recommendation:

- Gavi pre-screening teams should consider whether HR requirements are justified on grounds of efficiency, equity and reaching the indented coverage targets rather than the strict compliance with HR thresholds.

Human Resources requirements and vaccine delivery strategies

Nigeria was the only country application in this round which clearly articulated HR requirements (number of vaccination teams, supervisors, team composition) and their distribution by delivery strategy. Bangladesh, Kenya and Mali did not. In addition, differentiated delivery strategies are increasingly outlined in the POAs but often not reflected in the budgets (Mali, Kenya and to some extent Bangladesh). Furthermore, WHO recommended standards (vaccinator daily workload by delivery strategy, supervision of vaccination teams) were not used in any of the budgets reviewed for estimating HR requirements. Examples are given below.

Bangladesh: Bangladesh used an administrative criterion for estimating HR requirements attributing every Ward in the country the same number of vaccination teams regardless of the size and distribution of the target population between and within Wards and between and within geographies and administrative divisions. Such criterion is based on the principle of equality of treatment of ward and administrative entities (each entity receiving the same number of resources per Ward) and ignores the fact that the target population is not distributed equally between and within these geographic divisions. It also does not make any provision for hard-to-reach areas and missed communities.

As a result, and based on the country own assumptions including the target population and its distribution by delivery strategy, the average daily vaccinators' workload, and the campaign duration, we estimated that HR requirements are over-estimated by a factor of 1 to 4. Based on our findings, the country may need only 17,414 vaccination teams for the 12-day period and not 60,407 vaccination teams as envisioned, which represents a surplus of 42,993 vaccination teams. Similarly, the number of vaccinators required for both campaigns, assuming 2 vaccinators per teams, is 34,828 and not 120,814, a surplus of 85,986 vaccinators. With respect to the other members of vaccination teams,

the country plans to mobilize 181,221 while only 52,242 may be required based on the team composition set by the country, leading to a surplus of 128,979 team members (details in table below).

Table 3. HR requirements for the TCV and JE campaigns in Bangladesh

Campaign delivery	Country level plans and parameters						Recalculated HR requirements					
strategy	Target population	Standard daily vaccinator workload	Campaign duration (days)	Number of vaccination teams	Number of vaccinators	Number of other vaccination team	Number of vaccination teams	Surplus (+) Deficit (-)	Number of vaccinators	Surplus (+) Deficit (-)	Number of other vaccination team	Surplus (+) Deficit (-)
TCV campaign												
School-based	34,243,093	125	12	27,722	55,444	83,166	11,414	16,308	22,829	32,615	34,243	48,923
Community-based	14,675,611	125	12	27,586	55,172	82,758	4,892	22,694	9,784	45,388	14,676	68,082
Total	48,918,704	125	12	55,308	110,616	165,924	16,306	39,002	32,612	78,004	48,919	**117,005**
JE campaign												
School-based	2,325,800	125	12	2,853	5,706	8,559	775	2,078	1,551	4,155	2,326	6,233
Community-based	996,771	125	12	2,246	4,492	6,738	332	1,914	665	3,827	997	5,741
Total	3,322,571	125	12	5,099	10,198	15,297	1,108	3,991	2,215	7,983	3,323	11,974
Grand total	52,241,275	125	12	60,407	120,814	181,221	17,414	42,993	34,828	85,986	52,241	**128,980**

Kenya: Kenya used a high vaccinator workload (200 vaccinations/day/vaccinator) for all delivery strategies compared to WHO standards of 100-150. It appears that the country used a standard calculated by team and not by vaccinator; as there are 2 vaccinators by team, the number of teams may be over-estimated by a factor of 1 to 2. Countries tend not to clarify the role of different team members and make it difficult to differentiate the health workers (useful for calculating specific allowances) from the number of vaccinators (important to determine the number of teams). Furthermore, the number of vaccination teams was not differentiated by strategy (fixed, temporary, and mobile teams) and specific budget items for HTR areas were included in the budget. However, the number of vaccination teams was counted in addition to the number of teams calculated to reach the target population. This will inflate the budget by an estimated US$484,000.

Mali: The vaccinator workloads used by Mali were inconsistent between PoA and the budget. While the PoA indicates a daily vaccinator workload of 150 vaccinations for fixed strategy, the budget calculations were based on a workload of 105 vaccinations. With respect to vaccination teams' composition, the PoA indicates that vaccination teams comprise 5 members, the budget calculations use 5 members for fixed and mobile strategies and only 2 members for outreach team leading to a total of 48,997 team members. The use of PoA standards can rise the number by 30% to 63,898 and the cost increases accordingly. Mali did however differentiate the calculation of the numbers of vaccination teams by delivery strategy (fixed, temporary, and mobile) but the budget calculations did not reflect the same distribution with significant differences: for example, the target population for fixed strategy is 25% while it is the double (52%) in the budget calculations. With respect to the supervision of vaccination teams, budget calculations indicate 278 district supervisors for 13,636 teams, or 1 district supervisor for 45 vaccination teams compared with WHO standard of 1 supervisor per 4 vaccinations teams. Despite the number of supervisors being underestimated, the activity cost is high (US$871,000, or 15% of the budget) due to errors in transport costs estimations.

Issue 15: Over-estimation and under-estimation of HR requirements persist in most applications along with poor articulation of staffing needs in the PoAs and in the budgets (number of vaccination teams, supervisors, team composition) and their distribution by delivery strategy.

Recommendations:

Gavi and partners to sustain ongoing efforts to fully implement past IRC recommendations, including:

- ensuring a clear articulation of HR requirements per delivery strategy in the PoA;
- using WHO recommended standards when estimating HR requirements and clearly indicating reasons in the PoA if they deviate from the standards;
- budgets to include costs associated with operationalizing differentiated delivery strategies; and
- ensuring that budgets are fully aligned with POAs.

Full Portfolio Planning (FPP) reviews

The IRC carried out a high level review of FPP conducted during the year 2022 to generate preliminary lessons learned to further refine the FPP process. By November 2022, six FPP reviews were carried by teams of IRC members for a corresponding approved funds of US$ 223.6 million as itemized in Table 4 below. FPP included a range of applications types. Modality for review varied from in-country review (India), to remote reviews. Some remote reviews included a Zoom meeting with country and Alliance partners; other involved a set of questions and answers between the IRC and the country. All FPP were approved, though two countries received partial approval (Afghanistan approved for a first tranche of 18 months and South Sudan approved except activity 29 of EAF).

Table 4: Full Portfolio Planning reviews by type of support and review modality, 2022*.

Country	Support	US$ Amount	Recommendation	Review modality
Afghanistan	HSS	16.2 M	Partial approval[1]	Remote, written clarifications
Burkina Faso	HSS, EAF, TCA, CCEOP	27.5 M	Approval	Remote, written clarifications
Cambodia	HSS, EAF, TCA, CCEOP	18.0 M	Approval	Remote, written clarifications
Djibouti	HSS, EAF, TCA	5.6 M	Approval	Remote + Zoom meeting with country, written clarifications
India	HSS, TCA	131.6 M	Approval	**In country,** with pre-sent questions
South Sudan	HSS, EAF, CCEOP, Measles f-u camp	24.7 M	Partial approval[2]	Remote + Zoom meeting with country, written clarifications
TOTAL		**223.6 M**		

[1] approval for first 18 months of grant only
[2] all support types approved, except activity 29 for EAF
* An FPP review for Pakistan was planned for December 2022

Findings

The IRC reviewers found that FPPs had a generally well developed Theory of change (ToC) that used available evidence to support the proposed strategies. The ToCs were developed in line with Gavi 5.0 guidelines. Zero dose children were mapped and quantified using triangulation of data to mitigate

possible absence of data. In general, tailored interventions were proposed that aimed to target these Zero Dose children. However, these were not always comprehensive. For example, there was little information on planned strategies to target children in insecure and conflict areas while urban strategies (e.g. Burkina Faso, Djibouti, were often not sufficiently detailed). Similarly, while countries provided a gender analysis, none apart from Afghanistan proposed any structural interventions to address these (recruiting female vaccinators).

Overall, the focus of proposals varied depending on context and needs. Countries in fragile context aimed at primarily maintaining the resilience of the programme (Afghanistan, Burkina Faso, South Sudan) while higher performing countries allocated more resources to systems strengthening activities (India, Cambodia). Djibouti combined both objectives. Coherence and complementarity of support varied depending on included components. EAF in particular was clearly complementing HSS activities with a focus on activities aimed at identifying and reaching out zero dose children.

Finally, interaction with the country team during the FPP review provided an opportunity for the IRC team for obtaining contextual information, and allowed the country to respond to IRC requests for clarifications. In India where a country review took place, it offered an opportunity for the IRC to engage with the Ministry of Health and technical partners and present back their preliminary review and decision to the country receiving additional feedback.

Key issues identified from the FPP reviews

1. FPP applications mostly did not present performance status and lessons learned from the ongoing or recently completed HSS support (except India and Cambodia). No evaluation of ongoing HSS grants were available to reviewers though in India, however, the SCM who managed previous two HSS grants was available to the reviewers. New HSS applications are often designed as a continuation of previous support, and thus it was important to be cognisant of lessons learned to plan effectively for new FPP activities, address possible underperformance, and develop new approaches when previous strategies had not worked.
2. While the ToC were generally of good quality, the IRC noted that budgets were not always aligned with ToC activities. There were persisting budgetary issues, such as the lack of unit costs, unclear assumptions, recurrent costs and equipment that were not always fully justified. There also remain issues with data quality that were not sufficiently addressed in some applications. Additionally, IRC noted high HR costs in all applications, some of these beyond Gavi threshold. While these costs should be assessed within a specific context (such as for instance a fragile context), high HR costs were not always clearly justified and underpinned by a sustainability strategy.
3. Funding of CSOs was variable (significant in India) and often limited. Additional details on the CSOs involved, their location, and their role would also be beneficial to assess the strategic approach chosen. Some FPP had involved CSOs from the start of the plan development, which seemed positive.
4. Another issue was the EAF funding being interrupted in 2025 (as per Board decision), while most HSS continues to 2027. When planning HSS and EAF activities, countries tend to plan activities in a synergistic manner which is positive. The downside is that many critical activities such as micro planning, demand generation and outreach interventions tend to be funded by EAF, with no clear

certainty that the EAF funding will be extended.

5. Finally TCA was included in the application but not always detailed. The split between international and local TA varied, and local TA was sometimes limited, with heavy reliance on short term international experts not necessarily conducing to strengthening local capacity and in some case with apparent duplicative roles. In several countries the presence of multiple TA partners was noted as a possible challenge requiring a sound coordination and governance mechanism from the Ministry of Health part (Cambodia, Burkina Faso, Djibouti, India).

Recommendations

- Countries should be requested to reflect on lessons learned by providing an analysis of the level of performance of on-going or recently completed HSS grants and an assessment of which activities will be continued and what will change in new FPP programming
- Gavi and Alliance partners should provide additional support for budget development of FPP applications, and when possible local support from fiduciary agent or costing expert with knowledge of local context.
- Gavi and Alliance partners to review HR threshold based on country strategic needs, transition phase, and sustainability context.
- Countries should provide details on role and geographical location and funding allocated to CSOs and describe involvement of CSOs in proposal development. Evaluate threshold (currently 10%) for CSOs funding in HSS proposal.
- Gavi to encourage countries to provide a strategy for TCA investments that also include strengthening of long-term local support for better sustainability (if appropriate). Set up a sound coordinating mechanism to coordinate multiple partners input.

Other IRC reviews conducted since September 2022 IRC meeting

The IRC was informed of two Rotavirus product switch grant requests from Tanzania and Zambia that were reviewed since the IRC September 2022 meeting. Both grant requests were by remote review by two IRC members and were approved. The requests were necessitated by the unavailability of the Rotavirus product which had been in use by the respective countries and was no longer available. The switch to a different product also required changes in schedules of administration (two dose to three dose schedule).

Equity Accelerator funding

Three countries applied for Equity Accelerator Funding. This window of funding focuses on providing support to reach zero dose and missed children. Countries requesting support were Burundi (US$ 3.86 m), Solomon Islands (US$ 1.0 m) and Comoros (US$ 998,825). The requests of Solomon Islands and Comoros were approved while that of Burundi was recommended for re-review. The primary reason for the re-review recommendation was that the workplan and budget were not aligned with their stated ToC. One key aspects from all the three applications was failure to incorporate lessons learnt from previous and recent EPI interventions in the planning. In addition to the EAF, Comoros requested US$999,825 for TCA to focus on strengthening leadership and management of the EPI programme.

Issue 16: Lessons learnt from previous interventions were not included in the proposals.

Recommendations:

- Lessons learnt from previous interventions should be incorporated in the applications and applied to proposed interventions.
- Gavi and technical partners should share relevant success stories, or lessons learned from other countries to support the development of appropriate strategies to reach zero-dose and missed children.

Middle Income Country targeted Interventions

This year was the first time that funding was made available to graduated Gavi countries - Middle Income Countries through a Targeted Interventions window. This window of funding is to support restoring and reinforcing routine immunisation services to reach zero-dose children and those who have not been able to complete vaccination by strengthening health networks. The targeted interventions should be guided by six principles which are (a) high impact, targeted, adaptive, innovative, coordinated and catalytic and sustainable. Two countries applied in this round: Bolivia requested US$3.8 million for 2 years and Indonesia requested US$8.7 million for two years as well. The Bolivia application was approved as it had clear alignment of activities with the six principles of targeted interventions for middle income countries. The Indonesia application was recommended for re-review because the requested support was not aligned with the six principles and appeared to have been driven by partner organization priorities rather than those of the country EPI or health programme. Furthermore, in both applications, data driven approaches were limited (Bolivia) or missing (Indonesia) and causes and barriers to immunisations were not based on review of available evidence, although noting that in the case of Bolivia activities to address data gaps were included in the proposal. The theory of change also appeared to have been developed around partner priorities/activities and therefore not in line with the goals of the MIC TI strategy (Indonesia). Missing in the applications were complete performance indicators for monitoring the immunisation activities and evaluation of impact of targeted interventions.

Issue 17: Countries are not adhering to the six principles of the MICs TI support and are not basing proposed activities on analysis of barriers to immunisation.

Recommendations

- Countries applying for MICS TI support should analyse/use available data to understand causes and barriers related to immunisation. Data driven approaches, where available, should be the basis for requested support, or support requested to improve data.
- Countries should include in their applications clear indicators for monitoring and these should be linked to the proposed activities for restoring and reinforcing routine immunisation and to vaccinate missed children and communities.
- Countries must align their applications to Gavi 5.0 strategy goals of reaching zero-dose children and under immunised children.

Concluding remarks

The IRC noted with appreciation the work of the Gavi Secretariat and Alliance partners in providing support to countries to achieve the ultimate goal of protecting children. The country applications

reviewed in this round, despite challenges that are faced by countries, generally reflect the importance of identifying and reaching zero dose children and missed communities. There have been substantial improvements in the presentation of budgets for financial review. The IRC strongly feels that the established thresholds for the various components of the budget remain useful safeguards. However, for human resources adequacy is critical and what matters most is that the requirements are justified on grounds of efficiency, equity, and successful implementation of strategies. The major challenges for countries remain the limited or lack of use of available programme and epidemiological information for development of data-driven differentiated strategies and the alignment of human and financial resources with the planned activities.

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Annex 1: IRC members participating in November 2022 meeting

N°	Name	Nationality	Profession	Gender	Language	Expertise
1	**Aleksandra Caric**	Croatia	Independent consultant	Female	ENG, FR	Measles, AEFI Surveillance and vaccine safety, programme management, primary health care
2	**Beatriz Ayala-Öström**	British, Swedish, Mexican	Independent consultant	Female	ENG, SP	Health system strengthening, supply chain management
3	**Blaise Bikandou**	Congo France	Independent consultant	Male	ENG, FR	Health system strengthening, Project/Program management, Preparedness and Response
4	**Melita Gordon**	British Malawi	Professor & Academic Clinician, University of Liverpool and Malawi-Liverpool-Wellcome Programme	Female	ENG	Typhoid Conjugate vaccine epidemiology, surveillance and vaccinology
5	**Natasha Howard**	Canada, UK	Associate Professor, NUS School of Public Health and LSHTM	Female	ENG	HPV, immunisation service delivery, FER settings
6	**Sandra Mounier-Jack** *Vice Chair*	France, UK	Associate Professor in Health Policy, LSHTM Faculty of Public Health and Policy	Female	ENG, FR	HPV, measles, immunisation programmes, HSS, health policy and health financing
7	**Wassim Khrouf**	Tunisia	Auditing and Consulting Worldwide, Partner	Male	ENG, FR	Financial & budget analysis, audits, project assessment
8	**Viviana Mangiaterra**	Italy	Associate Professor, SDA School of Management, Bocconi University, Milan	Female	ENG, FR	HSS, Maternal and Child Health, Malaria, HIV and TB
9	**Pierre-Corneille Namahoro**	Rwanda	Director of Public Health, Global Supply Chain & HSS, Fascinans Ltd	Male	ENG, FR	HSS, Supply Chain Management and Cold-Chain Logistics
10	**Benjamin Nkowane,** *Interim Chair*	Zambia	Independent consultant	Male	ENG	Measles, epidemiology, mass vaccination campaigns, technical support for field operations in risk areas
11	**Gavin Surgey**	South Africa	Radbound University Medical Centre	Male	ENG	Financial and Budget Analysis, Health Economics, Health Financing Strategies, Program M&E
12	**Ousmane Tamba-Dia**	USA, Senegal	Independent Consultant	Male	ENG, FR	Routine immunization, Project/Program management, Supply chain management, Biomedical equipment maintenance, Health care waste management
13	**Abdel Tibouti**	Morocco, Canada	Independent consultant	Male	ENG, FR	Financial and Budget Analysis, Health Economics, Health Financing Strategies, Program M&E