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

MARCH 2021

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List of Acronyms

2YL	Second Year of Life
ACSM	Advocacy, Communication and Social Mobilization
AEFI	Adverse event(s) following immunization
CCE	Cold-chain equipment
CCEOP	Cold-chain equipment optimization platform
CCL	Cold-chain logistics
cMYP	comprehensive Multi-Year Plan (for immunization)
CHW	Community Health Worker
COVID-19	Coronavirus Disease 2019
cVDPV	circulating Vaccine-Derived Poliovirus
DHS	Demographic Health Survey
EPI	Expanded Programme on Immunization
ERG	Equity Reference Group for Immunization
fIPV	Fractional Inactivated Poliovirus Vaccine
HSCC	Health Sector Coordinating Committee (or Council)
HPV	Human papillomavirus
HR	Human resources
HSS	Health System Strengthening
ICC	Inter-Agency Coordinating Committee
IPV2	Inactivated Polio Vaccine 2nd dose
IRC	Independent Review Committee
JRF	WHO and UNICEF Joint Reporting Form
KAP	Knowledge, attitude, and practices
MCV	Measles-containing vaccine
MR	Measles-Rubella Vaccine
NGO	Nongovernmental organization
NITAG	National Immunization Technical Advisory Group
NVS	New Vaccine Support
PCV	Pneumococcal conjugate vaccine
PHC	Primary Health Care
POA	Plan of Action
RI	Routine Immunization
SAGE	Strategic Advisory Group of Experts on Immunization
SCM	Senior Country Manager
SIA	Supplementary immunization activity
SIG	Syria Immunization Group
TA	Technical assistance
TCA	Targeted Country Assistance
ToR	Terms of Reference
UNICEF	United Nations Children's Fund
VHT	Village Health Team
VIG	Vaccine introduction grant
VPD	Vaccine-preventable disease
WHO	World Health Organization

Executive Summary

The Gavi Independent Review Committee (IRC) met on 8th – 17th March 2021 and reviewed 10 applications from 8 Gavi-eligible countries. This was the fourth IRC meeting held virtually because of the COVID-19 pandemic.

Ten IRC members participated in this review round, including two new members who underwent induction training. Areas of expertise included: immunization services; vaccine preventable diseases (VPDs); Adverse event(s) following immunization (AEFI); health development and health systems strengthening (HSS); outbreaks, epidemic and emergency response; management and evaluation of health services; health policy and planning; primary health care (PHC); epidemiology and burden of disease; reproductive health, cold chain and supply chain management; health economics, health financing and auditing. Two members conducted in-depth financial reviews, and one member focused on cold chain and logistics issues.

During the review, the IRC members focused on the following specific tasks:

- Review of countries' funding requests and supporting documentation for vaccine introductions and campaigns to support national efforts to improve immunization coverage and equity.
- Production of country-specific review reports and recommendations.
- Development of a consolidated report of the review round, including recommendations for improving funding requests and strengthening routine immunization.
- Provision of recommendations to the Gavi Board and Alliance partners on improving processes relating to Gavi policies, governance, and structure.

Review modalities included:

- Desk review and virtual discussion in plenary with the participation of the full committee of 7 New Vaccine Support (NVS) applications from 6 countries.
- Remote reviews of three additional IPV2 applications from Djibouti, Indonesia and Uganda, with consolidated reports discussed in plenary.

The IRC recommended approval of 7 of the 10 reviewed applications, with an overall approval rate of 70%. The total funding amount recommended for approval is US$ 4.85 million in support of the immunization of a target population of more than 5 million children.

During the reviews, the IRC identified a number of relevant common issues in the submitted applications, described in this report. The IRC also developed specific recommendations for consideration by Gavi, Alliance partners and countries.

Methods and Processes

Methods

The Gavi Independent Review Committee met on 8th – 17th March 2021. This was the fourth meeting held virtually because of the COVID-19 pandemic. The virtual meeting went smoothly with only a few connectivity issues. To address some of the limitations of meeting virtually, the IRC continued to test the use of MS Teams for co-authoring documents and to facilitate personal or small group communication outside of the plenary sessions. This was done on a reduced scale from the previous meeting as some members had difficulty accessing or using MS Teams. An additional session was held on Saturday 13th March to allow for more discussion of thematic area findings and recommendations.

Ten IRC members participated in this review round, including two new members who underwent virtual induction training. Areas of expertise included: immunization services; VPDs (measles, rubella, Human Papillomavirus, and Pneumococcal disease); AEFI; health development and HSS; outbreaks, epidemic and emergency response; management and evaluation of health services; health policy and planning; PHC; epidemiology and burden of disease; reproductive health, cold chain and supply chain management; health economics, health financing and auditing. Two IRC members focused on in-depth financial reviews, and one member focused on cold chain and logistics issues. (see Annex 1 for the list of participating IRC members).

Country applications and supporting documents were shared with IRC members about one week before the start of the meeting. IRC members reviewed and analysed these applications and prepared draft reports of their assigned countries. The Secretariat provided clarifications and any additional documentation as needed.

The meeting started off with a welcome address by the Gavi Deputy CEO, Ms Anuradha Gupta. She welcomed participants, summarized Gavi response to the COVID-19 pandemic, and reminded the IRC about Gavi's priority of ensuring that specific activities to identify and immunize zero-dose children are included in all applications. Equally important are the emphasis on equity in the implementation plans and consideration of gender-related barriers in the proposed strategies.

The Secretariat then updated the IRC on the COVID-19 situation in Gavi-supported countries and on Gavi support to COVAX, including vaccine distribution and implementation. Thereafter, the briefings continued with updates from the Secretariat and Alliance partners on key topic areas relevant to this review round, including vaccine updates (measles and rubella, IPV2) and programme financing.

Each country proposal was reviewed by at least two IRC members, a primary and a secondary reviewer (three reviewers were assigned to the Syria MOH[1] and Syria SIG[2] proposals due to the complexity of the humanitarian situation). Each IRC member reviewed the applications and supporting documents independently and prepared separate, individual reports. Cross-cutting issues related to budgets and financial sustainability and supply chain and waste management were reviewed in each application by one financial crosscutter and one IRC member specialized in supply chain. These reports were presented in daily virtual plenaries, during which the initial findings were extensively discussed, with a final, consensual, outcome recommendation of either approval or re-review.

[1] Syria MOH refers to the application received from the Syrian Ministry of Health in Damascus, covering the entire country with the exclusion of areas beyond government control in the northwest and northeast of the country.

[2] Syria SIG refers to the application received from the Syria Immunization Group, a group of non-government actors, mostly NGOs, coordinating and implementing the immunization response in areas of the northwest of Syria beyond Damascus-government control, as part of the UN-coordinated Humanitarian Response Plan. The SIG is co-chaired by WHO and UNICEF in Gaziantep, Turkey and provides cross-border support authorized by annually renewed UN Security Council resolutions.

Three remote reviews[3] of applications for IPV2 introduction in Djibouti, Indonesia and Uganda were included in this round. For the remote reviews, two reviewers prepared independent reports which were consolidated before the IRC meeting. The consolidated reports and recommendations were shared with the IRC and final recommendations endorsed through consensus.

The Gavi Secretariat and Alliance partners supported the plenaries by providing information and clarifications when needed, especially in terms of country-specific background and context. Most IRC decisions were agreed upon immediately at the end of the plenaries, though a few required postponing the decision to clarify outstanding issues or acquire additional documentation or information from the country, the Secretariat, or technical partners.

The first reviewers then consolidated the reports from the different reviewers and the outcome of the plenary discussion, including decisions and recommendations, in draft country reports. These drafts were then finalized after editing, thorough fact and consistency checking, and quality review.

The two review modalities during this round are presented in Table 1:

1. Desk reviews of 7 NVS applications from 6 countries with full committee discussions.
2. Remote reviews by selected IRC members, with limited committee discussions, of IPV2 introduction.

Table 1: Country Applications by Type and Review Modality

Countries	Application/ Support requested	Modality	No. of applications
Syrian Arab Republic	MR follow-up campaign	Desk review (Virtual)	2
Uganda	MR 2nd dose	Desk review (Virtual)	1
Madagascar	Additional doses for M follow-up campaign	Desk review (Virtual)	1
Liberia	MR 2-dose routine and catch-up campaign	Desk review (Virtual)	1
Tajikistan	PCV routine	Desk review (Virtual)	1
Eritrea	HPV	Desk review (Virtual)	1
Djibouti, Indonesia, Uganda	IPV2	Remote review	3

Criteria for review

Review of the applications was guided by the IRC Terms of Reference and key criteria in line with Gavi's 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 decision.

Decisions

There were two decision categories:

I. **Recommendation for Approval** when no issues were identified that would require re-review by the independent experts. In this case, the minor issues raised by the IRC will be addressed by the country in consultation with the Secretariat and Partners.

[3] IRC "remote review" is applied when the proposal submitted is of limited nature and complexity, with minimal documentation needed. In this case, the review by the full IRC is considered not essential and the assessment is limited to two IRC members.

II. **Recommendation for Re-review** when there were critical issues that required a new review by the independent experts; this will entail detailed revision of the application and a revised submission to the IRC.

Table 2 presents the review outcomes for this round. Seven of the 10 applications were recommended for approval and three were recommended for re-review, with an overall proportion of recommendation for approval of 70%.

Table 2: Requests from Countries and Review Outcomes

Country	Application	Outcome
NVS, campaigns and CCEOP		
Eritrea	HPV	Approval
Liberia	MR 2-dose routine and catch-up campaign	Re-review
Madagascar	Measles additional doses for follow-up campaign	Approval
Syria MOH	MR follow-up campaign	Re-review
Syria SIG	MR follow-up campaign	Re-review
Tajikistan	PCV routine	Approval
Uganda	MR 2nd dose routine	Approval
Remote Reviews		
Djibouti	IPV2	Approval
Indonesia	IPV2	Approval
Uganda	IPV2	Approval

Thematic areas sub-committees

During the review, IRC members, organized in 5 sub-committees, identified specific findings and issues in the applications submitted that would be of general interest for Gavi and partners and could be addressed in the Secretariat's debrief session as well as in this report. The suggested issues were initially reviewed and agreed upon in a special plenary session held on the 13th of March. They were further discussed and finalized in a slide presentation on the 16th of March to be presented by the interim Chair to Secretariat Senior Management, staff and partners on the final day of the meeting.

Secretariat debrief and closing session

The debrief of the Gavi Secretariat was held on the 17th of March and included a summary presentation of the meeting's outcomes and key issues and recommendations from the IRC to Gavi and Alliance partners. This was followed by a brief discussion, questions/comments, and response.

During the closing session, Dr Seth Berkley, Gavi CEO, expressed his appreciation to the IRC members for the excellent work. He specifically thanked Philippe Jaillard, a long-standing member leaving the IRC after years of excellent expert contribution in cold chain and supply chain management. He also expressed his gratitude to the two vice-chairs of the meeting, Dafrossa Lyimo and Karen Wilkins (interim), and the interim chair Stefano Lazzari for agreeing to take on the responsibility to facilitate and manage the meeting.

Key Findings and Recommendations

NVS and Campaigns

The IRC reviewed seven applications from six countries for New Vaccines and Campaigns support. Five were for measles-containing vaccines (MCV), one for Pneumococcal Conjugate vaccine (PCV) and one for Human Papilloma Vaccine (HPV). Applications from three countries for the introduction of the second dose of IPV into routine EPI were also reviewed remotely.

Measles & rubella applications

The measles applications included Measles-Rubella (MR) second dose introduction (Uganda); rubella vaccine introduction in a two-dose schedule (i.e. switch from Measles to MR vaccine) with MR catch-up campaign (Liberia); MR follow-up campaign (Syria MOH and Syria SIG); and additional doses of measles vaccine for MCV follow-up campaign (Madagascar).

Applications for MR support provided good justification for introducing the second dose into routine or for rubella introduction and switch from MCV to MR vaccine. However, justification for follow-up campaigns and for catch-up campaigns in the context of rubella-containing vaccine introduction was based primarily on modelling of accumulation of susceptible children. They did not consider or provide adequate epidemiological analyses of the current measles situation in the country. Furthermore, campaigns' plans of action were non-specific and lacked detail on how lessons learnt from recent campaigns and proposed strategies would be operationalized. Focus on addressing equity issues and on reaching zero-dose children remained weak. All three MR campaigns in this round were recommended for re-review.

Analysis of measles applications 2018 – 2021

Introduction

Over the past several years, the IRC has reviewed many requests for operational support of M/MR follow-up campaigns from countries. In general, most countries submit follow-up non-selective campaign requests every 2-3 years based on sub-optimal national routine EPI coverage for MCV1 and MCV2 and the likelihood that susceptible children would accumulate, leading to a high risk for measles outbreaks. The IRC has noted that follow-up campaigns have become recurrent, "routine" costly exercises, not accompanied by meaningful efforts to improve measles coverage within the routine programme, a priority need of all countries. Despite Gavi SIA operational funding flexibility, the option of conducting a selective or sub-national campaign is rarely considered. Although an option available to all countries, out of four countries (Burundi, Senegal, Lesotho, and Zambia) selected to pilot the flexible approach to funding operational measles SIA through incentivizing sub-national targeting, only one country (Senegal) took advantage of this flexibility, remaining the only country overall to have opted for a national selective approach.

In their measles applications, countries often provide long and general lists of activities to strengthen routine immunization. However, they are seldom linked to ongoing HSS support, assessed for feasibility, and tailored to the local context. Often, immunization policies and operational guidelines are not updated to allow for extended upper age limit (above 12 or 24 months) so that all children, including zero-dose children >1 year, are eligible to receive two doses of MCV. Furthermore, the MCV2 opportunity continues not to be exploited as a delivery platform through which children can catch up with other missed vaccinations in addition to providing other health services such as growth monitoring/nutrition status and vitamin A supplementation. This does not instil confidence that a strong routine programme is the ultimate target and, with a history of campaigns achieving better coverage than routine, there is a risk that countries continue to rely on campaigns rather than invest in routine immunization. SIAs are often needed to prevent measles resurgence but this does not mean that reliance on non-selective campaigns should be supported at any cost.

Following a remark made during the IRC debriefing on the apparent low approval rate for MCV and MR applications, we reviewed the outcome of all measles applications submitted during the period from March 2018 to March 2021 to analyse the overall approval rate and the identify the main reasons for recommending a re-review.

Findings

Of 46 applications for MCV support reviewed by the IRC during that period, 31 (67.4%) were recommended for approval and 15 (32.6%) were recommended for re-review. The breakdown by application type is shown in Table 3.

Table 3. Outcomes of M/MR applications reviewed by IRC, March 2018 to March 2021

Application Type	Total	Recommended for Approval (1st submission)	Recommended for re-review	Recommended for Approval after re-review	Pending re-reviews
1. Follow-up campaigns (M/MR)	28	20 (71.4%)	8 (28.6%)	6	2
2. Catch-up campaigns with MR switch or MR1+2	6	2 (33.3%)	4 (66.7%)	3	1
3. MR routine introductions	10	7 (70.0%)	3 (30.0%)	3	-
4. Additional doses of MR vaccine for follow-up SIA	2	2	-	-	-
Total	**46**	**31 (67.4%)**	**15 (32.6%) ***	**12**	**3 ****

***Three re-reviews were not recommended for approval because the IRC action points from the first submission were in large part not addressed. Only the reports of second IRC review were therefore included in the analysis.
**** Pending re-reviews are from the March 2021 IRC.

Of the 15 country applications recommended for re-review, complete essential documentation was provided in 10 (66.6%). Justification for the request was assessed as adequate in only three applications (20%) and data was considered adequate in only two (13.3%). For follow-up and catch-up campaigns, in 11 applications (73.3%) the justification was based solely on the estimated accumulation of susceptible children from modelling and national data (the "rule of thumb" that if the estimated number of susceptible children exceeds the birth cohort, the risk of an outbreak would be high) without considering subnational analyses. However, the coverage data used in modelling estimates were often of variable quality, with limited survey data and major uncertainties on the denominators. For example, recent coverage data from a 2018 post-campaign survey and the 2020 DHS appear not to have been considered in the justification and planning in the Liberia application. Four applications (26.7%) recommended for re-review included robust epidemiological analysis of the measles situation in the country, but these analyses did not support the strategies proposed.

None of the applications recommended for re-review considered selective or sub-national campaigns to reach the most vulnerable population groups. In the case of Zimbabwe, a well-performing EPI programme that had identified at-risk areas and/or population groups for improving routine EPI, had a strong case-based surveillance system for measles and rubella and almost reached measles elimination status, the decision to implement a non-selective nationwide follow-up campaign was inappropriate as there would be a low marginal benefit when most children are already immune. The IRC requested the country to consider focusing on improving MR2 coverage and targeting interventions to identified areas of low routine EPI.

Regarding addressing special groups and at-risk populations, 13 applications (86.7%) included recent and comprehensive equity analyses from various sources of country data. However, only one (6.7%) had operationalized the equity issues in its Plan of Action. None of the applications targeted specific interventions or zero dose children. Links to on-going HSS activities that address equity were not

reflected or were only mentioned with no details provided. Demand generation activities were only detailed in 4 (26.7%) of 15 applications, and vaccine supply chain and cold chain was weak and required revision in 9 (60%) of the applications.

The IRC noted that often countries simply list the lessons learned, do not truly analyse them, do not assess why previous campaigns performed poorly, and do not see sub-optimal coverage as a failure. Lessons learnt from previous SIAs were listed in 12 applications (80.0%). Eight countries (53%) reported sub-optimal post-campaign coverage, but only 5 (33%) mentioned general activities in the plans of action (POA) to address reasons for the poor campaign coverage results.

The IRC found that 12 (80.0%) POAs submitted were general/non-specific, 2 (13.3%) were mere outlines, and only one (6.2%) was assessed as adequate. Ten (66.7%) plans listed strategies but provided no information on how they would be operationalized. Furthermore, timelines and integration with routine EPI activities were vague and often unrealistic (whether reflected or not reflected in the annual EPI plan). All applications refer to the use of readiness assessment tools in planning (either the WHO readiness tool or others) but timelines in the POA are often inadequate or not provided. The second year of life platform was only described in detail in 2 of the 10 relevant POAs. Finally, only one of the 14 applications had a budget aligned with the activities in the POA and all applications except one, required major budget revisions and justification for the funds requested.

Conclusion

Measles campaigns are essential tools in the strategy to reach measles elimination by supplementing routine vaccinations. However, they are also demanding exercises in terms of human and financial resources and should not simply replace inadequate routine immunization services. The applications which IRC recommended for re-review often lacked a robust justification supported with subnational data and information from outbreaks, did not look beyond non-selective national campaigns using mainly traditional vaccination strategies like fixed vaccination posts, lacked clear/tailored strategies to reach missed-dose or zero-dose children, did not translate results of equity analyses in specific activities, and did not show clear linkages and synergies with efforts to improve on routine immunization. Finally, they presented weak budgets often unlinked to the activities described in the plan of action, and timelines were often too short for high-quality SIA planning and preparation that would assure an adequate return for Gavi investment.

The IRC maintains the position that to be recommended for approval, applications should show a sound epidemiological justification based on robust data, a strong focus on reaching missed children and defaulters with appropriate strategies, and linkages to clear and tailored efforts to increase routine coverage, including through Gavi HSS support. IRC additionally noted that the applications recommended for re-review generally came back stronger and more complete, indicating that proposed interventions are more likely to achieve better results (e.g. Pakistan).

Issue 1. Despite considerable country experience in implementing measles interventions (both SIAs and routine introductions), existing WHO-recommended SIA guidance and available technical support, Measles and MR applications submitted to the IRC remain weak, with approvals at first submissions at 67.4%.

Recommendations:

- Applications for NVS and campaigns for measles should be accompanied by the full complement of relevant documentation and a critical analysis of essential information on the proposed intervention. In addition, NVS support documentation should include both the PSR/HSS plan and budget and an update on implementation where possible.
- For each request, adequate justification should be provided following Gavi guidelines and based not only on estimates of accumulation of susceptible children but also include a robust analysis of measles/rubella epidemiology at national and subnational levels, recent outbreaks and disease burden assessments, and outcomes of recent interventions.

- Applications should provide details on how specific strategies will address inequities in coverage (as identified by the robust analysis described above), including how zero dose children will be reached, how strategies to improve coverage will be operationalized especially at the service delivery and community level, and include clear and feasible linkages and synergies with RI strengthening efforts (e.g. Gavi PSR HSS support).
- Preparatory, implementation and immediate post-implementation activities should be fully reflected in the annual EPI plan to ensure synergies with other childhood interventions, routine EPI and HSS activities.
- Gavi and technical partners should work with countries to ensure POAs are contextualized, articulate relevant strategies based on local assessments, provide sufficient details on operationalization plans, and that the budgets are fully aligned with activities in the POA.
- Applications for MCV2 introduction should describe changes in national immunization policy along with specific strategies that will be implemented to build out a routine well-child visit in the 2nd year of life and beyond (e.g. to allow for catch-up of routine vaccines, other child survival interventions, demand generation activities) as well as linkages with HSS-supported RI strengthening efforts.

PCV application

To accelerate the impact on pneumococcal disease, WHO recommends but does not mandate conducting catch-up vaccination at the time of PCV introduction whenever possible, particularly where the burden of disease and mortality are high. Tajikistan's application for the introduction of PCV did not include a catch-up campaign to provide immunity to susceptible older age groups or prioritize children of less than 2 years who would be missed by routine EPI. The IRC considered this a missed opportunity as the decision was not based on disease risk or epidemiological data of disease burden, but rather because of "competing priorities".

Issue 2. The choice to not include a catch-up campaign with the PCV vaccine introduction can be a missed opportunity to provide protection of children who are not targeted in routine EPI and quickly reduce the main reservoir and transmitters of the disease.

Recommendation(s):

- When PCV vaccine is introduced in routine EPI, Gavi and partners should encourage countries to base their decision on including a catch-up campaign (up to age 5) solely on epidemiology and justify it by an analysis of the disease burden.

IPV Second Dose applications

Three countries (Djibouti, Indonesia, Uganda) applied for introduction of the second dose of IPV into routine EPI. Unfortunately, these applications were submitted before the WHO SAGE meeting of October 2020 that recommended a "Preferred Schedule" of IPV1 at 14 weeks and IPV2 at 9 months, but also allowed an alternative "Early Schedule" of IPV1 and IPV2 at 6 weeks and 14 weeks, which offers protection early in life, but at a cost of total immunogenicity achieved. In addition, the SAGE recommends that only a full dose of IPV should be used in the 'early schedule' option. Use of fractional IPV (fIPV) should be limited to the 14 weeks and 9 months schedule, because of lower immunogenicity of fIPV administered early in life.

Indonesia and Uganda both proposed an early delivery schedule. In addition, Uganda also requested a switch to fIPV using jet injectors. The IRC noted that there is limited available experience in using Jet Injectors for routine immunization and these are not included in Gavi's innovation catalogue. Both Uganda and Indonesia were recommended for approval but requested to align their schedule and dosage with SAGE recommendations.

Issue 3. Countries applied for IPV2 introduction prior to finalization of the WHO SAGE recommendations and their proposed schedule did not align with the new recommendations.

Recommendations:

- Countries applying for IPV2 introduction should be encouraged to adopt the "preferred" SAGE schedule of IPV1 at 14 weeks and IPV2 at 9 months.
- Countries that opt for the alternative "early schedule" at 6 weeks and 14 weeks should base their decision on an assessment of the risks of cVDPV and the immunity profile of the children.
- Gavi IPV application form should be revised to reflect the SAGE recommendations and the application should include appropriate documentation supporting the choice of schedule.

Issue 4. It is unclear if and how Gavi can support innovative delivery methods for vaccination such as jet injectors.

Recommendations:

- Gavi and partners should support operational studies on the use of innovative devices for routine immunization activities.
- Requests for Gavi support for innovative delivery methods should be made in the context of routine EPI, the justification should include considerations of long-term sustainability, and their use should not be restricted to a single antigen.

Coverage and Equity

Most applications reviewed in this round provided little or no documentation of analyses of coverage and equity. When provided, equity analysis was limited to differences by geography and the traditional dimensions of child gender, mother's education, and household wealth quintile. While gender-related barriers drive exclusion and affect the likelihood that a child will be vaccinated (regardless of sex), household and community levels of gender inequity are not analysed or associated with the likelihood of a child receiving full immunization. It appears that programmes do not recognize that findings of analyses of gender inequities should be considered when planning childhood vaccination strategies within the appropriate sociocultural contexts and for public advocacy from national down to household level, as recommended by the Equity Reference Group for Immunization (ERG).[4]

Issue 5. With gender analyses limited to traditional dimensions (e.g. coverage by sex), no attention paid to social contexts in which women reside, and no/minimal linkages between them and strategies proposed, addressing gender inequities continue to be inadequately considered in proposed activities to increase vaccination coverage.

Recommendation:

- Partners should work with countries to ensure that gender analyses go beyond the traditional dimensions (i.e. geography, gender of the child, mother's education and wealth quintile) and include other potentially addressable influences such as vulnerability and access to health care as discussed in the equity forum of July 2020.
- Applications should include clear linkages between gender analyses and proposed strategies to improve identified inequities.

Zero-dose and incompletely vaccinated children

Several campaign proposals included identification of zero-dose children during the campaigns without detailing operational aspects such as how this might change campaign team composition or

[4] Tacking inequities in immunization outcomes: a gender lens (https://drive.google.com/file/d/1pLV1p7H–8ngtvMnI9CgCV4dx7wEX44B/view?usp=sharing)

daily targets given the additional proposed tasks. Proposals also provided insufficient details on follow up of identified zero-dose children and catch-up on missed routine immunizations. While ongoing efforts to reach zero dose children may be addressed through the routine programme, this linkage is not mentioned in campaign plans of action.

Issue 6. Heavy reliance on campaigns to identify zero-dose children without allocating the required resources.

Recommendation(s):

- Countries should allocate additional human resources to campaigns (e.g. an additional team member) tasked with the identification of zero-dose children.
- Countries should provide clear plans and monitoring indicators for identifying and following zero-dose children, including in the routine programme, and document best practices.

Community Health Workers

Many proposals include significant reliance on community health-workers (CHW), assigning them complex tasks but without much detail of if and how they are positioned within the immunization programme, and without clear explanation of how they will be trained and supervised. Examples include the Uganda MR 1+2 proposal in which tasks assigned to CHWs include identifying zero-dose children, sensitizing parents on immunization, increasing vaccine acceptance and creating demand to improve immunization equity.

While it is safe to assume that inclusion of CHWs in immunization programmes can improve programme outcomes, this is unlikely to happen if their roles are not standardized, if there is no clear plan for their activities, training and supervision, if they are not integrated in the programme plan and policies or across different maternal and child health services, and ultimately, if they are not appropriately valued and compensated. Leaving such important tasks to voluntary actors outside of determined programme implementation structure and without evaluation of their contribution and impact, cannot ensure their sustained and quality input and provide the benefit to the immunization programme and the community.

Issue 7. Essential immunization tasks are assigned to CHWs with limited information being provided on their training and supervision, along with plans and policies for CHWs' role in the immunization programme.

Recommendation(s):

- Recognizing the potentially important role CHWs can play in immunization programmes, a clear description of their tasks, training and supervision should be included in the implementation plans and budget.
- Gavi and partners should compile and evaluate the evidence on CHW engagement in immunization programme activities and propose structured ways to mobilize and motivate them as an integral part of the immunization system.

Data Quality and Use

Country applications reflect variable efforts to improve accuracy and completeness of immunization data, and while availability and quality of data is generally improving, there is little evidence that they are used in vaccine introduction or campaign planning. A vital component of immunization programme interventions is communication and plans of action. All countries discussed in plenary in this round, (Eritrea, Liberia, Madagascar, Syria MOH, Syria SIG, Tajikistan, Uganda) included communication plans. However, these plans remain general, are presented as aspirations for the

future, and do not make use of multiple sources often available in the country to demonstrate pragmatic and evidence-based approach to reach target population, in particular the underserved. On the other hand, elaborate communication structures are sometimes described but with no evidence of existing programme communication strategy that would serve as a basis for design and implementation of an effective communication plan. Similarly, countries often mention the development of risk communication plans but do not identify the risks, often available in various survey reports (e.g. population surveys, EPI reviews, post-campaign coverage surveys).

For example, Liberia's application for Rubella vaccine introduction with catch-up campaign proposed a KAP and vaccine perception study to identify the gaps in immunization programme communication. However, the same study was planned for the TCV application of 2019 and there is no reference to its findings or their application in introduction or campaign communication plans. Similarly, PCV introduction plan for Tajikistan mentions intense activities undertaken to develop immunization programme communication and social mobilization strategy, but no elements are presented for the future communication plan within PCV introduction. Of additional concern is the statement that there is no capacity in the country to perform communication campaigns nationwide and any implementation may happen only with donor support.

Syria MOH MR campaign application mentions the need to update and adapt the existing communication strategy for the SIA communication plan but does not go beyond providing information about campaign. Despite all the challenges in the country, a study to identify factors impeding vaccinations was undertaken and it is unfortunate that its findings were not considered in developing the communications plan and activities. Syria SIG communication activities for the MR campaign, while scarce in detail, also concentrate on dissemination of general information about the campaign, while acknowledged information on hard-to-reach areas and population does not appear used for communication planning. For MCV2 introduction, Uganda plans to develop a risk communication plan, but uses no available information from EPI review and surveys to identify potential risks. In contrast, Eritrea confidently describes the intention to develop multi-pronged and multi-channelled demand promotion and crisis communication plan, to be implemented through cascaded communication committees for HPV vaccine introduction, but it appears that the country does not have the standard EPI communication strategy to increase timely uptake of vaccines and community participation.

Issue 8. Communication plans are poorly described and programme and qualitative research data, where available, are not used in the design.

Recommendation:

- Countries should demonstrate the use of available data in the development of communication plans. Gavi and partners should encourage countries to compile data from multiple sources to inform strategic programming to reach the target population, particularly those underserved.

Adverse Events Following Immunization (AEFI)

The IRC has persistently stressed the importance of functional vaccine safety monitoring systems in addressing vaccine safety concerns and supporting trust in immunization programmes. Passive surveillance systems, which consist of spontaneous reporting of adverse events following immunization, have been the cornerstone of vaccine safety monitoring systems as they cover the entire vaccinated population, can generate 'signals' (i.e. newly reported or emerging AEFI), and their cost of operation is relatively low. Countries applying for support include strengthening of AEFI surveillance in their budgets and maintain it as an objective in their cMYPs, but still do not report on performance. Furthermore, AEFI surveillance systems remain critically weak.

Although all eight countries applying for support report having a national system to monitor AEFI and an expert AEFI committee, only three (Eritrea, Indonesia and Madagascar) meet the minimal capacity requirement (i.e. more than 10 reported cases per 100,000 surviving infants per year), demonstrating a capacity of AEFI reporting but not necessarily that a well-functioning system is in place. Six countries (all except Djibouti and Liberia) reported a small number of serious adverse events though only Eritrea meets the indicator of the rate of case-based serious AEFI for 2019 (last year for which information in JRF is available). The rate of case-based serious AEFI reporting is a new vaccine safety indicator, introduced with the Immunization Agenda 2030, required for monitoring progress in AEFI surveillance in all age groups. As an initial target, at least 1 serious AEFI case reported per 1 million population per year is proposed (based on UN population estimate for the year). Serious AEFI will have to be documented and for many countries this may prove difficult, as collecting and transferring case-based information to higher administrative levels without electronic tools will be challenging.

Figure 1: AEFI reporting rates in 8 countries discussed in plenary (source: JRF 2019)

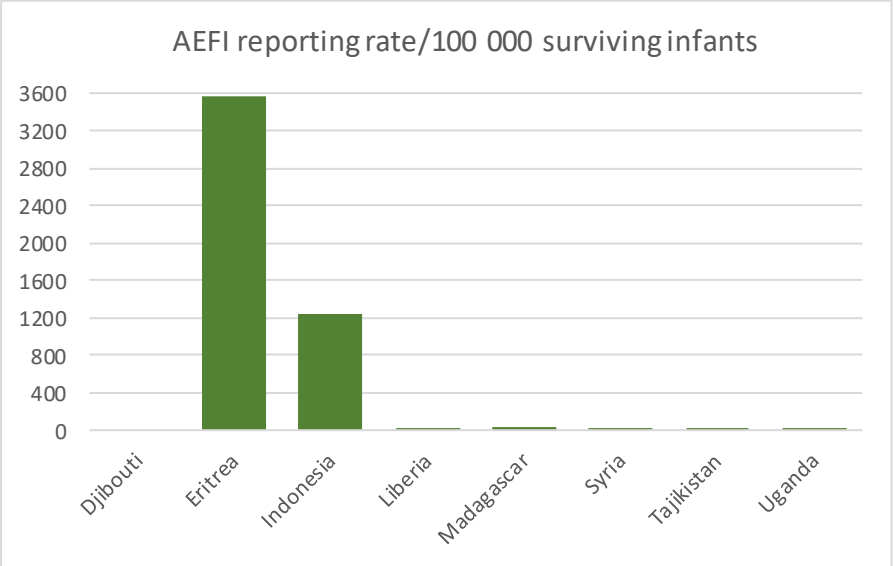
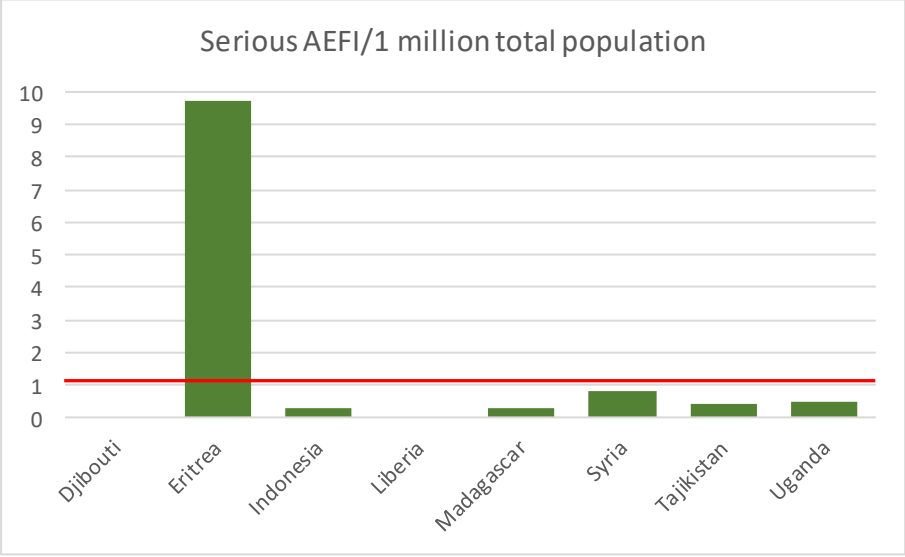


Figure 2: Rate of case-based serious AEFI in 8 countries discussed in plenary (source: JRF 2019)



Issue 9. Despite continued investments at national levels, AEFI surveillance systems remain weak and countries do not report on performance.

Recommendations:

- In the multi-stakeholder dialogue review report, Gavi should include a section on reporting and analysis of AEFI data, along with any emerging concerns and allegations which represent a risk to immunization programme credibility and lead to a reduction of vaccination coverage.
- Efforts to strengthen AEFI surveillance should continue. Gavi and partners should request countries to report on performance and encourage and assist them to build the capacity of transfer of data from facility to national level with appropriate tools, so that the progress against the new vaccine safety indicator for IA 2030 could be measured.
- Gavi and partners should support health workers in the process of strengthening AEFI surveillance systems by increasing their capacity for all components of the AEFI surveillance systems and by raising awareness of their important role as the point of entry for information on vaccine safety.

Supply Chain and Waste Management

a. Supply chain

The IRC noted again the absence or limited use of cold storage gap analysis in applications. Most countries state that they have sufficient capacity at all levels, but this is not supported by evidence. Moreover, passive containers are rarely considered in these estimates even though they are essential for vaccine transportation and outreach activities. As all countries have benefited from significant cold chain investment through various supports including Gavi CCEOP and HSS, storage capacity is likely to be sufficient to adequately preserve vaccines. However, due to the COVID-19 pandemic, deployment of CC equipment could be delayed, which may limit storage capacity in some sites.

HPV vaccination largely relies on school-based vaccination and more school-based immunization activities are likely to be conducted in future, indicating an urgent need to establish strong school-based platforms. However, despite the potentially new/challenging target populations and delivery strategies, countries are not required to assess the cold chain capacities and logistical feasibility when requesting Gavi support for HPV introduction.

Issue 10. Unexpected logistics challenges may negatively impact school/community-based immunization strategies.

Recommendation:

- Post-introduction evaluations and multi-country assessments should include supply chain and waste management to contribute to the establishment of strong school-based platforms.

Issue 11. The HPV application form does not contain a logistical/cold-chain needs analysis section.

Recommendation:

- Gavi to include a supply chain section in the HPV application form, as currently done for other vaccine application forms.

b. Waste management

Most applications did not properly address waste management and those that have partially addressed it have not taken into account personal protective equipment (PPE) disposal.

Issue 12. Widespread use of PPE has driven increased plastic pollution and there is no evidence that countries have developed effective solution to address PPE disposal.

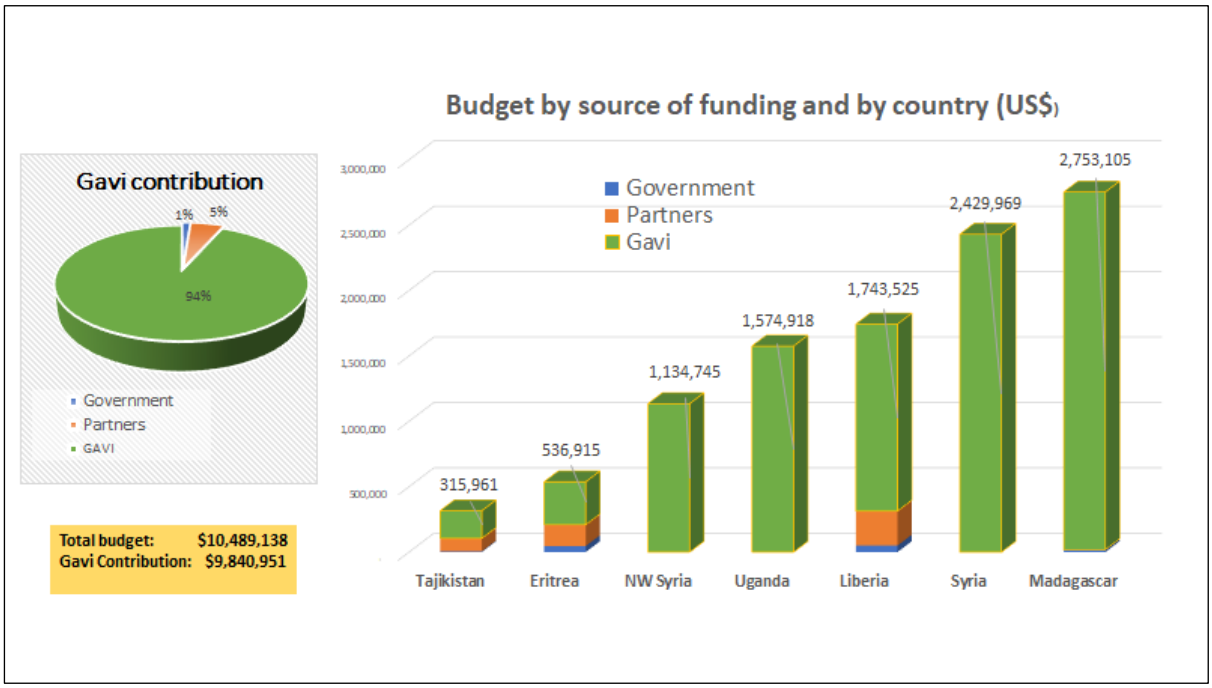
Recommendation:

- Gavi to disseminate the WHO/UNICEF interim guidance on Water, sanitation, hygiene, and waste management for SARS-CoV-2, the virus that causes COVID-19, and support countries in developing and implementing appropriate solutions for PPE disposal to avoid additional environmental pollution.

Budgets, Financial Management and Sustainability

In this round, nine budget applications for support totalling US$10,489,138 were reviewed. The requested Gavi contribution of US$9,840,951 constituted 94% of the total planned budget, with governments and partners contributing 1% and 5%, respectively. As shown in Figure 3, only Eritrea, Liberia and Tajikistan included government and partners' contributions in their budgets.

Figure 3: Overall budget requested by country and by source of funding.



Of the total requested Gavi contribution, 53% accrued to Madagascar and Syria MOH; 42% to Liberia, Syria SIG, and Uganda; and 7% to Eritrea and Tajikistan.

The share of the Gavi contribution by antigen was 67% (US$6.57 million) for Measles-Rubella, 28% (US$2.73 million) for Measles, 3% (US$0.33 million) for HPV, and 2% (US$0.21 million) for PCV.

a. Campaign staffing requirements

Human resource (HR) costs are the major cost drivers in all SIA applications. This is partly because HR requirements are generally higher for campaigns than for routine immunization but also because countries tend to systematically over-estimate those requirements, resulting in artificially inflated budgets.

To determine the extent to which each country might have over-estimated its staffing requirements for SIAs, we recalculated those requirements based on the target population and its urban-rural distribution, number and composition of vaccination teams, and campaign duration.

The Syria SIG budget included 2,986 vaccinators and 621 additional staff for the MR campaign targeting 733,717 children. With a campaign duration of 10 days, the average daily workload per vaccinator would be about 25 vaccinations, which is about a quarter of WHO standard vaccinator workload for campaigns. In addition, total HR availability for SIG is estimated at only 1,065 nurses,

which further reinforced the conclusion that HR requirements might have been over-estimated by a factor of 1 to 3.

In the revised version of the Syria MOH budget, the number of vaccinators has been increased to 10,700 without justification, resulting in an average workload per vaccinator of only 53 vaccinations per day. In this case, staffing requirements have been over-estimated by a factor of 1 to 2, resulting in an inflated budget.

Madagascar budget included 13,938 vaccinators for the MR campaign targeting 4.2 million children. Additional staff included 6,969 data recorders, 6,969 security officers, and 42,868 social mobilizers. Based on the information provided in the POA, we recalculated staffing requirements and found a surplus of 3,366 vaccinators, 1,683 data recorders and 1,683 security officers, and 27,010 social mobilizers. To accommodate these numbers within the Gavi budget envelope, the country significantly reduced the per diem rates that each category of staff was entitled to as per the "Gavi Operational Guide for Madagascar" (more details are provided in the country report).

In the Liberia application, the information provided did not allow a full assessment of staffing requirements for the MR campaign targeting 1.96 million children. However, over-budgeting for HR costs was also evident in this application. For example, DSA was calculated for a total of 16,794 campaign staff, including 3,880 vaccinators and 11,640 other members of vaccination teams, while catering and transport allowances were calculated for 21,984 people. These inflated numbers, along with the high per diem rates, had a significant impact on the budget.

Issue 13. Over-estimated staffing requirements for campaigns, in some cases by a factor of 1 to 3

Recommendations:

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

- Ensuring inclusion in the application of information related to HR availability in the country and a description of how the country plans to mobilize the required additional HR for campaigns.
- Ensuring a greater focus during Secretariat pre-screening on planned quantities and unit prices.

b. HR costs

The shares of HR costs range from 39% in Syria MOH to 74% in the Liberia VIG budget, significantly above the allowed range of 20-30%. At least 50% of the budget was allocated to HR costs in Eritrea, Madagascar, Syria SIG, and Liberia MR budgets. As explained above, these high rates are largely driven by inflated numbers of campaign staff, including vaccinators.

Issue 14. High share of HR costs in total budget

Recommendations):

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

- Considering adapting HR guidance to programme specifics and service delivery strategies (routine vs campaigns / HPV vs others).

c. Input quantities and prices

Input quantities and prices were another major cost driver of the budgets reviewed in this round. For example, the number of workdays used in the budget calculation for different categories of staff in the Syria SIG application ranged from 15 days for logisticians and data officers, to 20 days for district officers, to 25 days for governorate supervisors and central level supervisors. No justification was provided for this unusually high number of workdays considering that the campaign duration was only 10 days.

In the Liberia application, unit prices were a major cost driver of the budget. They included high per diem rates ranging from US$50 for a driver to US$60 for a health officer to US$80 for a national coordinator, as well as some excessive unit prices ranging from US$20 for snacks to US$150 for a banner and US$500 for a (rented) vehicle regular maintenance. These high unit prices were partly due to the exchange rate used in the budget calculations of LRD 100 per 1 USD, while actual UN and market exchange rate was LRD 170 per 1 USD.

Issue 15. Inflated input quantities and prices

Recommendations:

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

- Requesting countries to provide justification and programmatic rationale for planned quantities and prices.
- Ensuring greater focus in pre-screening on planned quantities and unit prices.

d. Misalignment of budgets with POA

In several applications, key activities included in the POA and critical for the success of the campaign or introduction were either inadequately funded or unfunded, and no indication was provided as to whether such activities would be funded from other sources. In the application from Syria MOH, for example, no funding was allocated to microplanning, health Information system, waste management, and knowledge, attitude, and practices (KAP) survey. In addition, key activities such as advocacy, communication and social mobilization (ACSM) received only 2.2 % of the total budget, capacity building of health workers 4%, programme planning and coordination 1%, and vaccination cards were budgeted for only 1 million children out of a target population of 5.7 million.

In the Syria SIG application, a disproportionate level of funding was allocated to supervision and monitoring activities while limited or no funding was allocated to other key activities such as microplanning, waste management, post-campaign coverage survey, and mop up operations.

Uganda allocated 72% of its VIG budget to two activities, ACSM and strengthening of catch-up vaccination in the 2YL by orienting and supporting VHTs to conduct defaulter tracking, while key activities such as micro-planning and cold chain maintenance were left with no budget. Even though only 19 per 1000 people own a TV compared to 139 per 1000 owning a mobile phone, most of the ACSM budget was allocated to TV spots and TV talk-shows and no budget for engaging mobile telephone companies to send mass SMS messages to their subscribers.

Issue 16. Misalignment of budgets with POA resulting in some key activities being inadequately funded or unfunded.

Recommendation:

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

- Requesting countries to demonstrate that budgets are aligned with POAs and that programmatic rationale for the range, frequency and scale of planned activities is provided as part of the application.

e. Budget calculation assumptions

While countries provided calculation assumptions and details for most activities, there were numerous exceptions. Eritrea, Syria SIG, and Tajikistan applications provided only a cost and activity calculation worksheet, but no detailed calculation worksheet, making the budget reviews unnecessarily difficult. Liberia provided a budget narrative only for activities with more than US$100,000 budget (in line with Gavi minimum requirement, but contrary to international good practice).

Madagascar calculated activity-budgeted amounts using unit costs (calculated elsewhere) and related quantities, without disclosing calculation details. Since these unit costs are a summary of different input prices and quantities for each activity, the quality and value for money of the budget, including issues of classification of activities and input costs, cannot be adequately assessed.

Two countries (Liberia and Madagascar) included lumpsum amounts of approximately US$250,000 without explaining how these amounts were calculated or how they will be used.

Issue 17. Budget calculations assumptions and details are frequently missing.

Recommendations:

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

- Pre-screening budgets for lumpsum allocations, missing budget calculations assumptions and calculation errors.
- Revising the budgeting guidance to ensure that budget calculation assumptions and related narratives are included for all budgeted activities.

f. Cost-efficiency

Tajikistan chose PCV10 4-doses/vial (Synflorix) as their first presentation preference rather than the more cost-efficient PCV10 5-doses/vial (Pneumosil). The Gavi waste-adjusted price per fully immunized person is US$6 for PCV10 5-dose/vial compared to US$9.95 for PCV10 4-doses/vial, meaning that the cost of the latter is 52.6% higher. No justification was provided for choosing a more expensive presentation. The choice of relatively expensive antigen presentation might pose cost-sustainability issues in future, when the country will enter the accelerated transition phase or transitions completely from Gavi funding.

Issue 18. There is a need for countries to also consider cost-efficiency in the choice of routine vaccines for future cost sustainability.

Recommendation:

- Gavi and partners to continue encouraging countries to also consider cost-efficiency criteria in the choice of routine vaccines for future cost sustainability.

Governance

All the countries that applied had an ICC/HSCC and provided TORs. All applications, except Liberia and Syria SIG, were endorsed by the ICC and minutes of the approval meeting were provided. Signatures of participants were missing in one application. Two countries did not have a functional NITAG (Liberia, Madagascar). NITAG TORs were provided with only 3 applications and NITAG review of the proposal was documented in only 4 applications. For the Syria SIG application, it was not clear from application documentation if the SIG General Assembly could be considered as filling the functions of the ICC or the NITAG, or both. The Syria MOH documents (i.e. ICC TORs, ICC and NITAG minutes) were accepted in lieu, which did not allow a proper assessment of relevant governance mechanisms.

Issue 19. It is unclear how to assess current Gavi requirements for submission of ICC and NITAG TORs and minutes where the formal ICC or NITAG bodies are not established or functional and the EPI programme relies on different committees expected to perform similar functions.

Recommendation:

- Gavi and partners to explore valid alternative options to demonstrate immunization governance functionality and endorsement of proposals in the absence of functional ICC or NITAG.

Technical assistance

Technical assistance (TA) was requested by all countries applying this round, except Uganda and Liberia, and countries included some information on specific TA required. However, most TA requested was generic and only noted that the potential partner would be either WHO or UNICEF. Countries provided minimal to no information on in-country challenges that would particularly benefit from specific TA. Similarly, countries did not prioritise programme needs in relation to their Targeted Country Assistance (TCA) plans (e.g. Syria (MOH), Syria SIG, and Eritrea.)

Tajikistan, exceptionally, requested support for its advocacy, social mobilization, and communication strategy to assist communities and health-workers as outlined in its TCA plan, noting it as an important component when introducing new vaccines to address particular issues related to vaccine hesitance.

Issue 20. TA requests included in applications are generic and do not address EPI programmatic challenges or link to TCA plans, making it difficult to monitor achievements or evaluate impact.

Recommendations:

- Gavi and partners to work with countries to ensure that the requested TA addresses specific challenges and is linked to TCA plans prepared by countries.

Review Processes

a. Humanitarian crisis and conflict-affected situations

The two applications from Syria proved to be a test case for reviewing applications from countries/subnational settings experiencing ongoing conflict and protracted humanitarian emergencies. While some flexibilities are provided under the Gavi FER policy, reviewing these applications was particularly challenging. The IRC found that several basic requirements in Gavi application processes are poorly suited to the special needs and the complex context of these settings. Applying for support through normal Gavi mechanisms and undergoing a standard IRC review may not be the best approach for these situations.

Issue 21. The current FER policy, while helpful, is not sufficient to cater for all the specific requirements of countries affected by conflict and protracted humanitarian crisis.

Recommendations

- Gavi should consider expanding the FER policy and existing criteria and operational guidelines to further simplify the application process and provide more flexible, timely, and appropriate support to fragile and conflict-affected countries and subnational situations.
- The FER policy should include guidance on how the IRC should approach the review of proposals from conflict-affected countries and territories.

b. Late submission of essential documentation

Late submission, missing information and last-minute modifications of the application documentation complicate the review process and undermine the quality of the proposal. In this round, essential information for the budget reviews was often not available at the start of the review process. This included missing detailed calculation worksheets, missing information about campaign staff including vaccination teams, missing information about HR availability in the country, missing budget narrative and information about underlying budget calculation assumptions, and in some cases about how unit costs were calculated. This increased the workload and caused unnecessary delays as the reviewer had to wait for the additional information to be provided by the country.

The review was further complicated by the submission of updated revised versions of essential document (e.g. POAs, budgets) after the start of the review, with a substantial increase in time and effort required to complete the assessments. In addition, last minute modifications of the key documents often lead to inconsistencies, errors, and contradicting figures and statements within and between the documentation itself, further complicating the assessment and weakening the quality of the application.

Issue 22. **Essential documentation, particularly for budget reviews, was not available before the review started or revised versions were submitted after the start of the review, resulting in unnecessary extra work, delays, and inconsistencies.**

Recommendations:

- Gavi to ensure that each budget submitted for review includes a cost and activity classification worksheet, with budget assumptions and narrative for all budget lines, and a detailed budget calculation worksheet showing the input quantities and prices used in the budget calculation.
- Gavi to ensure that all essential documentation is provided before the start of the IRC review and that any additional information submitted after that date is only intended to fill information gaps (at the request of the IRC) and does not include modified versions of mandatory documents (e.g. Plans of Action or budgets.)

Best Practices

The IRC noted some best practices described by countries in their applications. These best practices could be shared with countries to inspire them to focus on improving these key planning and implementation areas.

- **Madagascar** presented segmented high-risk populations with specific strategies to reach them.
- **Eritrea** plans to conduct formative research with nomadic populations by embedded researchers to strengthen immunization access.
- **Liberia** proposed routine introduction of RCV and a catch-up campaign. The two budgets address improving efficiencies by integrating similar activities. Liberia's budget also discloses non-Gavi funding sources allowing assessment of adequacy and sustainability of the budget.

Conclusions

While this round was comparatively small in terms of the number of applications submitted and amounts requested, it was by no means an easy one. Several applications required lengthy reviews and intense discussions, as reflected in the issues raised in this consolidated report.

All three MR campaigns applications in this round were recommended for re-review, which raised the question of why MCV and MR campaign applications have an apparent low IRC approval rate. To address this question, the IRC reviewed the outcome of all measles applications submitted during the period from March 2018 to March 2021. The overall approval proportion of 67.4%, although below the average approval of about 80% for all applications, cannot be considered low. However, the analysis did identify recurrent issues and weaknesses with MCV and MR proposals that, if adequately addressed through technical support, could result in a more robust proposal, better review outcomes, and improved intervention implementation.

The two applications from Syria challenged the standard Gavi application and IRC review processes, revealing the limits of the current FER policy in addressing the specific issues and requirements of countries facing protracted humanitarian emergencies, particularly violent military conflict. The ongoing process of evaluation and review of the FER policy should consider these issues and ensure

that specific guidance is included in the revised policy on how the IRC should modify, where needed, specific technical requirements and review criteria.

The IRC shares the Secretariat's and partners' concern that the ongoing COVID-19 pandemic and accelerated deployment of COVID-19 vaccines through COVAX may pose a major challenge to Gavi, national EPI programmes and partner agencies. This could continue to postpone planned vaccine introductions or essential campaigns, as was reflected in a reduced number of applications, or in poor quality of the submissions due to constrained national capacities and limited external technical support.

We are all aware of the importance of ensuring the continuity of essential health services, including immunization, as a critical component of pandemic response. We recognize and appreciate the tremendous amount of work accomplished by Gavi, partners and countries under these difficult circumstances. The enduring commitment and continuous support by all parties are essential now more than ever to ensure that children continue to be vaccinated, EPI programmes strengthened, and high-quality applications submitted for Gavi IRC review.

The IRC maintains its commitment to high standards in reviews and to provision of expert advice in support of countries' endeavors to move forward and reiterates its commitment to work in Gavi's best interest and in the best interest of the countries.

Acknowledgements

The IRC would like to thank the Gavi Executive Team, especially the CEO and Deputy CEO, for their continuous support and responsiveness to key IRC recommendations. The IRC is also extremely grateful for the invaluable support provided by the FD&R Team. Lindsey, Verena, Sonia, and Anjana made this review possible and were always there to assist and support us through every stage of the review process.

Our sincere thanks go to all the Gavi Secretariat, SCMs and country team members, Focal Points, and Finance Team Members in particular. Their timely and informative pre-review screenings and the inputs during plenary sessions, often providing country-level perspectives, were particularly useful during plenary discussions and final decision-making. We are also very grateful to the Gavi IT team for ensuring the smooth conduct of this virtual IRC meeting.

Finally, we wish to recognize the essential contribution of our key technical partners, UNICEF and WHO. Their support to countries in preparing the applications, and their valuable contributions to the IRC reviews with timely contributions and clarifications on global policies and strategic issues, are always greatly appreciated.

Annex 1: List of IRC Members

Name	Nationality	Profession/Specialisation	Gender	Languages	Expertise
Caric, Aleksandra	Croatia	Independent consultant	Female	EN, FR	Measles, mass vaccination campaigns, AEFI surveillance and vaccine safety, programme management
Essoh, Alima *	Cote d'Ivoire	Regional Director	Female	EN, FR	Routine immunization, program management, coordination (ICC, NITAG), HPV, Rotavirus
Howard, Natasha	Canada, UK	Associate Professor	Female	EN, AR	HPV, Outbreak, epidemic and emergency response, Fragility, emergency, and refugees
Jaillard, Philippe	France	Independent consultant	Male	EN, FR	Supply chain and logistics
Kirigia, Joses Muthuri *	Kenya	Independent Consultant	Male	EN	Health Economics, Health Financing, Health Systems efficiency and productivity analysis, Health Research Systems
Lazzari, Stefano INTERIM CHAIR	Italy	Independent Consultant	Male	EN, FR	Outbreak, epidemic and emergency response, HSS, monitoring and evaluation, grant management
Lyimo, Dafrossa VICE-CHAIR	Tanzania	EPI Manager	Female	EN	Program Management, HSS, RI, Surveillance, M&E
Nkowane, Benjamin	Zambia	Independent Consultant	Male	EN, FR	Measles, epidemiology, mass vaccination campaigns, technical support for field operations in risk areas
Tibouti, Abdel	Morocco, Canada	Independent Consultant	Male	EN, FR, AR	Financial and Budget Analysis, Health Economics, Health Financing Strategies, Program M&E
Wilkins, Karen INTERIM VICE-CHAIR	USA	Independent Consultant	Female	EN, FR	Routine immunization, measles, polio, surveillance, planning & evaluation

* New member