Final Report Annexes (Vol. 1)

COVAX Facility and AMC Formative Review and Baseline Study

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Submitted by Itad
In association with 3ie

Contents

Annex A: Methodology

Annex A.1.1: Evaluation questions (EQs)

In addition to providing a baseline on priority initial results, the objectives of this formative review include providing answers to the following list of priority Evaluation Questions (**Error! Reference source not found.**Table A1) regarding COVAX design, implementation and results, and from these findings developing lessons and recommendations for course correction and future pandemics.

Table A1: List of EQs

EQ #	EQ
1	**Is the design of the COVAX Facility and AMC appropriate to enable achievement of intended outcomes?**
1.1	Is the intervention logic of the COVAX Facility and AMC documented, including specific strategies, causal links, the evidence based and assumptions?
1.2	What design revisions were made since the original design, in view of the dynamic nature of the pandemic and geopolitical context, and why?
1.3	How did various stakeholders contribute to the original design, and subsequent design revisions of the COVAX Facility and AMC, and what impact did this have?
1.4	Are any design revisions needed for course correction? What are the design lessons for future pandemic responses?
2	**Have the COVAX Facility and AMC been successfully set up and implemented thus far?**
2.1	**Are COVAX Facility and AMC operations appropriate, and working to facilitate implementation as intended?**
2.1.1	Are the COVAX Facility and AMC management structures and governance arrangements suitable and appropriate for a new entity working in an emergency setting?
2.1.2	How well is the risk management function working to identify and mitigate key risks to secure success?
2.1.3	Were the initial set up costs for the COVAX Facility and AMC reasonable and appropriate?
2.1.4	How were external stakeholders and COVAX partners engaged in the early implementation of the COVAX Facility and AMC, and how did this guide decision making to support governance, management and implementation?
2.2	**Have COVAX Facility and AMC programmatic areas been successfully set up and implemented thus far?**

2.2.1	To what extent was a resource mobilization strategy successfully implemented to secure resources for full and timely implementation of intended activities and achievement of targets?
2.2.2	How well has the market shaping approach been implemented to secure accelerated, sufficient and affordable vaccine supply?
2.2.3	To what extent was the approach and strategy for procurement and delivery successfully implemented, in line with targets and expectations?
2.2.4	To what extent has the allocation mechanism design ensured fair and equitable allocation of COVID-19 vaccines?
2.2.5	Was Gavi's role in providing support for country readiness and delivery articulated, agreed and implemented in a timely manner?
3	**To what extent are the intended outcomes and impacts of the COVAX Facility and AMC on track to being achieved?**
3.1	To what extent does the early emerging evidence suggest that intended intermediate outcomes as per the ToC are likely to be achieved?
3.2	To what extent does the early emerging evidence suggest that the intended long-term outcomes are likely to be achieved?
3.3	What are the unintended consequences and results beyond those identified in the ToC?
3.4	What are the barriers and enablers to achieving intended COVAX Facility and AMC results?
4	**What lessons can be drawn from the design and implementation of the COVAX Facility and COVAX AMC for course correction, Gavi 5.0, and future pandemic responses?**
4.1	What are the most important lessons learned through design and implementation of the COVAX Facility and COVAX AMC that have implications for COVAX Facility and AMC course correction?
4.2	What are the most important lessons learned through design and implementation of the COVAX Facility and COVAX AMC that have implications for Gavi 5.0?
4.3	What are the most important lessons learned through design and implementation experience that have implications for future pandemic responses?
4.4	What can be learned from other agencies, arrangements and contexts and applied to the COVAX Facility and/or COVAX AMC for the achievement of outcomes and impact?
4.5	What can be learned from select countries' experiences of securing maximum possible vaccination supply and coverage, and applied to the COVAX Facility and AMC for the achievement of outcomes and impact?

Annex A.1.2: Methods per module

More details on the evaluation methodology and specific methods per each module can be found in Table A2, below.

Table A2: Evaluation modules and methods

Module	Description	Methods	Specific methods				
			Contribution analysis	Process tracing	PEA	Benchmarking	Data verification/ analysis
Module 1 Right things (Design)	Interrogation of whether the COVAX Facility and COVAX AMC and its components were and remain relevant to the problems they were designed to address, by assessing: (1) whether the ToC/intervention design and revisions are appropriate and based on evidence and with clear assumptions; (2) what change in the pandemic or geopolitical context prompted design revisions; (3) whether and how stakeholders were involved in original design and subsequent revisions; (4) whether any design changes are needed for course correction; (5) whether lessons can be learned for future pandemic responses.	Development and in-depth analysis of an overall ToC and nested ToCs for five programmatic sub-areas; political economy analysis, using data from in-depth desk reviews of relevant articles, reports & studies and key informant interviews (KIIs).	X		X	X	
Module 2 Right ways (Implementation)	These EQs interrogate whether the COVAX Facility and COVAX AMC have been implemented successfully by looking at the following: (1) The operations of the COVAX Facility and AMC – by conducting an overall assessment of the extent to which the program has been implemented according to plans. A specific focus is given to the extent to which (a) the COVAX Facility and COVAX AMC management structures and governance arrangements are fit for purpose, (b) risk management processes have been fit for purpose, (c) the costs of setting up and implementing the COVAX Facility and COVAX AMC were reasonable and appropriate, and (d) stakeholder engagement and communication has been appropriate; (2) The implementation of COVAX Facility and AMC programmatic areas. This is focused on understanding if resource mobilization, market shaping, securing supply, equitable allocation and vaccine delivery support inputs, activities and outputs have been implemented successfully and as intended.	Mixture of process tracing and benchmarking based on a desk review of documents, individual and small group KIIs, and review of data.	X	X	X	X	
Module 3 Right results (Effectiveness and impact)	Seeks to understand the available evidence on the achievement of outcomes and goals (intended and unintended), the contribution of the COVAX Facility and COVAX AMC to these results, and the barriers and enablers to their achievement.	For analyzing achievement of outcomes and goals as well as COVAX's contribution, publicly available quantitative data or data shared by the Gavi evaluation unit relating to allocation, supply and distribution (intermediate outcomes in the ToC at Annex B.1) and vaccination coverage (outcome in ToC at Annex B.1) has been used. Qualitative data from KIIs and country case studies has also been used to assess COVAX's contribution to ToC components. LICs and LMICs were analyzed separately since income level proved to be a good way to classify and analyze the set of COVAX AMC countries. The analysis of LMICs excludes India and other outliers such as island economies. A rapid search of the most relevant secondary literature is employed to discuss COVAX's contribution to reduction in morbidity and mortality (Box 9, main report).	X				X
Module 4 Learning	Summarizing and prioritizing lessons learned, building on the work done under the earlier modules (to inform immediate course correction) and on what can be learned from other agencies, arrangements and contexts and applied for the achievement of intended outcomes and impact. This will include opportunities for transformative learning, for instance on the overall design of the COVAX Facility and AMC and the contextual constraints which influence this design, and implications for future pandemic preparedness.	In-depth systematic review of findings across all three modules, with consensus-building meetings to identify the top lessons learned relevant for course correction, Gavi 5.0/5.1, and planning for future pandemics. Further inputs sought on the lessons during sense-making workshops in October/November 2022.	**Synthesis and prioritization of lessons learned:** **Operationalization, Gavi 5.0/5.1), future pandemic preparedness**				

Annex A1.3: Data collection

The data collection methods used in the Formative Review and Baseline Study are detailed in this section. The country case study data collection approach is included in the main report body, and is therefore not included here.

Global KIIs

A total of 76 stakeholders were interviewed in KIIs during the data collection period (see Annex G for details). Key Informants (KIs) were purposively sampled based on the relevance of their roles to the different EQs and to ensure that different world views, interests and perspectives were incorporated in the data collected. A master list of 203 stakeholders was developed based on the mapping exercise completed during the Evaluability and Evaluation Design phase, categorised by the stakeholder groups outlined in the evaluation Communications and Learning Plan. From this list, module leads then identified priority key informants based on the strategic and/or operational relevance of their roles to EQs, as well as a number of reserves to be invited to interview by a certain date if the priority informants had not responded. Stakeholders were contacted in May and June, and a second wave of invitations was sent out from mid-June onwards, based on 'snowball' recommendations from KIs. The majority of interviews were conducted remotely using Microsoft Teams, and were recorded and transcribed. Eight interviews were conducted in-person during evaluation team member visits to Geneva, at the beginning of June and in mid-July.

Group interviews took also took place with Senior Country Managers (SCMs) from the Gavi Secretariat, to source views on COVAX Facility and AMC engagement with participating countries, including vaccine delivery support. All SCMs were invited, following initial contact from Gavi's Evaluation and Learning Unit (EvLU). Three virtual group interviews took place in July and August 2022 involved 12 SCMs in total. These sessions were facilitated by the evaluation team using an online Miro whiteboard to invite written contributions and verbal responses to a number of key questions.

Further interviews took place following the receipt of feedback on the Interim Findings Report, between October and November 2022. A number of comments underscored the importance of engaging a broader constituency of AMC92 country voices to strengthen the evidence base. Another window for data collection – specifically targeted at AMC92-participating country representatives – took place in the run up to the finalisation of the draft study report. Sampling was purposive, prioritising countries of thematic interest regarding vaccine delivery support, and countries who had actively engaged with AMC fora and SCMs during the evaluation period, and took place in close coordination with the Gavi EvLU and SCMs. At the same time, a number of repeat interviews took place with key Office of the COVAX Facility staff to better understand feedback on the Interim Findings Report and solicit additional evidence in certain areas.

Global survey

Web-based surveys were used to maximise inclusion of a wider breadth of voices and provide an additional data triangulation point, which captured a total of 45 stakeholders' written responses. Questions were based on those from the global KII guide and were formulated to collect qualitative data from both multiple choice and free text answers. The survey was hosted on SurveyMonkey in English, French and Spanish and the link was sent to wave 1 and 2 KIs who did not respond to requests for KIIs, as well as being shared during two COVAX participant sessions in mid-June 2022. Between 3rd June and 9th August 2022 34 responses to the survey were collected. An additional and shortened survey targeted at AMC92 representatives, available in three languages as above, was subsequently administered

between 28th October and 16th November and the link shared alongside email invitations for KIIs, which elicited 11 responses.

Document review

A total of 1,002 documents were reviewed by the evaluation team (see Annex F). In addition to documents sourced and reviewed during the Evaluability and Evaluation Design, further documents were sourced from the EvLU team, with requests for information, documentation or data administered through a shared tracker spreadsheet. The majority of requests for documentation or data were fulfilled, and where documentation was unavailable or subject to confidentiality restrictions, key Office of the COVAX Facility staff were recommended as points of contact for follow up (either via email or during KIIs). Documents were also sent proactively by the Gavi team. Evaluation team members also sourced academic and grey literature independently. Documents were logged, categorised and indicated for priority review by module leads or other relevant team members as they were sent over and stored on a secure server.

Sense-making workshops

Five sense-making workshops were held between the end of September and beginning of November 2022, capturing feedback from a total of 40 stakeholders: Office of the COVAX Facility and Gavi stakeholders (22 participants across two workshops), Civil Society Organisations (CSOs) (4 participants), vaccine industry, AMC donor representatives and technical partners (10 participants), and Board/PPC representatives (4 participants). Following the submission of the Interim Findings Report, which included ten emerging lessons on the COVAX Facility and AMC design, implementation and results to date, a number of 'sense-making' workshops were planned to bolster stakeholder engagement and gather feedback on the lessons in particular. The remote workshops were organised so that homogenous or similar stakeholder categories were grouped, to foster quality of engagement, and were facilitated by members of the evaluation team in one-hour slots, using an online whiteboard to visualise feedback against each lesson. Participants were invited to contribute in writing or verbally, and the Miro board was locked one week post-workshop, and the inputs captured.

Rapid reviews

A rapid review ran alongside and separate to the evaluation, which focused on one specific area of the ToC where emerging evidence suggested a barrier to meeting COVAX Facility and AMC objectives. The intention of the review was to provide rapid findings where they may be of use for decision making. Following consultations and feedback from the Gavi CET and stakeholders from the Office of the COVAX Facility, the question was decided upon for the rapid review: "*To what extent is the availability of financing for the costs of delivering COVID-19 vaccines in AMC92 countries acting as a barrier to vaccine roll out at the country level, and is this being sufficiently addressed through Gavi COVID-19 Vaccine Delivery Support?".*

The rapid review was designed between March-May 2022, with inputs from the module leads to ensure alignment and complementarity of data across the rapid review and main evaluation. Quantitative and qualitative data was collected between June-August, including extensive quantitative review of data on vaccine coverage, supply and funding availability (Gavi and other sources), and eight Key Informant Interviews with stakeholder from Gavi and country representatives from Burkina Faso, Ethiopia, Ghana and The Gambia. The rapid review report was shared with Gavi in early September. The findings from the rapid review were triangulated with other evidence around vaccine delivery support, pertaining to Module 2 (**Error! Reference source not found.**). Two further rapid reviews were planned for Q4 2022 and Q1 2023, but following discussions with Gavi on potential utility of findings in the shifting

operational context and based on experience implementing the first rapid review, a decision was taken to repurpose resources towards the main thrust of evaluation work.

Stakeholder engagement

The evaluation team participated in the COVAX Country Facing (UNICEF/WHO regional and country offices) session on 21st June and at the Participant Session on 28th June to provide updates on the evaluation, share the link to the web survey, and discuss next steps and future opportunities for engagement.

Following the submission of the Interim Findings Report on 25th August 2022 and the receipt of initial written feedback, the evaluation team met the Evaluation Steering Committee (ESC) and the Evaluation Advisory Committee (EAC) on 15th and 22nd September respectively. An opportunity to discuss emerging feedback with the COVAX Leadership Team also became available on September 14th.

Further engagements were held in Q1 2023. Following the submission of the draft final report in December 2022, further feedback on the report was given at a COVAX Leadership Team meeting on 11th January 2023. The evaluation team met the ESC again on 25th January. An interactive stakeholder engagement session with a focus on evaluation recommendations was held on 28th February, with over 50 stakeholders attending from across a number of groups: Office of the COVAX Facility/Gavi, COVAX technical partners, CSOs, vaccine industry, SFP and AMC representatives. This session was primarily used to solicit further inputs on the draft evaluation recommendations, to support their specificity and utility.

Annex A1.4: Risks and limitations

This table (Table A3) expands on section 1.5 in the main report, and details evaluation limitations and risks, and mitigations put in place or planned.

Table A3: Evaluation risks/limitations

Risk/limitation	Mitigation/comment
Given the agreed timestamp for this evaluation (up to December 2021), key contextual shifts affecting the COVAX Facility and AMC in the first quarter of 2022 are precluded, but it has been difficult to consistently draw this distinction in stakeholders' minds during data collection of their inputs. There is an associated risk that some stakeholders will perceive the evaluation as less useful or consider findings 'out of date', given a focus of stakeholders and Gavi decision makers on more recent events.	The time period that this evaluation is concerned has been consistently outlined during all data collection. While the scope of this evaluation and this report is up to December 2021, references to key events following this time period, where contextually appropriate, are included in the text. While it was initially envisaged that equal focus would be given to learnings and recommendations for (1) course correction, (2) Gavi 5.0/5.1 and (3) future pandemic preparedness, during the course of the evaluation and the team's interactions with a wide breadth of stakeholders it has become very clear that the focus of key decision makers' and countries' minds is on what the response to the next pandemic might look like and the role a 'future COVAX' or equivalent could play. Moreover, given the utility focus underpinning recommendations and learnings, it is the view of the evaluation team that these are sufficiently applicable to the shifting context.
Although the interim findings submitted on 25 August 2022 was able to feed discussions at the December 2022 Board meeting and the preceding Program and Policy Committee (PPC) meeting, these findings were not able to be refined and further elaborated through feedback, sense-making workshops and further analysis in a timely manner. While the more developed evaluation conclusions and recommendations will be available to the March 2023 Board meeting, they may come too late to influence critical decisions around Gavi 5.1/integration and other key topics.	Opportunities have been explored with the Gavi CET for interim findings to be discussed with COVAX leadership. A discussion was held in mid-September, and another session will take place in mid-January 2023. The Itad evaluation team remain open to other opportunities for leadership touchpoints outside of the Board cycle, where CET may be able to secure time on the agenda to expand on the conclusions and recommendations presented in the report. A stakeholder engagement workshop (90 minutes) will also take place in February 2023.
The pandemic has evolved during the period of COVAX Facility and AMC implementation, therefore necessitating changes to the operating model and, in turn, its ability to be evaluated.	The evaluation methods and approach are grounded in an understanding of the importance of context to implementation and results, supported by stage-appropriate EQs. Regular updates from Office of the COVAX Facility and the Gavi CET on design and strategy changes and status of risks have supported the evaluation team's understanding, which is detailed in this report.

Given the breadth of stakeholder interest in the COVAX Facility and AMC, and the acute demands on the time of stakeholders working in the global health sector during the COVID-19 pandemic, there has been an ongoing risk of limited and unrepresentative/unbalanced involvement of broader stakeholder groups (i.e. beyond the core partners directly engaged in implementing COVAX) in data collection.	The evaluation team have adopted a robust, practical approach with methods which have been selected to flex to stakeholders' availability to engage in the process, and – through strong internal coordination and tracking of data collection requirements, stakeholder contacts, and coordination with other evaluation teams (EHG) – have attempted to minimize duplicative requests. Gavi's CET has been proactive and helpful in informing key stakeholders on the purpose of the evaluation and highlighting upcoming opportunities for group engagement. Purposeful sampling within each stakeholder group has been used to help promote balanced capture of views to represent each constituency and to ensure we have a transparent process for targeting (to help demonstrate independence and objectivity). The balance in participation among stakeholder groups was monitored throughout data collection and reasons for non-participation were documented. Low response rates were observed in particular among AMC92 country representatives, both pre- and post-Interim Findings Report data collection. Additional measures were taken to encourage further AMC92 responses between Oct-Nov 2022, detailed in Annex 1.3 (Global KIIs), but a limited amount of additional participation persisted. The evaluation team posits that this speaks to overstretch across many stakeholders involved in health responses and interventions in countries, and low bandwidth or potentially interest to engage in continued discussions around COVID-19 vaccine supply when the worst of the pandemic is perceived to be over.
Delays in confirming case study countries affected the timing of the window in which data collection was carried out, analyzed and integrated. Rather than integrating country-level data into the Interim Findings Report as originally planned, country case studies took place from August to November 2022, with the intention that they would feed in to the (draft) final study report. The late receipt of some country case study data from Ministry of Health stakeholders in Senegal and India meant that not all country case study findings were analyzed 'in the round', with some evidence being integrated at a later stage in the refinement of findings and conclusions.	While the revised country case study timeline has stretched resources in Q3/Q4 in terms of project management, coordination and analysis, the Itad team is confident that country case study findings have been integrated, and late receipt of evidence from India and Senegal relating to certain stakeholders has largely aligned with existing findings or nuances.
Analysis of vaccination coverage of all vulnerable groups and country readiness to accept and administer COVID-19 vaccines was limited by data completeness, availability, quality and appropriateness.	For these outcomes and for analysis of barriers, enablers and unintended consequences, the analysis draws primarily from KIIs and country case studies.

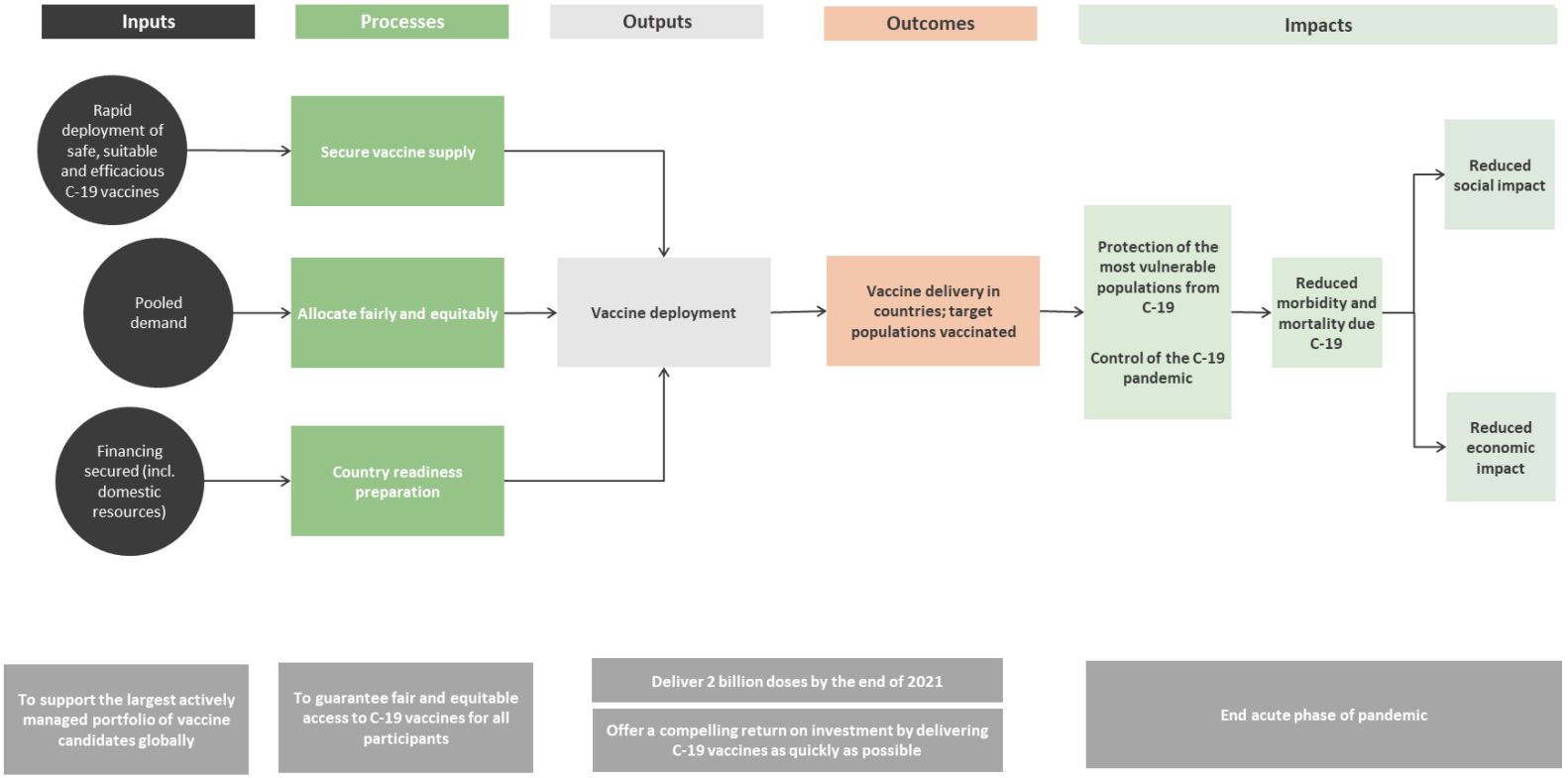
Given the significant stakeholder interest – from a broad group – in this evaluation, there has been an ongoing risk around management of stakeholders' expectations on what the evaluation is able to deliver in terms of its scope. Detailed comments received from a number of constituencies of stakeholders on the Interim Findings Report pointed to a number of issues and areas for clarification which are out of the evaluation's scope. This led the evaluation team to pre-empt potential risks in relation to the final study report, where stakeholders feel their needs in terms of evaluative information are not being met, potentially affecting the utility and perceived credibility of findings.	Itad welcomes advice from CET and the EAC on how to land the evaluation findings effectively and to manage expectations among COVAX stakeholders around the scope. A clear articulation of evaluation scope is included in this report and associated summary products. Additional opportunities for stakeholder engagement (such as sense-making workshops) have supported increasing understanding of the evaluation scope. The Itad team noted good attendance from some of the stakeholders with more robust or out-of-scope comments at recent sense-making workshops, and will ensure their inclusion in Q1 dissemination/engagement activities.
The evaluation space around the global COVID-19 response mechanisms is busy. A number of other evaluation reports have been published or will be made available in coming months, which increases the risk of findings of this evaluation phase being 'lost', and the risk of stakeholders conflating findings and perceptions of the respective evaluations.	The evaluation team will continue to work with Gavi's CET, SteerCo reps and the EAC on messaging and framing of findings, conclusions and recommendations in the final study report, as well as on ensuring methodological robustness is clearly explained. Itad has also proposed the idea of a panel bringing together key stakeholders behind some of the high-profile evaluations, which would provide a constructive space for engagement in a clear and external-facing manner and would help to showcase the contribution of the respective evaluations to ongoing debates on future pandemic responses (for example).

Annex B: Module 1 (Design)

Annex B.1: Theories of Change

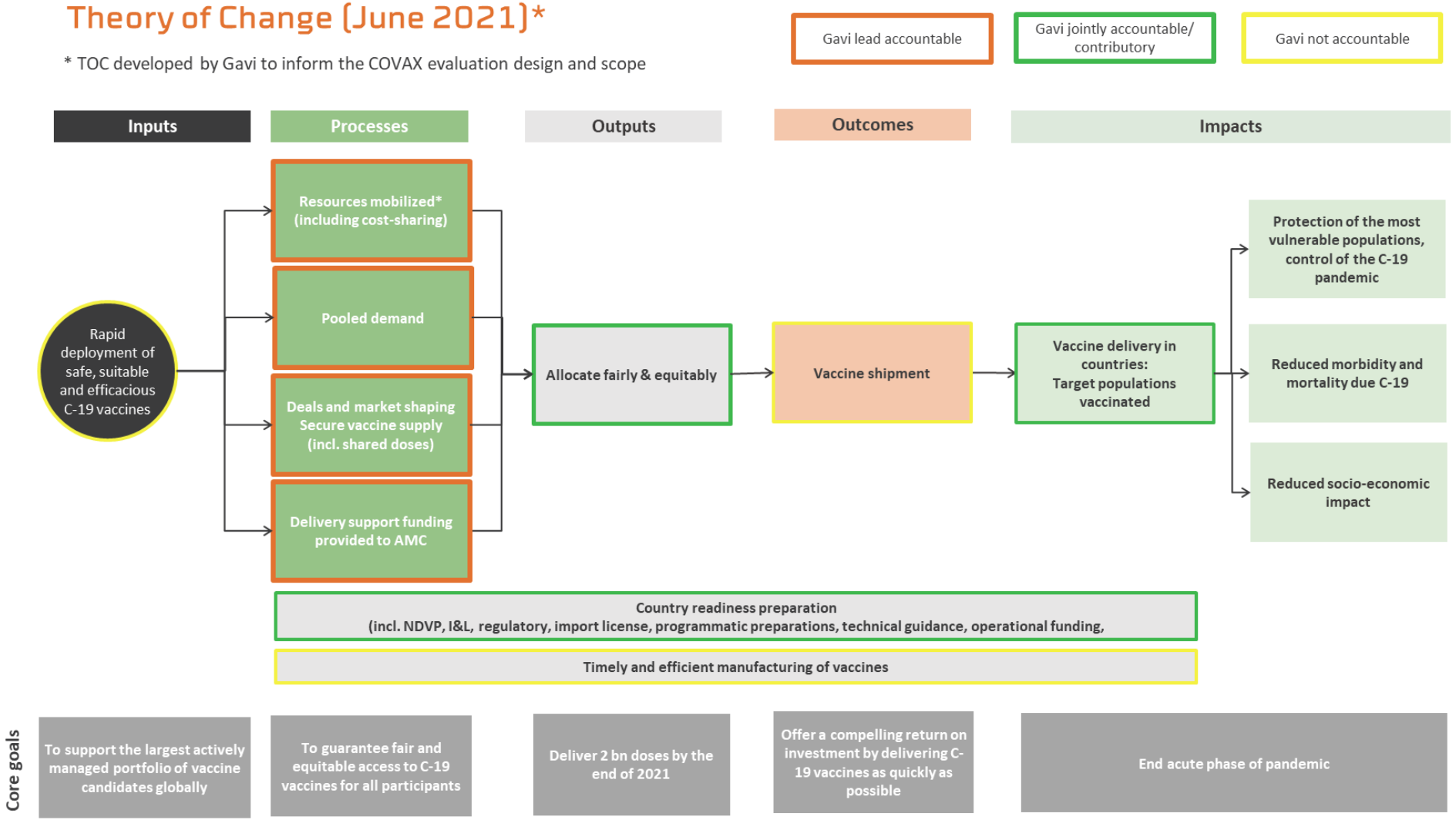
Theory of Change (December 2020)*

* TOC developed by Gavi to inform the COVAX reporting framework. Not exhaustive but focusing on key components of the COVAX Facility and AMC

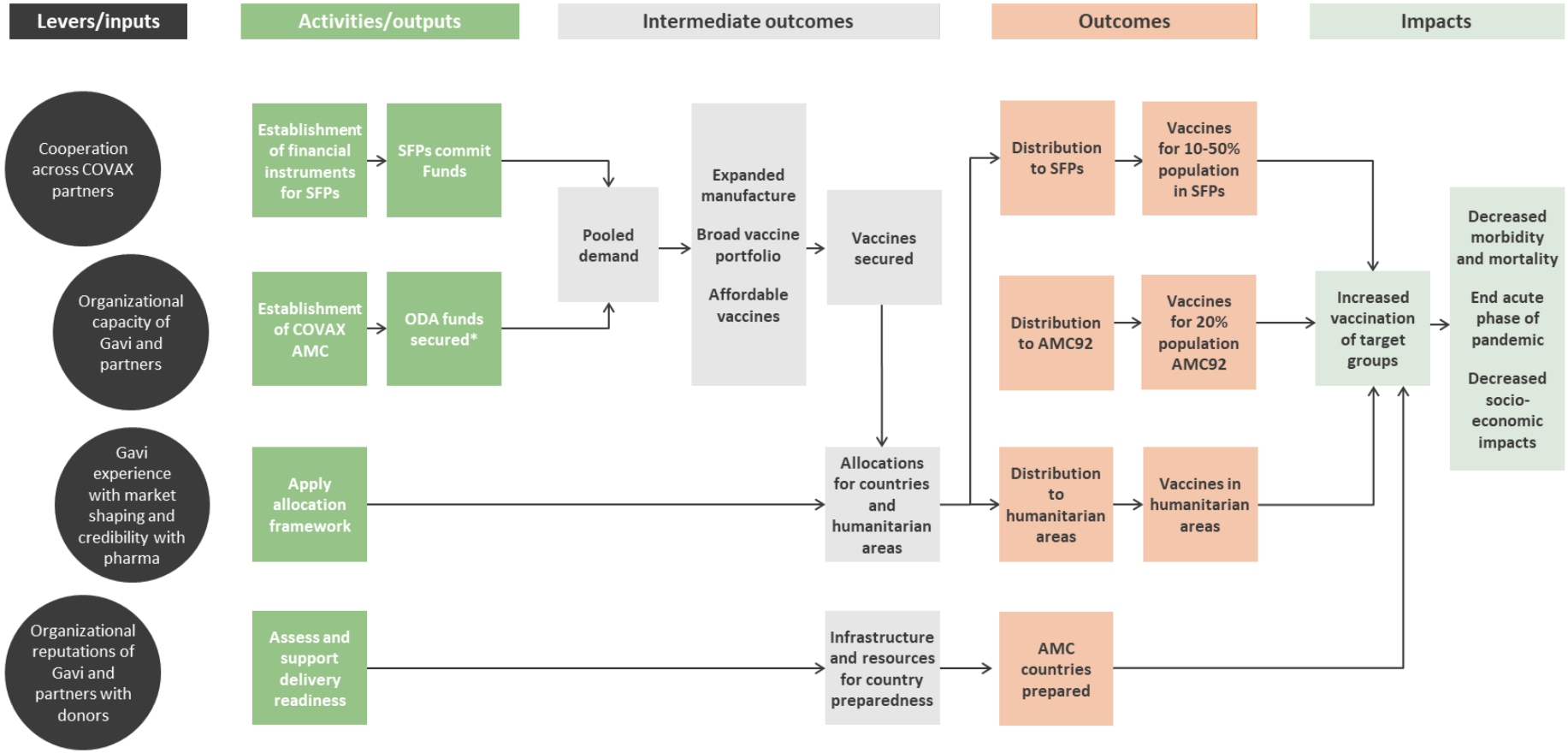


Theory of Change (June 2021)*

* TOC developed by Gavi to inform the COVAX evaluation design and scope

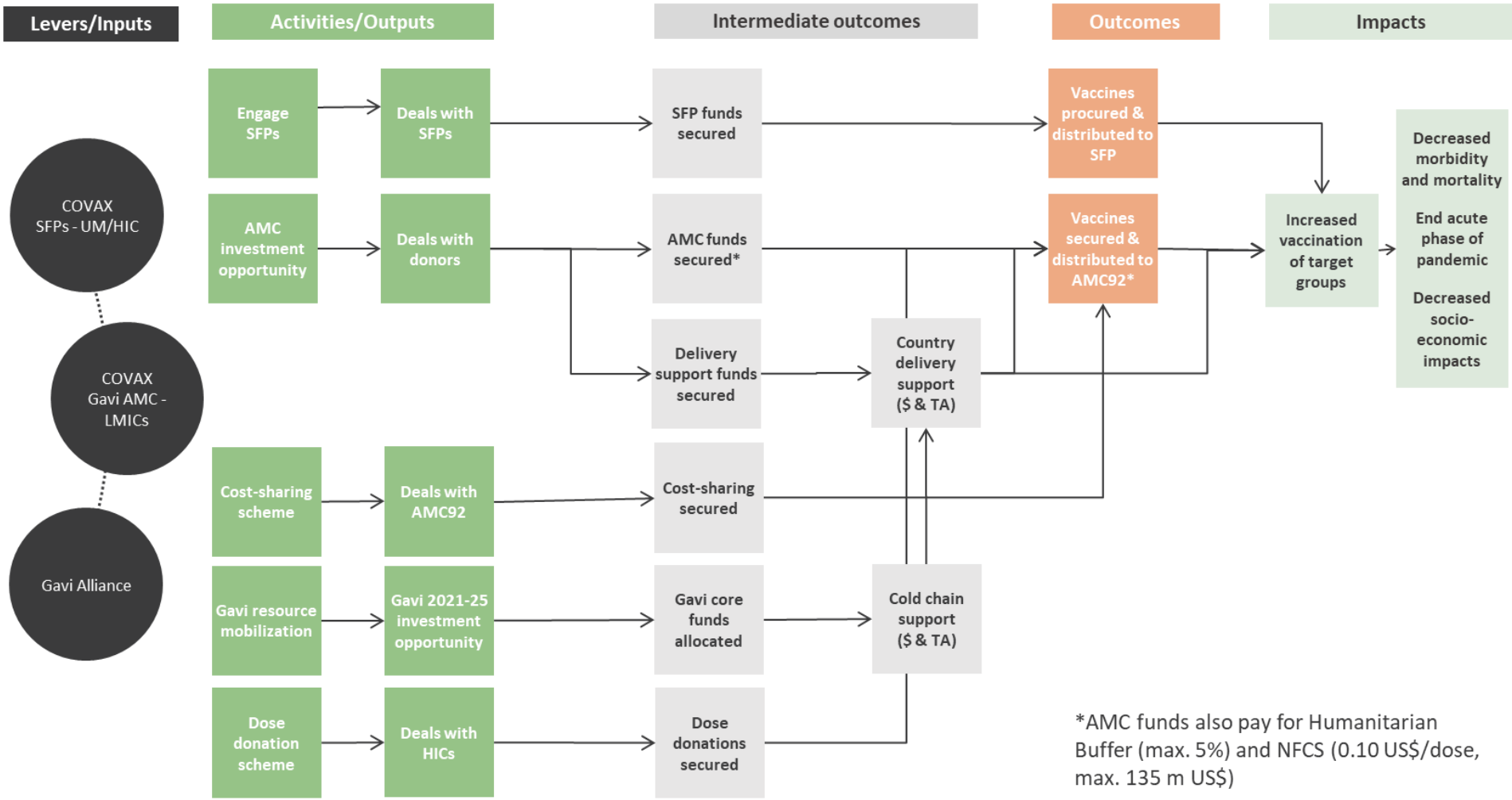


Theory of Change (December 2021) for the Baseline Study



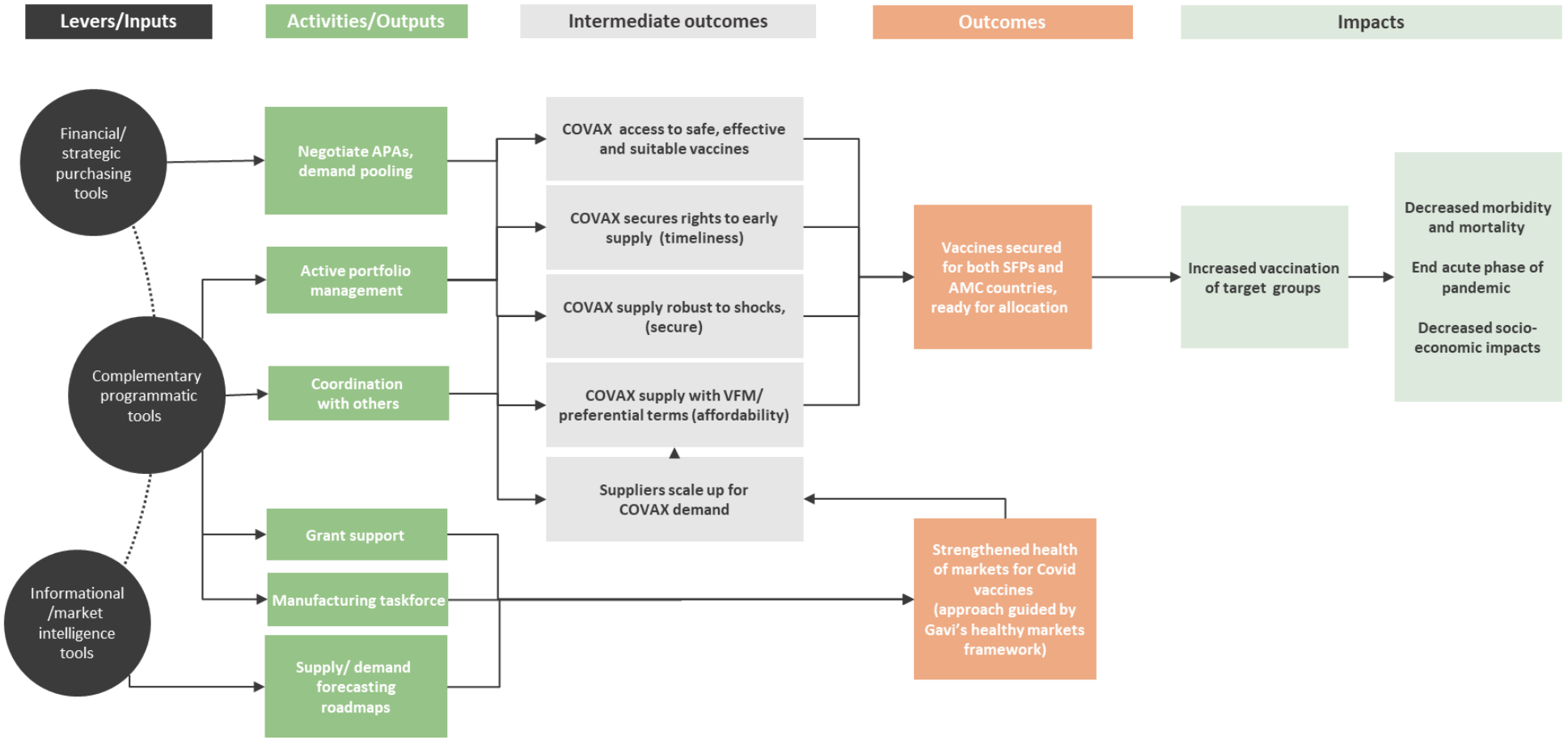
* ODA in the form of dose donations added from 2021

Provisional Nested Theory of Change for Resource Mobilization

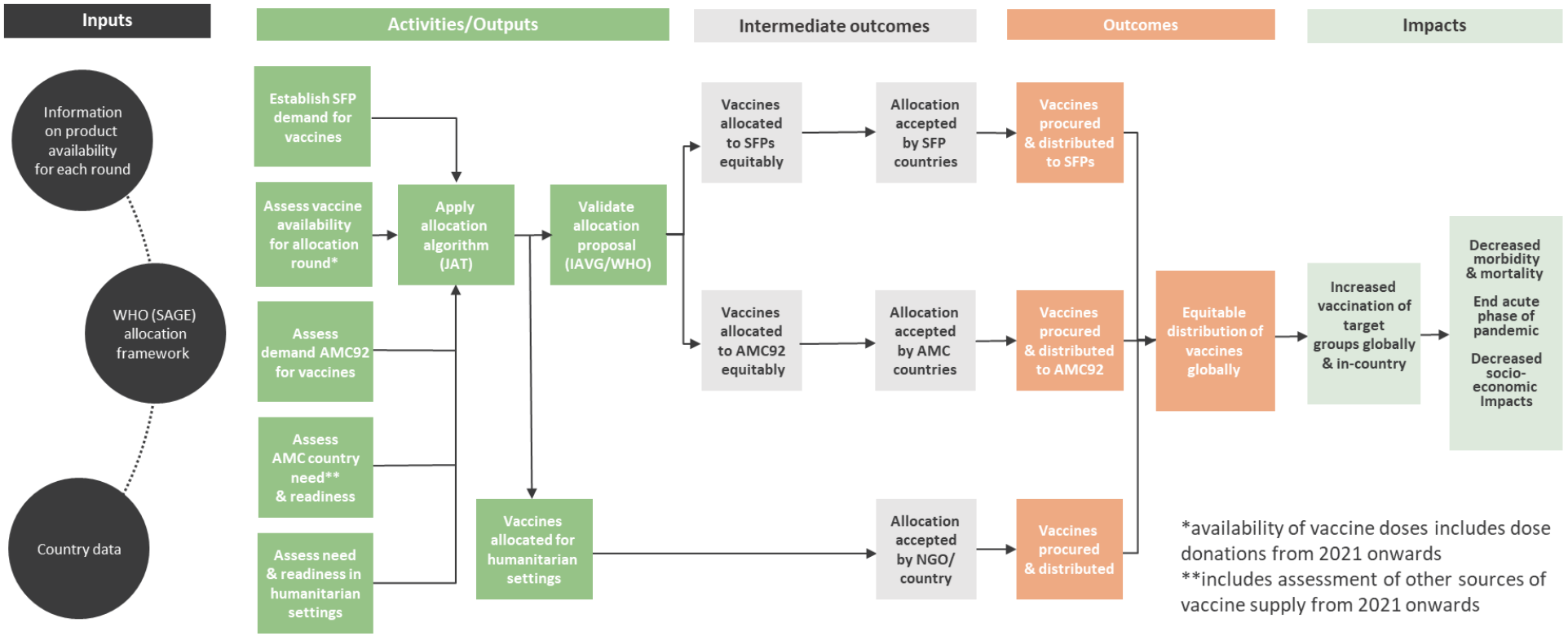


*AMC funds also pay for Humanitarian Buffer (max. 5%) and NFCS (0.10 US$/dose, max. 135 m US$)

Provisional Nested ToC for Market Shaping and Securing Vaccine Supply for COVAX

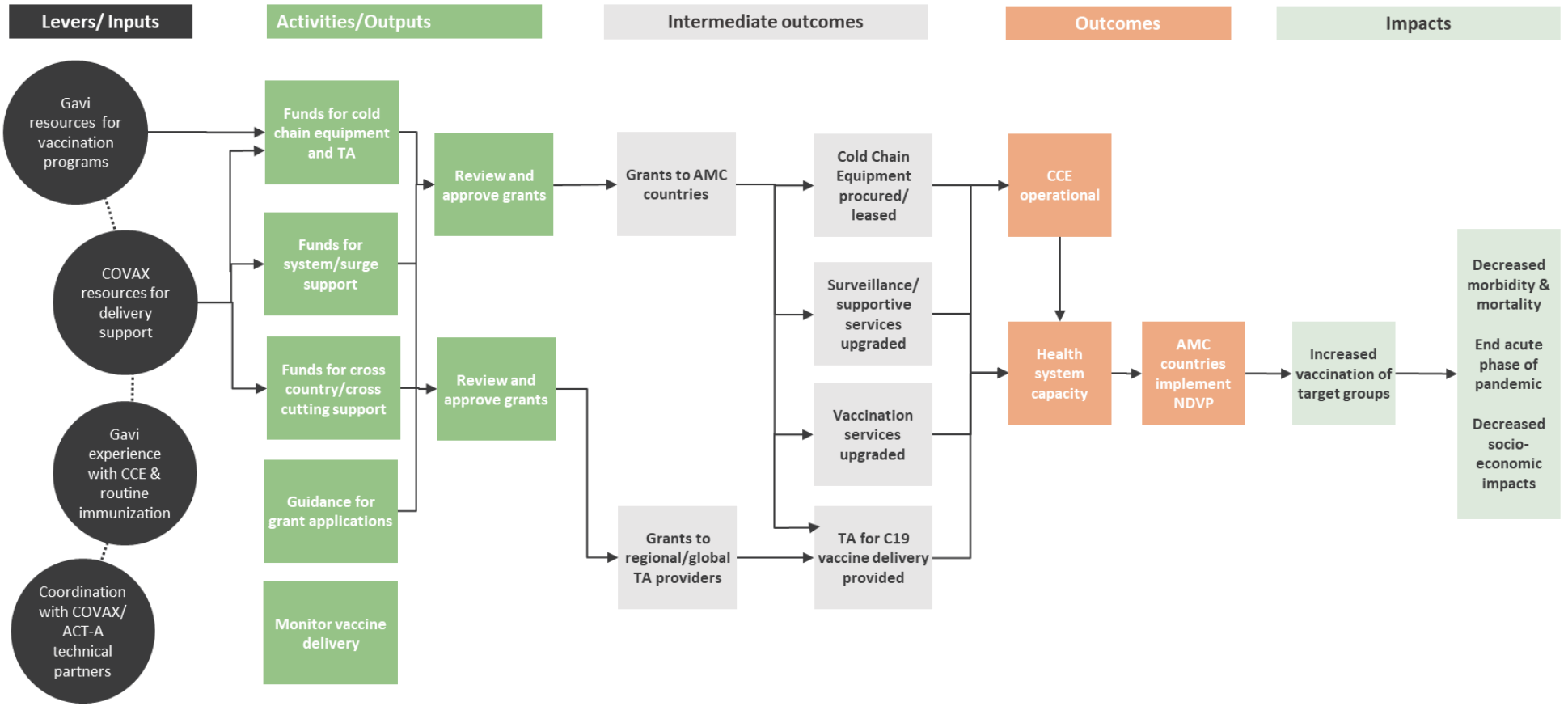


Provisional Nested ToC for Fair Allocation



*availability of vaccine doses includes dose donations from 2021 onwards
**includes assessment of other sources of vaccine supply from 2021 onwards

Provisional Nested ToC for Country Readiness and Delivery Support



Annex B.2: COVAX assumptions table

The following table, Table B2, details the assumptions underlying the COVAX Facility and AMC ToC in the previous sub-section, and a colour code indicates whether the assumption is considered to be held, partially held, not (or minimally) held, or is unclear.

Table B2: COVAX assumptions

Assumptions	Rating[1]
Overall[2]	
Ethical and normative consensus that such a mechanism is required, including from a majority of WHO Member States across income categories, the UN and multilateral system, and civil society	
Political will from across stakeholder groups to create such a mechanism, with solidarity between countries to jointly tackle the pandemic using this mechanism	
Availability of financial resources and instruments to operate at the scale required to incentivize participation by public and private sector partners in such a mechanism	
Presence of organisations/agencies with the mandate, willingness and capacity to implement such a mechanism	
Effective vaccine becomes available	
COVAX resource mobilisation[3]	
It is possible to accurately estimate the required level of investment to achieve COVAX objectives	
A broad range of stakeholders engage to mobilise global support for full and timely financing of the COVAX Facility and AMC	
HICs and MDBs/IFIs are willing to fully fund the COVAX AMC and COVID-19 Vaccine Delivery Support (CDS) to achieve COVAX objectives	
AMC participants are willing and able to meet cost sharing requirements	N/A[4]
Dose donations can be provided in line with desired principles to support overall resource mobilisation objectives	
Ensuring vaccine supply	
Vaccine manufacturers are willing and able to engage in discussion and negotiation with the COVAX Facility, including through APAs	
The COVAX Facility has sufficient resources available to enter into a sufficient number of APAs to create a broad portfolio of vaccines, as intended	
Vaccine manufacturers respond to COVAX Facility and AMC 'pull' mechanisms to signal and guarantee demand by scaling up vaccine manufacturing capacity and providing vaccines affordably	
Vaccine manufacturers respond to 'push' mechanisms by CEPI and others (invest in R&D, manufacturing capacity, fill and finish capacity), as well as COVAX Facility APAs, by scaling up vaccine manufacturing capacity	
The intended scale up in manufacturing can happen in time to achieve COVAX objectives	

Assumptions	Rating[1]
Vaccine delivery to countries/humanitarian settings	
Governance bodies (e.g. R&D and Manufacturing Committee, Technical Review Group, Market Sensitive Decisions Committee) provide well rounded guidance on vaccine portfolio and product selection	
The active management of a portfolio of vaccines mitigates supply risk to Gavi and secures supply to a range of vaccines that are suitable across COVAX participant country contexts	
Countries respond to COVAX communications on indicative supply quantities/timelines by planning for in-country delivery, distribution and roll-out	
The AMC Delivery Partner (UNICEF in collaboration with PAHO) and SFP Procurement Coordinator (UNICEF) fulfil roles and responsibilities in line with agreements and expectations	
Vaccine delivery support	
AMC countries have systems and capacities in place to take receipt of and distribute/roll-out COVID-19 vaccines	
Countries are willing and able to apply for and utilise COVID-19 Vaccine Delivery Support	
Tools and processes (e.g. VIRAT) accurately identify TA and cold chain needs, which are reflected in COVAX TA and cold chain plans	
WHO, UNICEF and other TA providers at country level fulfil roles and responsibilities for the provision of COVID-19 Vaccine Delivery Support, in line with agreements and expectations	
Gavi COVID-19 Vaccine Delivery Support is aligned to country needs, and complimentary and adds value to support from others	

Annex B.3: COVAX Humanitarian Buffer

The design of the COVAX Humanitarian Buffer aims to cover populations that may not be covered through the main allocation mechanism for vaccines, including refugees, Internally Displaced People, asylum seekers[1]. As of late 2020 most national vaccination plans did not include these vulnerable groups, and the Inter-Agency Standing Committee estimated that 167 million people were at risk of exclusion from COVID-19 vaccination. The Gavi Board agreed to the principle of a humanitarian buffer in December 2020, recognizing that Gavi had prior experience with collaboration around humanitarian settings[2]. The COVAX Facility secretariat, after consultation with IASC, civil society, WHO and UNICEF engaged a "COVID-19 Working Group" under the IASC (chaired by UN OCHA) to finalise policy frameworks and design with COVAX partners. Gavi would negotiate a solution to indemnity and liability issues, MSF developed the application form and ICRC developed terms of reference for the IASC allocation body[3]. In March 2021, the Gavi Board approved the principles of a COVAX Humanitarian Buffer, including 1) allocation of 5% of AMC funding to the buffer, keeping a 'real time' stockpile[4]; 2) measure of 'last resort', i.e. priority would be inclusion of humanitarian settings in national vaccination plans; 3) equitable allocation would mean 20% of any given target population as per SAGE recommendations; 4) application would only be available for COVAX participant countries and humanitarian agencies only – not for non-participating countries; and 5) delivery funding would not be included, and left to other COVAX partners[5]. In addition, assumptions for successful implementation included availability of vaccines for the buffer as well as additional funding for vaccination delivery; I&L waivers or insurance through COVAX for humanitarian agencies unable to indemnify manufacturers and regulatory approval and import licenses to be organized by applicants and UNICEF.

Implementation of the Humanitarian Buffer was slow, complex, and has received considerable external criticism[6]. First, the application system was delayed until June 2021 pending resolution as to which legal entity would apply, host governments or humanitarian agencies. The lack of transparency of the application process was criticized by the humanitarian field[7]. Second, I&L waivers took time to negotiate (4 manufacturers as of end 2021[8]), drawing criticism from across the humanitarian field[9][10] including the IASC Covid 19 Working group. The withdrawal of an MSF application for Northern Syria added to reputational damage for Gavi, seen a reluctant to join the sectors advocacy efforts vis-à-vis manufacturers. Third, unavailability of delivery operational costs through the COVAX Humanitarian Buffer proved another barrier, as these costs are higher than in routine contexts. Funding was meant to come from the UNICEF/ACT-A Humanitarian Action for Children (HAC) appeal, which raised less than expected, plus was itself challenged in funding NGOs directly[11]. Fourth, operational challenges in humanitarian settings, include the complexity of regulatory approval for non-state actors and cross border supply lines, 'last mile' delivery in terms of location, safety, and security especially when supply lines are part of a conflict, and unpredictable community demand for vaccination. Gavi has actively monitored the Humanitarian Buffer to inform Gavi's routine immunization, especially 'zero dose' strategies which rely on non-state partners.

As of end 2021, out of eight applications, six have been approved, one rejected and one withdrawn, and only one application resulted in delivery (Iran). Two others were delayed due to I&L issues (refugees in Thailand and non-government-controlled areas in Myanmar)[12]. Humanitarian organisations have not been supported through the buffer. The contribution of the COVAX humanitarian buffer has been minimal: it delivered 1.6 million doses to Iran[13], against a target of 35 million people (20% of the estimated 167 missing people) and 5% of the total vaccine AMC allocation. There is no information on actual vaccine uptake among Afghan refugees in Iran. That said, COVAX regular programming did contribute to vaccinating 'missed populations'[14]. For example, twenty-eight COVAX participants reach refugees through their

national vaccination plans. UNHCR reported that refugees and asylum-seekers were vaccinated in 91 countries monitored[15], which includes doses from COVAX and other sources, e.g. Colombia reaches Venezuelan refugees with self-financed doses.[16]

In conclusion, the COVAX Humanitarian Buffer has not been implemented to the extent intended nor made a substantial contribution to reaching missed populations. Several external reviews[17] confirm this conclusion and Gavi recognizes that the need for improvement to be useful in a next pandemic or moving forward.[18]

Annex B.4: Indemnity and liability and No-Fault Compensation Scheme

The problem analysis for the indemnification of liability (I&L) is clear and real. Manufacturers cannot get the usual insurance for any losses resulting from vaccine side effects without extensive data on vaccine safety. In the absence of insurance or indemnification, manufacturers face commercial risk and may sell later (until safety data exist and the product receives WHO prequalification) or at a higher price (to pay for the extra cost of self-insurance), thus preventing early and equitable access to vaccines. This was not just an issue for COVAX participants, but also for countries purchasing vaccines directly[1].

The COVAX Facility developed I&L arrangements from the earliest design, demanding participants to indemnify both manufacturers and COVAX as intermediary. Gavi and manufacturers agreed model indemnity agreements and shared these with AMC92 countries[2]. Signature of I&L agreements and side letters became an indicator of country readiness and a condition for vaccine allocation. Whilst standardized I&L clauses aimed to obviate lengthy country-by-country negotiations, several countries needed to develop legislation to sign I&L agreements.

COVAX I&L clauses are broad and open-ended. Many stakeholders argue that I&L should contain triggers to end as soon as the product receives WHO prequalification or safety is assessed otherwise. In practice, Gavi found that manufacturers often failed to submit complete dossiers in time for WHO prequalification in low-income countries, instead prioritized regulatory compliance in high-income countries[3]. In terms of levels of indemnification, several sovereign countries negotiated exclusion of wilful misconduct, and the US government went as far as completely taking responsibility for any claims, thus obviating the need to indemnify manufacturers[4]. Finally, the United Nations immunity shield applies if vaccines are distributed through UNICEF or WHO (done during the H1N1 pandemic), which could have been an alternative approach.

The 'No Fault Compensation Scheme' (NFCS) provides an extra layer of protection to the manufacturers[5] but is not proportionate nor evidence based. From 2021, AMC countries participated in the NFCS as part of the I&L arrangement. The rationale for the NFCS was that countries with low credit status might be unable to pay litigation costs, as per the I&L agreement. This is a hypothetical risk, as there is no prior experience of low-income country residents successfully litigating a vaccine manufacturer *and* their government defaulting on their I&L agreement, in earlier outbreaks. The NFCS is a global insurance scheme that pays people suffering adverse effects a lump-sum compensation 'in full and final settlement of any claims'. The NFCS was designed to run for 18 months. No fault compensation schemes exist in several high-income countries[6], with the main goal to reduce vaccine hesitancy for compulsory vaccination programmes, and to encourage continuation of production of low-profit vaccines for routine immunization. Unlike the COVAX scheme, claimants typically maintain the right to litigate the vaccine manufacturer if they can prove a 'fault'.

The 'No Fault Compensation Scheme has been costly to administer and the number of complaints has been low. The design of the NFCS was a tremendous effort for the Office of the COVAX Facility. Recipient countries need to develop and pass special legislation as part of country readiness, potentially delaying vaccine delivery. Transaction costs are high as the scheme is administered jointly by WHO, an administrator and an international insurance firm. The allocated funding is 135 million US$ for the first 18 months, through a levy of US$ 0.10 per dose[7]. Uptake of the scheme is low: our analysis of progress reports provided by the COVAX Secretariat shows that as of 31 January 2022, the scheme registered few complaints (mostly from ineligible countries) and made only a handful of pay-outs[8]. Reasons for low uptake include low prevalence of side effects and limited awareness of the scheme. The NFCS only covers vaccines provided through COVAX, which could explain why countries are slow to

promote the scheme and raise expectations. The scheme was extended in June 2022, partly because the investment in terms of establishment costs were so high[9].

I&L arrangements impacted on implementation, especially for the Humanitarian Buffer. The requirement for I&L side letters, and in some cases legislation, as a requirement delayed country readiness and undermined the rationale for I&L: early access. The requirement for all AMC countries to pass NFCS-related legislation further delayed country readiness. The inability of humanitarian agencies to sign I&L agreements, combined with the reluctance of manufacturers to waive indemnity, is seen as the main reason for the failure of COVAX humanitarian buffer. Some consider the introduction of I&L clauses as a dangerous precedent for future access to essential health products in humanitarian settings and health emergencies.

The design of the I&L system is heavily influenced by vaccine manufacturers. IFPMA demanded indemnification from the earliest design discussions[10], echoing earlier lobby efforts[11] for protection against potential claims during the swine flu epidemic and for a World Bank indemnification fund for the Ebola vaccine[12]. As a Gavi Board member, IFPMA was in a strong position, and provided legal inputs to Gavi to jointly develop COVAX I&L clauses and templates, including the NFCS. COVAX recognizes that I&L measures were necessary because manufacturers would not themselves assume risk for global populations[13]. Participating countries did not have much agency in the design but received COVAX support to comply during implementation. COVAX negotiated I&L waivers for the Humanitarian Buffer, ultimately from six manufacturers. The NFCS was a demand from the lawyers representing the vaccine manufacturers.

In conclusion, liability of vaccine manufacturers to claims is real in emergency situations but can be addressed through indemnity mechanisms that are appropriate to the real risk, such as UN immunity shields or emergency indemnity legislation, as used in the USA. COVAX indemnity mechanisms are more risk averse than these examples, and in some case may have hampered equitable distribution to some areas and/or population groups, especially in humanitarian settings and low-income countries.

Annex C: Module 2 (Implementation)

Annex C1.1: Governance and management

This annex includes a section with elaborated findings on the Gavi and COVAX Facility governance arrangements (C1.1.1), management arrangements (C1.1.2) and summary findings of the benchmarking assessment conducted, used to generate findings (C1.1.3).

Annex C1.1.1 : Elaborated governance findings

Gavi, a public-private partnership (PPP), is a legitimate body to facilitate good governance of an international, multi-stakeholder effort to rapidly scale up vaccination programming.
Global health governance is increasingly driven by:[5]

- A growing recognition that health problems go beyond borders and the capacity of national governments alone, requiring intergovernmental cooperation for an effective response.
- The increasingly important and/or recognised roles that non-state actors (NGOs, the private sector and philanthropies) play has led to new demands for a voice and often equal voting rights for these groups.
- An acknowledgement that global challenges require collective action solutions that are efficient, equitable, with fair sharing of the benefits and costs of cooperation.
- A desire by donors to use discretionary funding to achieve specific health outcomes via vertical funds, and move away from core or longer-term committed funding for broader goals via multilateral cooperation.

Public-private partnerships (PPPs) respond to these needs and have been used widely to raise significant financial resources to address specific health issues – the Global Fund, Gavi, GAIN and UNITAID are all examples.[6]

The COVAX Facility and AMC is administered by Gavi and as such it is important to consider the legitimacy of Gavi as a PPP in health governance. Gavi is the product of significant international cooperation between donors and foundations (who provide most of the financing), the World Bank, United Nations agencies (which provide both normative guidance, procurement and delivery services, as well as delivering technical assistance), the vaccine industry (which provides the commodities Gavi procures) and CSOs (which undertake a range of functions from advocacy to demand generation). The Board is also comprised of research and technical health institutes and a number of independent individuals.[7]

The broad set of stakeholders represented on the Gavi Board recognises that health problems go beyond borders and the capacity of national governments alone, requiring intergovernmental cooperation, and the important roles that non-state actors (NGOs, the private sector and philanthropies) need to play for the achievement of Gavi's objectives.[8,9,10]

Legitimacy can be defined either in terms of process, such as inclusiveness and accountability (input legitimacy) or in terms or outcomes, such as health outcomes or value for money (output legitimacy).[11] In terms of *input legitimacy*, some critiques of the PPP model posit that in giving a seat at the table to the private sector, input legitimacy will be compromised as priorities will be skewed towards their interests rather than governments and their citizens. This has been used as a criticism of both Gavi and COVAX.[12,13] Others argue that this can be countered by the engagement of other stakeholders and strong conflict of interest policies to protect the integrity of decision-making processes (which Gavi has in place).[14] Empirical evidence of input legitimacy being compromised in this way is lacking.[15] Nonetheless, it is important to note that Gavi is governed by a relatively small group of Board members, as compared to member state-based models of representation, such as that offered by United Nations agencies, which derive input legitimacy from a democratic governance structure that

is inclusive of governments. In terms of *output legitimacy*, evidence suggests that Gavi (like some other health PPPs), and the COVAX Facility and AMC thus far, has had a substantial health impact in lower-income countries.[16]

Gavi was created in part to be able to take action quickly and at scale. It's structure and governance model have offered a number of potential comparative advantages for responding to the COVID-19 pandemic, including the ability to take decisions quickly, which is a function of its slim and less inclusive governance structure, but which is of great importance for an emergency pandemic response where agile and timely decision making is required; and its ability to take on greater degree of risk; and its expertise in vaccine market shaping.

While Gavi's, and by extension that of the COVAX Facility and AMC, model of governance is different to that of state-based models of representation, it has been partly legitimised by them, including via:

- UNICEF, WHO and the World Bank acting as Gavi Board and Alliance members, and with UNICEF and WHO fulfilling key roles in support of the COVAX Facility.
- The World Health Assembly passing the COVID-19 resolution in May 2020, committing all 194 countries to controlling the pandemic through a coordinated, multilateral pandemic response, and making immunisation against COVID-19 a global public good.[17]
- The reaffirmation of the world's commitment to ACT-A in September 2020 at the 75th anniversary of the United Nations General Assembly.

It is also of note that COVAX was intended as a response to the call of many political leaders for a global solution to address the COVID-19 pandemic, and its broad-based membership of more than 180 countries has provided further legitimacy.[18]

It should be recognised that Gavi, and by extension the COVAX Facility, holds relatively little political power. Unlike the United Nations Security Council or World Trade Organization, Gavi does not have the power to impose sanctions and is not viewed as a steward of global political debates or a mechanism through which grand bargains are struck.[19] It also does not have the financial backing of other global non-health-focused institutions, such as IMF or World Bank, and as such its ability to incentivise cooperation is limited. While Gavi aims to influence and operate within the market for vaccines, it can and should not be expected to fundamentally alter the marketplace by addressing the highly political and structural barriers to equitable access to vaccines, such vaccine nationalism and issues surrounding intellectual property rights and vaccine manufacturing.

The scope and scale of the COVAX Facility and AMC posed several challenges to Gavi's existing governance arrangements. One issue is in terms of representation. Gavi was established to serve only the lowest income countries, of which there were originally 73 and with 57 eligible to apply for new vaccine support in 2020, and its governance arrangements have been established to meet this mandate.[20] The global COVAX Facility, serving 87 LICs and LMICs engaging as AMC participants and 60 HICs and UMICs engaging as SFPs, represented a significant expansion of this mandate. The notable omission within Gavi's existing governance arrangements is representation of never-eligible MICs. In addition, although a number of SFPs are in theory represented as donors, representatives tend to come from donor country development agencies and not the health ministry responsible for vaccine procurement.

Another issue relates to the frequency of meetings and level of burden placed on members of Gavi's existing governance structures. The introduction of the COVAX Facility and AMC more than quadrupled the level of funding, and the volume of vaccine doses, being administered by the Gavi Secretariat and overseen by Board and its committees. We understand that 6 additional Board meetings, at least 1 PPC meeting, 13 AFC, and 2 Governance Committee meetings were held in 2020 and 2021 than would normally have been scheduled, with analysis suggesting that the COVAX Facility was discussed or the main agenda item in 83% of meetings

where minutes are available. Stakeholder feedback suggests that this was both a function of the need to take decisions quickly (although many also noted that the need for these meetings also slowed processes down), but also due to the Secretariat's lack of capacity in some areas and the need for governance bodies to engage more fully in operational details than would normally be the case (such as for risk management, for which the AFC was heavily engaged during 2021).[21] In some instances, the high frequency of Board meetings meant that not all issues had yet been discussed by the PPC and some decisions had to be deferred until such time as they had – notably, this occurred with a COVAX Strategy decision in late-2021. To partly mitigate this burden, a number of additional executive powers were granted to the Gavi CEO, for instance in relation to adjusting budget amounts for Gavi's COVID-19 response, waiving co-financing obligations, and for the COVAX Facility specifically, the CEO and Chair of the Board were granted authority to make decisions on Gavi's co-leadership of the ACT-A vaccine pillar.[22] In December 2021, the Board also delegated authority to the Secretariat to allot COVID-19 vaccine delivery funding, with flexible application of the Programme Funding policy including waiving the requirement for independent review, utilising existing programmatic and fiduciary risk mitigation mechanisms such as those used in emergency and humanitarian contexts on a no regrets basis.[23]

A range of governance structures have been established for the COVAX Facility and AMC to meet different purposes, broadly focused on stakeholder engagement, soliciting external expertise and guidance, and donor accountability. A guiding principle of ACT-A was not to establish new entities, and governance arrangements have also sought to build on existing bodies wherever possible.[24] While the COVAX Facility is governed by the Gavi Board and its existing committees[25], 18 separate bodies were also created, and at least 9 others created/adapted for the COVAX Pillar.[26, 27] Figure C1 presents a schematic of the COVAX Facility governance arrangements, with a summary of each body in terms of its role/function, authority and membership presented in Table C1 below. As shown, the COVAX Facility governance model is effectively an extension of Gavi's PPP model, with engagement and membership of participating countries, AMC donors and foundations, Gavi Alliance and COVAX implementing partners, research and health institutes, and civil society. It is worth noting, however, that these governance structures report to and advise the Office of the COVAX Facility, rather than the Board directly, and that there are far fewer numbers of some constituency groups (such as civil society) than others.

Figure C1: COVAX Facility governance arrangements

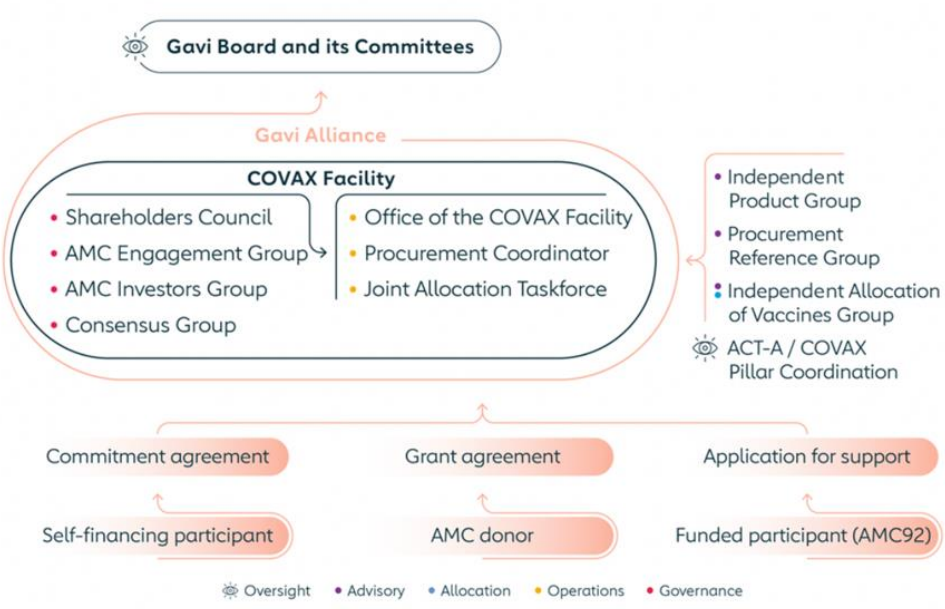


Table C1: Features of key COVAX Facility governance bodies[28] [29]

Body	Role/function	Authority	Composition
Gavi Board and its committees			
Gavi Board	Overseeing the role of the Gavi Secretariat and the Alliance in the COVAX Facility, and will have ultimate responsibility for decisions and effective implementation	Decision making	4 permanent seats for representatives of the Gates Foundation, UNICEF, WHO, and World Bank, and 18 rotating seats, 5 from developing country governments, 5 from donors, 1 from research health institutes, 1 from developing country vaccine industry, 1 from industrialised country vaccine industry, 1 from civil society, and 9 independents
Programme and Policy Committee (PPC)	Assists the Board in fulfilling its responsibilities in respect to the programmatic and policy oversight	Advisory	Comprised of not less than 3 and up to 20 persons, a majority of which are Board Members and Alternate Board Members (excluding implementing country governments). Current composition has 2 seats for independent Board members; 1 seat for the Bill & Melinda Gates Foundation; 1 seat each for UNICEF, WHO, and World Bank; 4 seats for implementing country governments; 4 seats for industrialised country governments; 1 seat for developing country vaccine industry, 1 seat for industrialised country vaccine industry; 1 seat for research health institutes; 1 seat for civil society; and 1 non-voting seat for the Gavi CEO
Audit and Finance Committee (AFC)	Supports the Board in fulfilling its oversight responsibilities in a timely manner, in respect of financial management; risk and control framework, including internal and external audit; and adherence to appropriate standards of good practices and ethics	Advisory (makes decisions in some limited areas)	Comprised of not less than 3 persons, a majority of which are Board Members and Alternate Board Members (excluding implementing country governments). Current composition has 2 seats for independent Board members; 1 seat each for UNICEF and World Bank; 2 seats for implementing country governments; 4 seats for industrialised country governments; and 1 seat for civil society[30]
Market-Sensitive Decisions Committee (MSDC)	Supports the Board in fulfilling its oversight responsibilities and makes decisions that are market and/or commercially sensitive	Decision making	1 seat for the Board Chair; 1 seat for the Board Vice Chair; 2 seats for the multilaterals (World Health Organization, UNICEF, World Bank); 1 seat for the Bill & Melinda Gates Foundation; 2 seats implementing country governments; 3 seats for donor country governments; 1 seat for civil society; 1 seat for the Chair of the AFC; 1 seat for the Chair of the PPC; and 1 non-voting seat for the Gavi CEO[31]
Governance Committee	Assists the Board in fulfilling its responsibilities relating to developing and implementing sound Governance policies and practices	Advisory	Comprised of 12 Board members (3 seats for industrialised country governments; 2 seats for implementing country governments; 2 independents; 1 seat each for industrialised country vaccine industry, civil society, Bill & Melinda Gates Foundation, and WHO; and 1 non-voting seat for the Gavi CEO) and 1 Committee delegate (implementing country government)[32]
COVAX Facility governance bodies			
COVAX Shareholders Council	Self-organising body representing SFPs to support real-time information exchange and provide strategic guidance and advice to the Office of the COVAX Facility on operational aspects	Advisory	High-income economies who are self-financing COVID-19 vaccines, plus 1 representative from each of: WHO, PAHO, World Bank, CSO and AMC92[33]
AMC Engagement Group	Self-organising group to support real-time information exchange, and provide strategic guidance and advice, to the Office of the COVAX Facility on the operational aspects, particularly as it relates to implementation in AMC-eligible countries	Advisory	Open to representatives from implementing economies, donors and other parties engaged in the financing and operation of the COVAX AMC, i.e. WHO, PAHO, UNICEF, World Bank and CSO[34]
AMC Investors Group	Body within the AMC Engagement Group acting as a forum to discuss AMC investments and options for additional financing, and to receive specific reporting on progress achieved against AMC objectives	Advisory	AMC donors, including multilateral development banks or regional banks, and procurement organisations such as UNICEF and PAHO[35]

COVAX Consensus Group	Support effective operations of the COVAX Facility through consensus-based decision-making between various governing bodies, particularly in areas where disagreement may arise	Advisory	Chair and Vice Chair of Gavi Board; co-chairs of COVAX Shareholders Council; co-Chairs of AMC Engagement Group; institutional leads of CEPI, Gavi and WHO in a non-voting ex-officio capacity
COVAX Facility technical and advisory bodies			
Independent Product Group (IPG)	Considers priority vaccine candidates and portfolio balance, and makes recommendations to the Office of the COVAX Facility on the inclusion of vaccines in the COVAX Facility	Advisory	Comprised of research and health institutes, academia, independent consultants
Procurement Reference Group (PRG)	Provides independent advice to the Facility on its procurement strategy to ensure an appropriately risk-managed portfolio from a commercial perspective, considering the timeline for supply delivery of vaccine candidates	Advisory	Independent virology, vaccination and public health experts
COVAX Facility allocation governance			
Joint Allocation Taskforce (JAT)	Based on a data-driven allocation model, prepare a Vaccine Allocation Decision (VAD) proposal for review and validation by the IAVG	Advisory	Office of the COVAX Facility and WHO, with technical consultations undertaken as needed[36]
Independent Allocation of Vaccines Group (IAVG)	Independent body to validate VAD proposals put forward by the JAT	Advisory	Independent members, selected by Gavi, CEPI and WHO to cover a range of technical areas[37] Current composition has 12 members from academia, research and health institutes, civil society and independents
WHO Deputy-Director General	Approval of the IAVG recommended VAD	Decision making	WHO
Country Readiness and Delivery (CRD) workstream governance			
CRD working groups	Oversight of seven other sub-working groups (communications, advocacy and training; data and monitoring; vaccine introduction; vaccination demand; supply and logistics; costing; and innovation to scale) which collaborate across the ACT Accelerator and beyond to promote a cohesive approach to COVID-19 vaccine readiness for introduction and deployment.	Advisory	Coordination Working Group: 8 WHO; 6 UNICEF; 2 World Bank; 1 Gavi; 1 Bill & Melinda Gates Foundation; 1 PAHO; 1 CEPI; 1 civil society; 1 consultant Communications, advocacy and training sub-working group: 6 WHO; 1 UNICEF; 2 Gavi; 1 Bill & Melinda Gates Foundation; 1 PAHO; 1 CDC; 1 civil society Data and monitoring sub-working group: 10 WHO; 1 UNICEF; 1 Gavi; 1 Bill & Melinda Gates Foundation; 1 CDC Vaccine introduction sub-working group: 13 WHO; 3 UNICEF; 1 Gavi; 1 Bill & Melinda Gates Foundation; 2 US CDC; 2 consultants; 1 civil society Vaccination demand sub-working group: 1 WHO; 6 UNICEF; 1 Gavi; 2 Bill & Melinda Gates Foundation; 1 US CDC; 2 consultants; 1 civil society Supply and logistics sub-working group: 9 WHO; 32 UNICEF; 3 Gavi; 1 PAHO; 8 WHO; 6 UNICEF; 2 World Bank; 1 Gavi; 1 Bill & Melinda Gates Foundation; 1 PAHO; 1 civil society; 2 consultant; 1 China CDC Costing sub-working group: 3 WHO; 3 UNICEF; 2 Gavi; 1 Bill & Melinda Gates Foundation; 2 academia; 1 consultant
COVAX Pillar coordination			
COVAX Coordination Meeting (CCM)	Provides a link to the established governance of each COVAX organisation, it coordinates, guides and resolves issues across COVAX.	Advisory	Board Chairs of CEPI and Gavi; institutional leads of CEPI, Gavi and WHO; COVAX workstream leads from CEPI, Gavi and WHO; 2 industry partner representatives; a representative of civil society; UNICEF; and Chairs of the RDMIC and IPG by invitation

Access and Allocation Sub-Working Group	Brings together COVAX partners who work together to design: • the operationalisation of the WHO-developed Fair Allocation Framework, • the governance of the Allocation Mechanism • the scope, governance and operationalisation of the COVAX Emergency Buffer Composed of four working groups: Allocation Mechanism governance Allocation process design and data needs Emergency Buffer Allocation IT requirements and integration with other systems	Advisory	Allocation Mechanism governance: 5 WHO; 1 PAHO; 1 CEPI; 2 Gavi; 1 civil society Allocation process design and data needs: 9 WHO; 4 PAHO; 6 Gavi; 1 CEPI; 4 UNICEF Emergency Buffer: 7 WHO; 1 PAHO; 1 CEPI; 3 Gavi Allocation IT requirements and integration with other systems: 36 WHO; 7 Gavi; 4 UNICEF; 2 PAHO; 1 CEPI

The various governance bodies, notably led by a powerful donor constituency, have exercised a significant degree of control over the design and operationalisation of the COVAX Facility. Many stakeholders interviewed suggested that some constituency groups, notably donors, have been highly motivated to influence both the design and operationalisation of the COVAX Facility. Drawing on the principal-agent literature, there are considered to be four main ways that the Gavi Board could exert/enhance its control over the Gavi Secretariat and Office of the COVAX Facility:[38,39]

- *Through the alignment of the objective interests of the COVAX Facility with their own:* There are multiple examples of where principals have leveraged their position to influence the design and operationalisation of the COVAX Facility. One example is the introduction of the Optional Purchase Agreement which we understand was suggested and promoted by a small group of influential donors and Board members, primarily to meet their national interests.
- *Through the use of incentives to reward actions and behaviour they approve and to punish that which they don't:* While it is challenging to demonstrate a clear link between decisions taken and rewards or punishments provided, anecdotal evidence suggests that these incentives have been strong. Building on the example above, we understand that not only did the adoption of the Optional Purchase Agreement guarantee the engagement of the group of influential donors and Board members, it was also linked to cash donations by some of these donors. The timing of this decision and financial pledges made appears to support this. Stakeholders have also noted that another example relates to the decision of the US to link its second $2bn donation to the procurement of Pfizer vaccines, rather than a previously discussed cash donation, around the time of the MSDC's decision to incorporate two Chinese-manufactured vaccines into the COVAX Facility portfolio. Again, the timing of the US decision and the MSDC's decision in June 2021 appears to support this.
- *By reducing the asymmetry of information between the Gavi Board and the Office of the COVAX Facility:* As above, the Gavi Board, PPC and AFC have dramatically scaled up their level of activity to both support the Secretariat, enable quick decision making, and to stay well informed to enable accountability. However, unlike Gavi core business where the Board retains decision making authority and seeks external expertise to make these decisions, such as through the IRC which makes recommendations to the Board on what to fund, a number of executive powers have been granted to the Gavi Secretariat/Office of the COVAX Facility, and the additional governance structures put in place for the COVAX Facility mostly report to the Office of the COVAX Facility, rather than the Board directly.[40] This was considered a necessity of the fast paced environment and need to act quickly. As well as the novel and highly technical subject matter in which the COVAX Facility was engaging, this in theory would enable the Office of the COVAX Facility a greater degree of autonomy and potentially allow it to act in own interests, rather than those of the Board. This suggestion was, however, disputed by most stakeholders interviewed, who reflected that the many governance bodies and high frequency of meetings meant that they were highly engaged in discussion of the subject matter throughout.
- *By tightening their monitoring over the agency's work and outcomes, such as through the governance and decision-making rules of the agency:* As noted above, despite the dynamic context in which COVAX was and is operating, the various governance bodies have been highly engaged in monitoring the Office of the COVAX Facility's actions, placing a high degree of emphasis on monitoring its activities, outputs and the achievement of its outcomes of interest.

As such, using the principal-agent literature as a framework, the evidence suggests that the governance bodies, notably the donor constituency, have exercised all levers at their disposal

to place a significant degree of control over the design and operationalisation of the COVAX Facility.

COVAX Facility governance arrangements have been overly complex with a lack of clarity over roles and overlapping responsibilities between bodies. These issues have created a huge administrative burden and limited the extent to which stakeholders have felt meaningfully engaged in the COVAX Facility and its decision-making processes. As above, there are at least 22 different governance bodies engaged in the COVAX Facility, with over 550 members. In line with existing COVAX internal reflections and learnings, stakeholders have widely noted that the current form of governance arrangements has been inefficient, stemming from the substantial time and effort to organise and administer the governance arrangements; the many members that serve on multiple bodies simultaneously; and the numerous examples of where governance bodies have highly related or overlapping roles or functions, such as between the JAT, IAVG and four working groups of the Access and Allocation Sub-Working Group. Box C1 elaborates on some of the issues encountered with governing the operationalisation of the allocation mechanism. Another example relates to the RDMIC's role in providing investment oversight for the COVAX R&D portfolio – as distinct from the COVAX Facility (procurement) portfolio – it nonetheless frequently considered issues across the R&D portfolio in view of the potential impact on downstream procurement. However, the COVAX Facility also had separate scientific and technical advisory group (the Independent Product Group) to ensure objectivity in procurement decisions. The lack of clarity over the scope of each body's responsibility and decision-making pathways was described as duplicative.[41]

A number of stakeholders also noted that the COVAX Facility governance arrangements were really focused on communications rather than genuine stakeholder engagement. This is reflected in COVAX Facility governance bodies being advisory to the Office of the COVAX Facility, rather than the Board, and in the design of many groups. For instance, up to 300 participants would attend calls for the self-organising AMC Engagement Group in 2021 that would largely focus on information sharing, rather than providing an opportunity for AMC participants to provide strategic guidance and advice to the Office of the COVAX Facility.[42] Perhaps in part for this reason, and now doses are readily available to countries, participation in this group in mid-2022 is much lower.

There is also reported to have been some mixed understanding and/or frustration on the purpose of some governance bodies. For instance, members of the Shareholders Council would seek to engage in strategic discussion, for instance in relation to the potential design of a COVAX dose exchange and donation mechanism, although this was not the purpose of this group and it had no formal ability to feed the Council's inputs into Board-level decision making.[43] Nonetheless, it is understood that feedback such as this was fed up into the PPC and other existing Gavi governance bodies, including through the same members being on both the Council and Gavi Board (again reflecting an issue with duplication between bodies).

Box C1: Governance of the operationalisation of the allocation mechanism

In theory, the allocation mechanism would be operationalised as follows: the JAT would launch the allocation round, the WHO Allocation Core Hub would run the algorithm, and the JAT, based on the data-driven allocation model, would prepare a Vaccine Allocation Decision (VAD) proposal for review and validation by the IAVG. The validated VAD would then be approved by the WHO Deputy-Director General.

In practice, due to the issues set out in the allocation section of the main report, there was insufficient time for the algorithm to be run and full allocation and IAVG review process to be conducted. This resulted in at least three allocation rounds, 13 administrative adjustments and numerous allocations of dose donations being considered outside of the WHO Fair Allocation Framework and conducted without the IAVG's formal review. Even where the IAVG did undertake a review process, stakeholders reported challenges in sufficiently informing the IAVG on the justification for JAT actions given the complexity of considerations and limited time available for the IAVG to meet and engage in the process.

As such, this has limited the IAVG's ability to fulfil its purpose of fostering the independence of, and providing transparency into, vaccine allocation decision making. In practice, the process has been much more reliant on those running the algorithm and the staff of Gavi and WHO that comprised the JAT. While reported raising concerns to senior management, the processes were retained to maintain speed. There is no evidence to suggest that this has influenced the way that the allocation mechanism was operationalised or its outputs. It has, however, limited the meaningful participation of external and independent stakeholders in the process, and their ability to hold Gavi and WHO to account.

Annex C1.1.2 : Supplementary content to support management findings

Organisational network analysis suggests that the set of management issues identified are likely to have had further implications for the Office of the COVAX Facility operational efficiency and effectiveness. Such analysis may hold lessons and have useful suggestions for how to do things differently. The set of circumstances described above can be usefully characterised according to Cross and Carboni's (2021) categorisation of patterns of collaborative disfunction as one that (a) represents an overwhelmed system; and (b) is suffering from priority overload.[44] The table below sets out the issues and drivers for these patterns and the extent to which evidence suggests that they apply to the Office of the COVAX Facility. While stakeholders have often identified the drivers that correspond to the patterns, they have mostly been reluctant to link these drivers to the issues and implications described. Nonetheless, the evidence points in this direction and sensemaking workshops will allow for further analysis and to understand if the proposed solutions are appropriate.

Issue	Drivers	Relevance to Office of the COVAX Facility
Pattern A: Overwhelmed teams		
Team members cannot keep up with collaborative demands placed upon them, leading to insufficient time for work, inefficient decision-making, excessive	Group growth that surpasses the limits of team and work design	*Highly relevant:* This is a function of establishing a series of new teams and structures in a short space of time
	Ineffective meeting and communication norms	*Somewhat relevant:* Stakeholders reflected that decisions are often subject to discussion at all levels of the internal hierarchy before made
	Lack of effective workload metrics	*Unknown*
	Fear of making independent decisions or of being left out	*Unclear:* Decision making is highly centralised but stakeholders have not reflected directly on a fear of making independent decisions

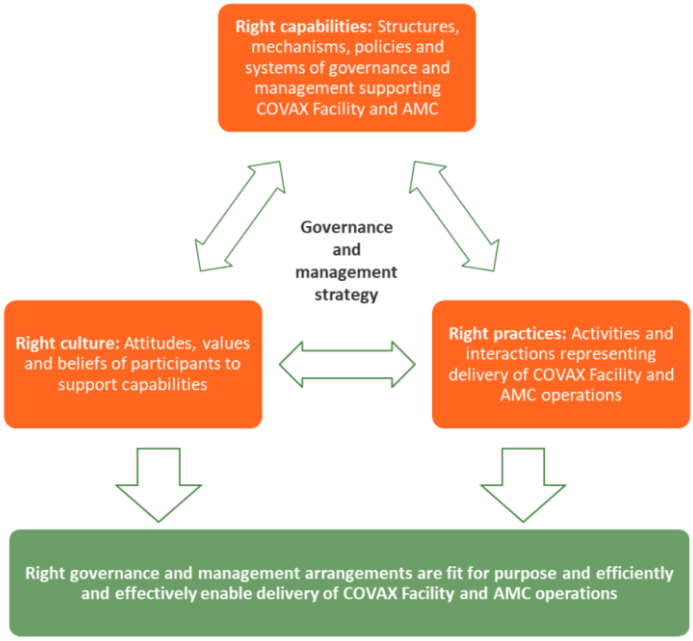
compromise, lower engagement, and ultimately burnout	A culture of overinclusion – both within the team and the larger organisation	*Highly relevant:* As above, decisions are subject to discussion at all levels of the internal hierarchy, with COVAX partners and a range of governance bodies before being made
Pattern B: Priority overload		
External stakeholder demands cause group members to lose sight of their mission and highest priorities, resulting in work overload that hurts the quality of execution, delays delivery, and creates employee burnout	Overemphasis on agility	*Highly relevant:* The Office of the COVAX Facility has been highly dynamic and sought to respond to the many demands placed upon it, often at short notice, such as the introduction and management of dose donations
	Lack of North Star clarity/agreement among leaders with competing demands	*Somewhat relevant:* While the COVAX Facility has clear objectives that staff work towards, among the myriad of different requests placed on staff (programmatic, operational and for governance and stakeholder communications) there is some evidence of organisational priorities not putting sufficient emphasis on important issues – other sections describe a situation of too much focus being put on vaccines rather than vaccinations.
	Personal and cultural values that lead to overcommitment	*Highly relevant:* Staff have demonstrated a very strong mission-driven culture and willingness to take on unmanageable and/or unsustainable workloads given the lack of immediately available alternatives

Annex C1.1.3 : Benchmarking analysis

Benchmarking is used to ascertain whether the right capabilities, culture and practices were/are in place to best enable and support the operations of the Office of the COVAX Facility, understand the way accountability works between key stakeholders at different levels, and the reasons/drivers for any failures or successes. As per the evaluability assessment recommendations, it is important to ensure that the evaluation remains focused on Gavi and the COVAX Facility and COVAX AMC, while also considering the interconnectedness of roles, responsibilities and ways of working between agencies.

The capabilities, culture and practices framework draws on the approach used in Global Accountability Reports[45] and the Multilateral Organisation Performance Assessment Network (MOPAN) 3.1 methodology,[46] as articulated in Figure 1 below.

Figure C2: Components of capabilities, culture and practices framework



The following table is used as a tool to assess whether the design and implementation of the COVAX Facility and AMC management structures and governance arrangements is aligned to the different components of the capabilities, culture and practices framework. The components, tailored to answering the evaluation question, are drawn from the references above, Cross and Carboni's (2021) categorization of patterns of network connectivity and collaborative practices that lead to dysfunction which undermine performance[47], and the key principles agreed by the COVAX implementing partners to guide good governance in the COVAX collaboration.[48]

Table C2: Analytical tool for assessment against capabilities, culture and practices framework

Mgt (M)/ gov (G)	Framework components	Evidence of COVAX Facility and AMC alignment to principles
Capabilities		
M & G	Procedures, mechanisms, processes and roles and responsibilities are clearly documented and distributed to stakeholders	*Governance:* Operating procedures and TORs were created for the governance bodies of the COVAX Facility (COVAX Shareholders Council, AMC Engagement Group, AMC Investors Group, and COVAX Facility Consensus Group) in late-2020, with updates made over time. *Management:* While efforts have been made to document and distribute procedures, mechanisms, processes and roles and responsibilities, such as through SOPs for staff processes, there were delays in introducing these and stakeholders generally acknowledge that these are not comprehensive or fully up to date of COVAX processes. There is some difference of opinion between stakeholders within the Office of the COVAX Facility as to how appropriate and/or problematic this is. While some stakeholders note that this is suitable for a new entity working in a highly adaptive manner in response to a dynamic context, others consider that it has contributed to some mixed expectations and inefficiency in how processes are being implemented. In particular, this applies to how the Office of the COVAX Facility works with other COVAX implementing agencies, which a number of stakeholders commented was problematic. This is attributed to both a lack of clarity on the boundaries of each agency's role, and the multitude of different stakeholders engaged in different governance bodies overseeing and feeling responsible for implementation of different areas of the COVAX Facility's operations.
M	Staff capacity (quantity of staff and mix of skill sets) is considered to be sufficient to fulfil	The Office of the COVAX Facility has both drawn on a highly qualified and experienced resource within the Gavi Secretariat and recruited externally (from a pool of highly talented candidates willing to work within the Office of the COVAX Facility) to fulfil positions. *Calibre of staff:* The evaluation has not included a formal capacity assessment, but when asked, most stakeholders (both internal to and external of the Office of the COVAX Facility)

	roles and responsibilities	reflected that staff are very highly skilled and often overly experienced for their roles, and have benefitted from drawing on the Gavi Secretariat's pre-existing capacity. Others have, however, pointed to the issues of: (a) hiring and onboarding a largely new team, which takes time and is subject to teething problems; (b) hiring from similar backgrounds, notably management consultancies and the pharmaceutical industry, which some stakeholders linked to perceived issues with 'groupthink' and a lack of willingness/ability to consider alternative views or realities; and (c) a lack of capacity in key skill areas, notably deal making (for which UNICEF usually plays a lead role, yet neither Gavi nor UNICEF had experience in entering in advance purchase agreements), tech transfer arrangements, entering into indemnity and liability agreements, and emergency response (again, not an area of Gavi core expertise). *Quantity of staff:* More than 220 stakeholders within Gavi have contributed to the COVAX with regular attendance of 50-100 Gavi members on biweekly check-in calls. Despite this, almost all stakeholders commented that the Office of the COVAX Facility has been very lightly staffed for the scope and scale of the COVAX Facility's activities, resulting in staff being overworked with poor work-life balance and numerous examples of burnout. Some also described a situation in late-2020 and early-2021 of the Office of the COVAX Facility having limited bandwidth which hampered its ability to move quickly with a sufficient level of depth and rigour. An example that was raised in multiple interviews was the operationalisation of the allocation mechanism which involved many different processes and required constant revision, for which there were only limited resources. This resulted in a team that was constantly overworked. Despite this, and numerous other examples across different functions, stakeholders reported an inability and/or reluctance within the Gavi Secretariat to recruit more staff or flexibly accommodate the conditions upon which senior staff would be willing to join (e.g. sticking to short-term contracts without relocation allowances, despite seeking to recruit from a diverse set of countries) which was described as a legacy of Gavi's core operations.
M & G	Roles, decision rights and incentives are well structured for an entity working in an emergency setting	Within the Office of the COVAX Facility, despite the lack of documented procedures, mechanisms, processes and roles and responsibilities, there have been clearly fairly defined roles for different teams based around distinct functions (e.g. resource mobilisation, deals, allocation, country engagement). There have, however, been some issues. For instance, while stakeholders reflected that it made sense for the Resource Mobilisation Team to manage dose donations, this caused a degree of separation from the Deals Team (responsible for securing supply via APAs) and also created some communications challenges with those responsible for allocation, procurement and other functions. There have also been issues in how teams have engaged with counterparts from COVAX partner agencies to fulfil these functions. This is both a function of a lack of clarity on the boundaries of each agency's role, and the multitude of different stakeholders engaged in different governance bodies. It is also related to the ways of working blurring the usual lines of accountability for Gavi business. The scope and scale of the COVAX Facility and AMC posed several challenges to Gavi's existing governance arrangements, requiring a significant expansion in the frequency of meetings and burden placed on the Board and its committees. The newly established COVAX Facility governance arrangements are widely reported to have been problematic due to their complexity, the sheer scale of stakeholder engagement, and a lack of clarity over roles and responsibilities between bodies as well as unclear decision-making pathways. These issues have limited the extent to which some stakeholders have felt meaningfully engaged in the COVAX Facility and its decision-making processes. Decision making authority has, however, been highly centralised within Gavi's existing governance structures, notably the Gavi Board and the Gavi CEO. While this is perhaps appropriate for an emergency setting where decisions need to be made quickly, it has at times created some disconnect between decision making and COVAX Facility governance bodies.
G	Governance structures provide a comprehensive view on the investment of public funds, enabling the right decisions to be taken in a timely manner	Gavi's existing governance structures, notably the Gavi Board, PPC, AFC and MSDC have dramatically scaled up their level of activity to both support the Secretariat, enable decision making, and to stay well informed to provide a comprehensive view on the investment of public funds and enable accountability. The newly established governance arrangements of the COVAX Facility have likely added some but limited value to this function. This is due to all bodies within the COVAX Facility governance structure being mandated to advise the Office of the COVAX Facility, rather than the Gavi Board. There are, however, some important spill over effects, for instance where there are common members of the COVAX Facility and existing Gavi governance structures.
G	Appropriate members are selected for advisory groups	All governance bodies established for the COVAX Facility are advisory, although different in nature. The Shareholders Council and AMC Engagement Group (primarily serving a stakeholder engagement purpose) are self-organising bodies open to representatives of all SFPs and AMCs, respectively. The AMC Investors Group (primarily serving an accountability purpose) is comprised of representatives of significant AMC investors, and a representative each from UNICEF, PAHO, WHO, the World Bank, civil society and AMC participants. Other

		groups focused on soliciting external expertise and guidance vary in how and whom members have been selected: • *IPG:* Members selected based on credibility and independence; commitment and availability to participate in meetings; geographical and gender diversity; absence of conflict of interest. Members selected by IPG Selection and Oversight Panel, comprised of the Gavi CEO, CEPI CEO and the WHO Chief Scientist. • *PRG:* Selection is based on experience and skills related to COVAX objectives, and the absence of issues related to confidentiality or potential conflict of interests. Members selected by UNICEF SD and the Gavi Secretariat • *IAVG:* Selection is based on technical expertise, geographical representation and gender balance, and the absence of real, potential or apparent conflicts of interest. Members, selected by Gavi, CEPI and WHO. There is good evidence that selection has been based on technical competence, as well as the absence of conflicts of interest. There is no evidence to suggest that inappropriate members have been selected for advisory groups.
Culture		
M	Attitudes and behaviours of staff, such as their perceptions of external stakeholders and how they interact with them, support capabilities	Stakeholders universally noted the exemplary attitude and behaviour of staff within the Office of the COVAX Facility, including how they perceive and interact with partners and other external stakeholders. This is in spite of the significant challenges created by staff being over worked, and the challenges imposed on the workforce by the COVID-19 pandemic.
M	Management structures are not overly hierarchical and/or leadership is not overly controlling, allowing for independent decision making	Management structures for the COVAX Facility are hierarchical. Although stakeholders have not fed back that leadership is overly controlling, decision-making authority is highly centralised among the Board Chair and Gavi CEO.[49] The Office of the COVAX Facility has a senior management team and several groups composed for management and coordination issues.[50] The hierarchy within the Office of the COVAX Facility includes: • Operational Coordination Team • Delivery Leadership Team • Cross Facility PMO • Facility Leadership Team • Executive Office • COVAX Facility Managing Director • Gavi CEO There is also an established hierarchy within the COVAX Pillar through which the COVAX Facility operates: • Joint Facility Leadership Team • Workstream Conveners • Pillar Leadership • RSSE • CCM
M	Team members work collaboratively (albeit without a culture of overinclusion) for the attainment of joint goals	There is strong evidence that team members work collaboratively for the attainment of joint goals. There is some evidence of a culture of overinclusion, as demonstrated by decisions often being discussed at all levels of the internal hierarchy before being taken or not by the Board Chair and/or Gavi CEO. Country facing staff also linked this to internal inefficiency and decision making taking too long. Although staff have pointed to this offering benefits, for instance in terms of ensuring that decisions reflect diverse stakeholder perceptions and experiences (which is critical for an entity like the COVAX Facility), it also leads to inefficiency (which is important to avoid given limited staffing capacity and the need to take decisions quickly).
M & G	Expert and wider stakeholder inputs are sought in an inclusive manner, without an overreliance on a few stakeholders or one stakeholder group	The ways of working between COVAX partners and multitude of governance bodies advising on key functions is highly inclusive of expert and wider stakeholder inputs. A number of stakeholders have stated that this is overly inclusive and has led to significant inefficiency through delays due to time seeking external advice and time spent seeking to gain consensus. Analysis suggests that through the governance structures established for the COVAX Facility there is a strong reliance on a mix of COVAX Partners (particularly WHO but also UNICEF and CEPI), internal expertise independent experts for decision making.
Practices		

M & G	There is limited divergence between what is included in the formal documentation and what happens in practice	*Governance:* There are a number of examples of divergence between what is included in the formal documentation of the COVAX Facility governance arrangements and what happens in practice. This includes: • *Decision making:* Gavi Board, PPC, AFC and MSDC meeting much more frequently than intended and in some cases engaging on a much more operational level than is expected, such as the AFC in risk management. • *Stakeholder engagement:* The COVAX Shareholders Council and AMC Engagement Group are designed to support real-time information exchange and provide strategic guidance and advice to the Office of the COVAX Facility on operational aspects. However, we understand that in practice these groups are focused almost exclusively on information sharing from COVAX to countries, rather than two-way information sharing and the provision of strategic guidance and advice. This is at least in part due to the high number of participants engaging through these fora. • *Independent oversight and advisory inputs:* The IAVG is an independent body with a mandate to review and validate the Vaccine Allocation Decisions (VAD) put forward by the JAT (comprised of Gavi and WHO staff) and make recommendations to the WHO Deputy-Director General for approval. While the intent of the IAVG in Phase 1 of the COVAX Allocation Mechanism was to review all COVAX allocations there was provision for the JAT to make some adjustment decisions. Nonetheless, despite the IAVG meeting at least every two weeks, it did not formally review rounds 1, 4 or 7, or the many administrative adjustments that were made within Phase 1, which accounted for a significant proportion of the overall dose allocation. Stakeholders interviewed do, however, confirm that the IAVG has been kept well informed of all allocation decisions made. • *Management:* There is frequent divergence between what is included in staff SOPs and what happens in practice. This is reflective of a highly adaptive and responsive way of working and the SOPs not being comprehensive or fully up to date of COVAX processes. As noted above, there is some difference of opinion within the within the Office of the COVAX Facility as to how problematic this is.
M & G	Meeting and communication norms are effective	Stakeholder feedback suggests that there have been some challenges to ensuring that meeting and communication norms are efficient and effective. This mainly relates to the culture of overinclusion, resulting in too many meetings, often with the same stakeholders, where similar or the same topics are discussed. While individual meetings are generally run smoothly, this creates a degree of inefficiency. Further, there are some examples of meeting and communication norms not working effectively. For example, as referenced above, the volume of stakeholders engaging through the COVAX Shareholders Council and AMC Engagement Group has acted as a barrier to some functions of these governance bodies being fulfilled, notably in relation to the provision of strategic guidance and advice.
M & G	Decision making is done in an impartial and fair manner, with appropriate consideration given to conflicts of interest, which are identified and managed appropriately	Gavi has in place a strong Conflicts of Interest Policy for Governance Bodies which seeks to protect the integrity of decision-making processes, particularly with regard to the allocation and disbursement of resources. It also has in place an Ethics Policy which ensures standards of ethical conduct for all activities of any member of the Secretariat, Board and Advisory Bodies. Both policies apply to all governance bodies related to the COVAX Facility and there is no evidence to suggest any form of deviation or non-compliance. As noted above, decision making authority rests predominantly with the Gavi Board and CEO. Analysis suggests that the governance structures in place, and the level of scrutiny placed on the CEO's decisions by these governance structures, should result in decisions being taken in an impartial and fair manner, which reflects stakeholder feedback gathered.
M & G	Information on critical discussions and progress is provided in a transparent and timely manner	Gavi has taken significant steps to expanding its stakeholder engagement with a view to providing transparency, which has further sought to increase its legitimacy and build trust among donors and the public. The Access to Information Policy seeks to enhance Gavi's accountability towards Alliance partners and stakeholders, as well as the general public who may be interested in Gavi's work, by providing access to the information that will enable Gavi partners and stakeholders to understand its governance, strategies, policies and activities. The 2020 Aid Transparency Index ranked Gavi 11th out of 47, with a score of 'very good'.[51] A benefit of the hierarchical management structure within the Office of the COVAX Facility and the COVAX Pillar more generally is that most staff of the COVAX Facility and COVAX partners are aware of and feel engaged in decision making by the Gavi CEO. These structures, and the representation of COVAX partners (except CEPI) on the Gavi Board, also ensure that key implementing agencies are transparently and immediately/quickly aware of critical discussions and progress. Transparency has not, however, always extended to the general public. One stakeholder referred to COVAX as a mushroom, with many things going on and only a limited amount of information filtering back down to others. For instance, a number of the documents

		made available through the Gavi website for Gavi's core business are not available for the COVAX Facility, including: • Details of COVAX Facility governance structures, such as TORs, operating procedures, current members and minutes. • Country financial commitments and disbursements, including vaccine doses and vaccine delivery support. • Country applications and annual progress reports for approved country programmes (although these have now been added there was a substantial time lag). Although the Access to Information Policy makes clear that confidential information will not be shared openly, Gavi has also made repeated requests for transparency from other vaccine purchasers.

Annex C1.2: Risk management

This annex includes a section with elaborated findings on risk management (C1.2.1) and summary findings of the benchmarking assessment conducted (C1.2.2).

Annex C1.2.1 : Supplementary information to support risk management findings

Box C2: SFP optional purchase agreements and risk to Gavi's balance sheet

In mid-2020, the COVAX Facility design was formalised to incorporate high- and upper middle-income countries through a self-financing model, including the choice of whether to enter into a committed purchase or an optional purchase agreement. The latter introduced the possibility that SFPs could provide upfront funding to cover a small proportion of the cost of a set number of doses, enabling Gavi to enter into deals with vaccine manufacturers, but SFPs would later have the ability to opt out of the negotiated doses leaving Gavi liable to assume the remainder of the full cost. This became problematic as (a) SFP funding guarantees, which accounted for much of Gavi's resources raised in late-2020, could no longer be used as financial backing to enter into deals with vaccine manufacturers; and (b) the AFC and Board had earlier agreed that Gavi's core (5.0) balance sheet should be protected from COVAX related risk and Gavi core resources could not be used as financial backing either. As such, this amplified the need for the COVAX Facility to urgently raise and receive in cash sufficient resources through committed agreements to enter into deals with vaccine manufacturers, and for the COVAX AMC to have raised sufficient funding such that any doses Gavi was liable to pay for could be reallocated to the AMC, so as to cover the eventuality that Gavi would be liable to pay for doses ordered through SFP optional purchase agreements.

Some stakeholders have noted that the AFC's decision was consistent with standard practice and reasonable, particularly as the geopolitical environment was uncertain and the risk to Gavi's core balance sheet could not be fully quantified, as well as there being desire not to use Gavi core resources for non-Gavi eligible countries and to keep COVAX and Gavi's core business distinct. However, a number of others reflected that the AFC and Board's decision was highly risk averse, particularly in light of the emergency need for funding, the successful Global Vaccine Summit in early 2020 and Gavi's healthy core balance sheet at the time, and that parameters could have been set to enable flexibility but within a limit that didn't adversely affect Gavi's core business. Undoubtedly though, this decision by the AFC had a material effect on the COVAX Facility's ability to enter into sizeable early firm commitments with vaccine manufacturers, with options pursued instead, which likely affected its ability to secure supply and achieve its overall objectives (see main report section on securing supply). We understand that it was adapted in January 2021 so that deals could be struck using pledges as financial backing, which stakeholder reflected represented a better balance between financial and programmatic risk. We note that insurance products were introduced and a debt facility for the COVAX AMC, the Rapid Financing Facility, was established in May 2022 to monetise pledges soon after being made. These solutions would have been useful in early-2021.

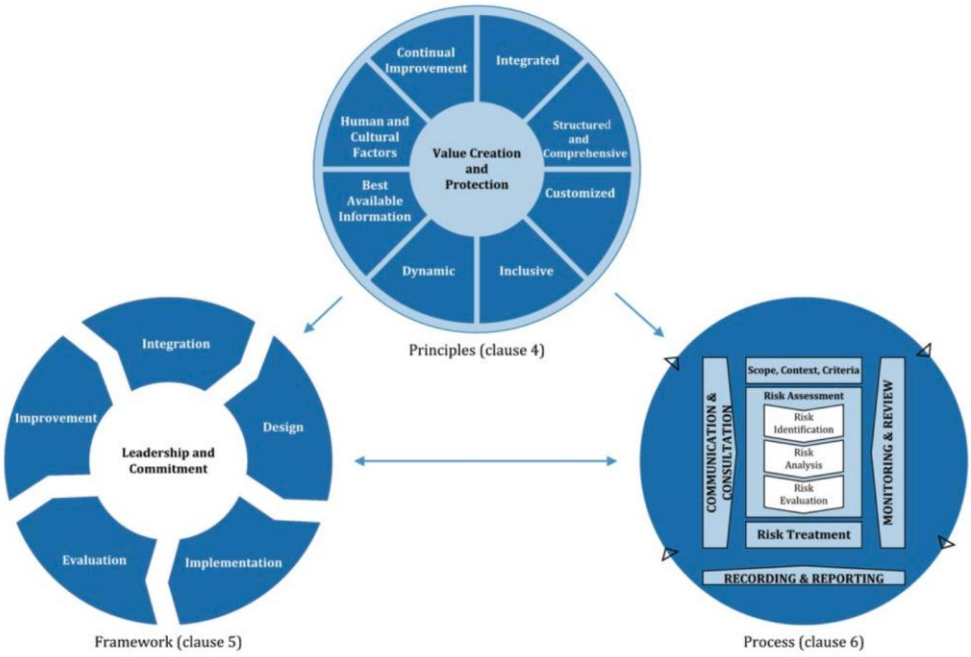
Annex C1.2.2 : Benchmarking analysis

The evaluative enquiry is focused on documenting how risk management processes have been designed and delivered to comprehensively identify and prioritize financial and programmatic risks. This includes a review of the risk assessment strategy documentation produced by the COVAX Facility and COVAX AMC. The design is assessed against the ISO 3100:2018(en): 'Risk Management – Guidelines' as a benchmark comparison framework.[52] This exerts that managing risk is based on the principles, framework and process set out below, where the:

- principles are the foundation for managing risk and should enable an organization to manage the effects of uncertainty on its objectives;
- framework assists the organization to integrate risk management into significant activities and functions, i.e. through its governance and management; and

- process ensures the systematic application of policies, procedures and practices to the activities of communicating and consulting, establishing the context and assessing, treating, monitoring, reviewing, recording and reporting risk.

Figure C3 - Components of the ISO risk management guidelines



The following table is used as a tool to assess whether the COVAX Facility and AMC risk management system and processes are aligned to the components of this benchmark.

Table C3: Analytical tool for assessment against ISO risk management guidelines

Benchmark component	Evidence of COVAX Facility and AMC alignment
Integrated: Risk management is an integral part of all organizational activities, with all staff taking responsibility for managing risk	The approach to risk management has evolved over time. **The main design of the COVAX Facility was agreed in mid-2020 without a full understanding of how the individual components of the design would align and integrate within the Gavi business model – something a risk management lens could have supported.** A number of stakeholders likened the process of designing and implementing the COVAX Facility to 'building a ship while we were sailing it'. This was based on the decision to urgently raise resources and enter into APAs with vaccine manufacturers in order to secure supply for participating countries. In part as a result, the initial design was socialised and formalised without an end-to-end analysis of the implications for the COVAX Facility and Gavi business model, and whether these could be managed in the manner envisaged. Further, although the Gavi Board had earlier agreed to Gavi administering the COVAX Facility and acknowledged that this would be an inherently risky venture, there was a lack of clarity on its risk appetite, which some perceived to be too low for the fast paced pandemic environment.[53] This had implications for decisions across different parts of the business model.[54] In particular, there was the need to clarify with donors (a) whether there was agreement to use ODA for vaccine products that had not yet received EUL, something that Gavi nor UNICEF had previously done; and (b) the volume of resources that there was comfort to put at risk in this way. The desire to limit this risk – which some stakeholders referred to as being risk averse – influenced the amount Gavi was willing to provide upfront to manufacturers, the scope and scale of deals struck, and the number of APAs entered into for different vaccine products.[55] Another example relates to the terms and conditions that SFPs and AMC participants agreed to on joining COVAX. Stakeholders reported that these did not require transparency over non-COVAX sources of supply or infer that accessing vaccine doses outside of COVAX would have any implications for the way that COVAX doses were allocated. As explored in Section [ALLOCATION], this had implications for COVAX's ability to allocate doses in line with its objective to ensure fairness and equity. A further example relates to the incorporation of the SFP Optional Purchase Agreement, alongside the decision to protect Gavi's balance sheet from any COVAX-associated risk presented in Box [A].[56,57]

	Strong risk management systems and processes have been established over time. The approach to risk management has been broadly translated from Gavi's business as usual approach, where risks are generally well understood and stable, with the emphasis on assurance. The dynamic context of the COVID-19 pandemic and the administration of the COVAX Facility has involved taking more risk and required a heightened approach to risk identification, impact assessment, prioritisation & mitigation. Gavi's governance structures were aware of this, and the AFC in particular was proactive in its engagement around risk, setting up a sub-committee in 2021 with additional programmatic expertise to supplement its primarily financial in-house expertise. Alongside the recruitment of a risk specialist for the COVAX Facility and the hiring of external expertise (e.g. CitiGroup which developed a financial risk management framework for the COVAX Facility) in late 2020, systems and processes were formalised and risk analysis became more thorough and nuanced.[58] Through 2021, there is strong evidence that risk management has been integrated into the working and operations of the Office of the COVAX Facility. This includes having standing agenda items in many meetings, with identified risks feeding into a risk tracker/ matrix, with risk owners identified to monitor the risk and implement mitigating actions. As noted above, although there was initially a lack of clarity on Gavi's risk appetite, the Board did clarify its position in mid-2021.[59] As such, although it took some time, Gavi's usual tools, processes and governance have been right-sized to the COVAX Facility's mandate and external and internal context.
Leadership and management: Top management demonstrate leadership and commitment to risk management	There is mixed evidence on the extent to which senior management demonstrate leadership and commitment to risk management. Firstly, they are responsible for taking the necessary steps to design and implement the strong risk management system described in the rest of this section. However, some stakeholders noted that senior management were not fully engaged with risk management, with risk specialists not of a senior enough position and not invited to high level strategy discussions. As a result, stakeholders have reported that some design and implementation decisions can be taken without engagement of risk specialists, or adequate consideration of the risks and implications of these decisions. Stakeholders have also suggested that the AFC's highly engaged role in relation to risk management is related to the lack of senior management engagement around risk and its implications for decision making. On balance, it is important to acknowledge the tension between senior management being able to take decisions quickly and being inclusive of all operational functions, including risk management, especially in a highly dynamic operating environment. This issue is also likely related to the stretched staffing arrangements within the Office of the COVAX Facility and a lack of capacity to adequately fulfil this function without the AFC's appreciated support.
Structured and comprehensive: A structured and comprehensive approach to risk management contributes to consistent and comparable results	The approach to risk management, from 2021 onwards, has been well structured and comprehensive of the COVAX Facility's operations and its implications for Gavi's core business. While the highly dynamic context has meant that the actual risks identified and mitigating actions have evolved over time, the structured and comprehensive approach has ensured that risk management analyses are of a consistently high quality.
Design: The risk management framework and process are customised and proportionate to the organization's external and internal context related to its objectives	The approach to risk management has been broadly translated from Gavi's business as usual approach, in terms of tools, process and governance, with the AFC retaining responsibility for oversight of risk management. For Gavi core business, the risks are generally well understood and stable, and as such the emphasis is on assurance. The dynamic context of the COVID-19 pandemic and the administration of the COVAX Facility required a different approach focused on risk identification, impact assessment, prioritisation and mitigation planning. It also required a heightened approach to risk management given that the scale and scope of the COVAX Facility was beyond what Gavi had previously had experience and expertise in, and that the work of the COVAX Facility would necessarily require a greater level of risk appetite than Gavi was used to. The tools, process and governance of risk management have been right-sized to the COVAX Facility's mandate and external and internal context in a number of ways. Most notably, the AFC has taken an extremely proactive and engaged role in risk management, establishing a COVAX risk management sub-committee that has met frequently to understand, guide and advise the Office of the COVAX Facility on risk management and make recommendations to the Gavi Board. Further, as noted above, risk management has been embedded in a significant number of meetings (heightened due to their increased frequency) of the Office of the COVAX Facility and its leadership. Risk management specialists feel that this approach has been appropriate. Although there was initially a lack of clarity on risk appetite, the Board did clarify its position in mid-2021 to accept a higher degree of risk in pursuit of the COVAX Facility's objectives.
Inclusive: Appropriate and timely involvement of stakeholders enables their knowledge, views and perceptions to be considered. This results in	A critique of the COVAX Facility design is that it did not adequately take into consideration the risks of and take mitigating actions for the geopolitical context, as well as sufficiently integrate civil society and country perspectives. This is reflective of the findings that the

improved awareness and informed risk management	design was primarily construed by a small number of individuals and without sufficient consideration of risk. Stakeholders have noted that this changed in 2021 with more attention paid to risk management, and with knowledge, views and perceptions feeding in from across the Secretariat and the diverse set of stakeholder groups represented on the Gavi Board and in the COVAX governance structures.
Dynamic: Risks can emerge, change or disappear as an organization's external and internal context changes. Risk management anticipates, detects, acknowledges and responds to those changes and events in an appropriate and timely manner	There is strong evidence of the nature of risks and the strength of their implications for COVAX objectives evolving over time. Analysis of risks identified over time also shows a continual evolution in how different risks have been considered. In particular, throughout 2021 there is evidence of the primary focus of risk management being on the management of financial risk and supply side risk, with little emphasis placed on demand side risk. This fundamentally changed in late 2021 and 2022, with a shift towards demand side risk as it became clear that this risk would not be mitigated by others and that Gavi would have to engage more fully than previously anticipated. The frequency with which risk management is discussed, by way of it being integrated within the working and operations of the Office of the COVAX Facility and wider Gavi Secretariat, enables the risk management function to anticipate, detect, acknowledge and (mostly) respond to changes in the context in an appropriate and timely manner.
Best available information: The inputs to risk management are based on historical and current information, as well as on future expectations. Risk management explicitly takes into account any limitations and uncertainties associated with such information and expectations. Information should be timely, clear and available to relevant stakeholders	The inputs to risk management are based on historical and current information, as well as on future expectations, with risks and their implications projected into the future. Information is provided in a timely and clear way to relevant stakeholders, which is a function of the frequency of meetings in which it is actively discussed and decided upon. It is, however, unclear if/how the risk management function takes into account the limitations and uncertainties associated with the information and expectations upon which it is based, and there is likely to be variation on how this is conducted across teams and individuals within the Office of the COVAX Facility.
Continual improvement: Risk management is continually improved through learning and experience	There is only limited evidence in this area. While there is evidence of lesson learning – for instance, to document lessons, some of which relates to risk management – it is unclear if/how risk management as a process is improved by this.

Annex C1.3: Set-up costs

The costs of establishing and administrating the COVAX Facility are low in absolute terms and particularly as a percentage of total expenditure. The cost to Gavi associated with establishing the COVAX Facility prior to the Board's decision in July 2020 was $1.4m, which mostly related to consulting and legal fees. The forecasted cost to administer it, including establishing the Office of the COVAX Facility, were forecast to be $7m for 12 months ($4m in 2020 and $3m in the first half of 2021). It is unclear exactly what this estimate included, although it is assumed to mostly relate to staffing, office and other related costs, as well as consulting and legal fees.[60] These fees were intended to be paid for through the participation fees for SFPs and COVAX AMC funding.[61]

The estimated costs associated with administering the Office of the COVAX Facility were later updated to $16.5m in 2021[62], and then again to $55m, of which $23m was for staff, consulting and professional fees and other related costs; and $21m for UNICEF's role as procurement coordinator, UNICEF and PAHO's roles as procurement agents, the Joint Allocation Taskforce, systems and contingency.[63] These costs were developed on the assumption that higher costs would be incurred in 2021 due to continued set up and launch activities that would reduce in later years. Further costs of $10.5m were estimated for financing and insurance. It was estimated that 70% of all costs would be attributable to SFPs and 30% to AMC participants.[64]

Actual overhead expenses were $12m in 2021.[65] Actual operating costs for the COVAX Facility were $8.7m in 2020 and $29.2m in 2021.[66, 67] As per Gavi's financial reporting, overhead expenses and operating expenses for the COVAX Facility were 0.18% and 0.31% of total expenditure in 2021, respectively. This is extremely low compared to ongoing (not even initial set up) costs of administering Gavi core (overhead expenses and operating expenses were 2.56% and 6.35% in 2021, respectively) and the Global Fund (operating costs as a percentage of total expenditure were 4.7% in 2021 and 6.9% in 2020).[68, 69] Both Gavi and the Global Fund consistently scored very strongly compared to other multilateral agencies in successive UK Multilateral Aid Reviews against the criteria for controlling costs to secure value for money and are widely known for having amongst the lowest overhead and operating costs in the sector.[70]

COVAX Facility operating costs are estimated to grow to $68m in 2022, with $60m borne by the COVAX AMC as a result of increased costs associated with its "increasing complexity and size".[71]

Annex C1.4: Stakeholder engagement

This annex includes a section with elaborated findings on stakeholder engagement (C1.4.1) and summary findings of the benchmarking assessment conducted (C1.4.2).

Annex C1.4.1 : Elaborated findings on stakeholder engagement

Getting external communications right for all stakeholder groups posed a significant challenge for the COVAX Facility. The framing of external communications in late-2020 and 2021 was driven by many considerations, including the need to get some degree of alignment between partners and project a positive and successful storyline that was in line with the original vision of COVAX and would aide fundraising, while also being careful not to deviate from this message or impede this objective by calling out stakeholder behaviour where this was inconsistent with the overall objective to achieve global equitable access. Particular challenges were faced with donors, who the COVAX Facility was reliant upon for funds and dose donations; vaccine manufacturers (and the country governments within which they are based) who the COVAX Facility was reliant upon for vaccine doses; and partners who the COVAX Facility was reliant upon for continued implementation services and support. Some stakeholders did, however, comment that these considerations, and a fundamental premise not to use public communications as an advocacy tool, prevented the COVAX Facility from

accurately portraying to participating countries the scale of the challenges it was facing and in particular why it was not able to provide firmer and longer-term details on vaccine dose availability.[72] There is anecdotal evidence that in the absence of a complete explanation, some individuals in countries were blamed for a lack of COVAX deliveries to countries, but this also affected public perception and the level of frustration many countries felt in being unable to access the volume of doses through COVAX that they expected and/or demanded.[73]

There was, however, a notable shift in communications (a) activity in mid-2021 with the establishment of a communications team within the Office of the COVAX Facility to support the wide-ranging communications needs for all participants;[74] and (b) approach at the end of 2021 with more open critiques of stakeholder behaviour, including language that explicitly referenced vaccine hoarding, export bans, and the need for manufacturers to "choose global solidarity over technicalities".[75] This was in part linked to widespread criticism of COVAX, a recognition that the communications strategy to date hadn't worked as intended, the need to more transparently communicate what the issues were to stakeholders, and the need to build momentum for a further programmatic and fundraising push in 2022.[76]

Other feedback on communications has focused on the relationship with participating countries. A number of stakeholders noted that the volume and highly technical and/or legal nature of documentation was overwhelming for many countries, particularly when multiple vaccine products were introduced, and there was often very little time for them to make decisions. This was particularly challenging for the introduction of Pfizer doses and in relation to indemnity and liability (I&L). For the latter, stakeholders did note that Gavi asking countries to sign one agreement saved significant time as compared to a situation where countries would have to sign separate agreements with each country donating doses.[77] It is also important to note that the COVAX Facility has struggled to obtain information from countries, such as in relation to vaccine demand (for which processes to collect country data were criticised by a number of stakeholders), absorption and total supply.[78]

Annex C1.4.2 : Benchmark analysis

To assess whether the level of stakeholder engagement in implementation is appropriate, the model is assessed against the AA1000 Stakeholder Engagement Standard as a benchmark comparison framework for good quality engagement.[79] This exerts that stakeholder engagement is the process used by an organisation to engage relevant stakeholders for a clear purpose to achieve agreed outcomes. The following table is used as an internal tool to assess the level and quality of stakeholder engagement.

Table C4: Analytical tool for assessment of stakeholder engagement

Benchmark component	Evidence of COVAX Facility and AMC alignment
There is a strong organisational commitment to stakeholder engagement, which is integrated into governance, management structures, strategy development and relevant decision-making processes	Gavi and the COVAX Facility and AMC has a strong organisational commitment to broad-based stakeholder engagement. In global health there is now an expectation that nonstate actors, whether from civil society or the private sector, will have at least direct visibility, even insight into and a seat at multilaterals' boardrooms.[80] This is true for Gavi and reflects the engagement of nonstate actors in Gavi's mission through the provision of money, vaccines and other health commodities, technical assistance and direct services. As a PPP, Gavi's Board includes research health institutes, the vaccine industry and civil society. While this does not guarantee that all constituencies have an equal voice and equal influence, it does demonstrate a strong organisational commitment to diverse and multi-stakeholder engagement in its governance and management structures, as well as its strategy and decision-making processes, and reflects a broadened view of accountability beyond just the governments of donor and recipient countries. The Gavi Secretariat is also committed to fostering a meaningfully representative organisation that builds on the full potential of its diverse staff. It seeks to do this through recruitment, remuneration, recognition and rewards, respect, reporting

	and reinforcement. It also seeks to challenge and dismantle unequal power structures by supporting priorities and processes driven by Gavi-eligible countries, and working with and through local and regional experts and organizations as well as marginalized and vulnerable communities to strengthen the systems that make access to vaccines more equitable.[81] These commitments and principles applied to Gavi's administration of the COVAX Facility. In particular, dedicated governance structures were established for the COVAX Facility to better engage SFPs (through the Shareholders Council), AMC participants (through the AMC Engagement Group), AMC investors (through the AMC Investors Group), and independent experts (through the IPG, PRG and IAVG; each of which include members from research and health institutes, academia, and civil society).
There is a clear and stated definition of: • Why the COVAX Facility and AMC is engaging (the purpose) • What issues to engage on, the parts of the organisation to engage and the timing of engagement (the scope) • The mandate, ownership and who needs to be involved in the engagement (stakeholders)	There is, however, a lack of clarity on the purpose and scope of the COVAX Facility's approach to stakeholder engagement. It was recognised early on that establishing and implementing the COVAX Facility would require 'extensive coordination, collaboration, stakeholder engagement and outreach with many partners involved with varying interests, as well as engagement with many new economies with which Gavi does not yet have established relationships (including economies under economic sanctions)'.[82] Despite this, we are not aware of a specific plan or strategy for comprehensive stakeholder engagement to meet a specific purpose, which best practice suggests would be helpful to set out why the COVAX Facility and AMC is engaging (the purpose); what issues to engage on, the parts of the organisation to engage and the timing of engagement (the scope); and the mandate, ownership and who needs to be involved in the engagement (stakeholders).[83] Such plans are not without precedent. For instance, the Global Finance Facility set out its Civil Society Engagement Strategy in 2017.[84] The Global Fund 2017-22 Strategy included an objective to support meaningful participation of key and vulnerable populations and networks in Global Fund-related process, which was in part operationalised through a $15m catalytic investment.[85,86] Its 2023-28 Strategy Framework also includes an objective to maximize engagement and leadership of the most affected communities.[87] The terms of reference for COVAX facility governance structures provide some insight: • *Shareholders Council:* Real-time information exchange and provide strategic guidance and advice to the Office of the COVAX Facility on operational issues • *AMC Engagement Group:* Real-time information exchange and provide strategic guidance and advice to the Office of the COVAX Facility on operational issues • *AMC Investors Group:* Discuss AMC investments and options for additional financing, and to receive specific reporting on progress achieved against AMC objectives • *COVAX Consensus Group:* Consensus-based decision-making between various governing bodies • *PRG:* Advises Office of the COVAX Facility on procurement strategy • *IPG:* Advises Office of the COVAX Facility on vaccine portfolio • *IAVG:* Independent body to validate Vaccine Allocation Decision proposals put forward by the Joint Allocation Taskforce (JAT) While civil society representatives have been highly critical of the COVAX Facility's approach to stakeholder and CSO engagement, most key informants operating within the COVAX Pillar suggested that CSOs had been adequately engaged in implementation through Gavi Board representation and with at least one civil society representative acting as a member of each of the COVAX Facility governance structures.[88] These positions are, however often with observer status only and many CSOs reportedly feel that this is tokenistic, having been given only minimal opportunities to engage in decision-making.[89] Adopting a framework based on three principles embedded in the mission statement of ACT-A, and as used by others, these governance structures broadly meet stakeholder's needs for some form of participation, yet, as noted above, have often expressed dissatisfaction that information on critical discussions and progress is not provided in a transparent and timely manner, and that the governance structures do not enable stakeholders, other than donors through the AMC Investors Group, to hold implementers to account, principally as they are

	only advisory to the Office of the COVAX Facility and not the Board (although it is hoped that the publication of this evaluation and other studies will better enable a wider group of stakeholders to do so).[90,91]
A defined stakeholder engagement process is in place, including stages to: • **Plan** – profile and map stakeholders; determine engagement levels and methods; establish and communicate boundaries of disclosure; draft engagement plan and indicators • **Prepare** – mobilise resources; build capacity; and identify and prepare for engagement risks • **Implement** – invite stakeholders to engage; brief stakeholders; engage; document the engagement; develop an action plan; and communicate engagement • **Review and improve** – monitor and evaluate engagement; learn and improve; develop and follow up on action plan; and report on engagement	In the absence of a clear and comprehensive stakeholder engagement strategy, different approaches have been adopted by different teams. There has been a greater degree of stakeholder engagement for some functions than others. For instance, in late 2020 as the Secretariat sought to gain members of the COVAX Facility and AMC there was an enormous effort to engage a diverse range of stakeholders, including direct country communications and via regional/continental bodies such as the African Union (COVID-19 Special Envoys, Africa CDC, and AU Commission through five regional Ministers of Health and Ministers of Finance meetings), the Association of Southeast Asian Nations (AESAN), PAHO and the Friends of the COVAX Facility, African Export-Import Bank (Afreximbank), Inter-American Development Bank and the World Bank.[92,93] A wide array of stakeholders has since been proactively engaged in resource mobilisation efforts.[94] For instance, the COVAX AMC Investment Opportunity Launch Event, One World Protected, in April 2021 was attended by a broad mix of SFP and AMC participant representatives, regional and/or continental bodies, COVAX and Alliance partners, United Nations agencies and international organisations, CSOs, foundations and other non-profit institutions, private sector partners and foundations, and pharmaceutical industry representatives.[95] Engagement in other areas has been through Gavi's established existing governance structures and those established for the COVAX Facility – i.e. for deal making through the IPG and PRG, MSDC and Board; for allocation through the IAVG; and for vaccine delivery support through the PPC and Board, and more recently the temporary Standing Committee of the Board with delegated authority to over delivery related strategy and decisions of the COVAX Facility and oversee vaccine delivery support. There has, however, been a substantial decline in stakeholders' willingness to engage in the activities of the COVAX Facility in 2022 which is reflective of the current status of the pandemic, the ability of countries to access sufficient COVID-19 vaccines to meet needs, community demand for vaccination, and country participation in the COVAX Facility governance structures. For instance, while the number of people joining AMC Engagement Group meetings had been as high as 400 in 2021, representatives from less than 20 countries have joined some calls in 2022. This is despite a change of operating procedures to allow alternate representatives to join and opening the chat function to stimulate conversation across all participants.

Annex C2.1: Resource mobilisation

This annex includes a section with supplementary content to the findings on resource mobilisation (C2.1.1) and a summary of the process tracing exercise conducted (C2.2.2).

Annex C2.1.1 : Supplementary content to findings on resource mobilisation

Box C4: Case study on the US government's support to the COVAX Facility and AMC

Following President Trump's open criticism of WHO, the early implementation of Operation Warp Speed, and a lack of US willingness to engage in and join the COVAX Facility in mid-2020, and the election of Joe Biden to become the 46th President of the United States on 3 November 2020, the US Congress allocated $4bn to support Gavi's Vaccine Equity Plan, as part of a US COVID-19 relief package, on 19 December 2020.

In February 2021, the US Government announced an initial pledge of $2bn for the COVAX AMC, and a further pledge to expand COVAX's reach through the release of an additional $2bn through 2021 and 2022, of which the first $500m was to be made available when existing donor pledges are fulfilled and initial doses are delivered to AMC countries. A signed agreement of $4bn was made in March 2021, with $2bn received in cash in March 2021 (of which $500m was for vaccine delivery support) and the remaining $2bn received in cash in July 2021.

On 3 June 2021, the US Government announced a global vaccine sharing framework to provide 80m US-manufactured vaccine doses worldwide, with 75% of these doses to be distributed through COVAX, earmarked for Latin America and the Caribbean, South and Southeast Asia, and Africa, in coordination with the African Union. This announcement included a detailed plan for the distribution of 19m doses via COVAX to specific countries.

Separately, on 10 June 2021, the US Government announced that it would facilitate a purchase of 500m Pfizer doses to be distributed through the COVAX Facility, earmarked for AMC participants and member states of the African Union, with 200m to be shipped in between August and December 2021, and 300m before July 2022. Although Gavi's funds are fungible, we understand that the US cash disbursement to Gavi of $2bn in July 2021 was linked to 300m of the doses procured through the US facilitated purchase – this equates to $6.67 per dose, broadly equivalent to the estimated COVAX price paid for Pfizer doses, as shown in main report section on market shaping. This facilitated purchase was reported as extremely useful in enabling access to a significant volume of Pfizer doses with delivery in a timeframe that would meet country demands and preferences.

On 22 September 2021, the US Government announced that it would donate a further 500m Pfizer doses to the COVAX Facility for delivery beginning in 2022. While 200m of these doses represent additional resources to those stated above, we understand that the USG's second tranche of $2bn referenced above was linked to the procurement of 300m of these doses. A number of stakeholders noted that this was not as helpful to the COVAX Facility: (a) as the first facilitated purchase, mainly as it could have secured access to Pfizer doses at this time without the US's involvement; (b) as there was a growing risk of there being significant levels of oversupply in 2022; and (c) as a cash contribution, which was required and for which the COVAX Facility set out to raise funds for in early 2022. Stakeholders also noted the political dynamics surrounding the US's approach, notably that the timing of the US decision to provide US-manufactured doses coincided with the MSDC's split decision (the first in its history) to incorporate Chinese manufactured doses into the portfolio.

Comparison to other agencies: The scale and speed with which resources were raised is unprecedented for a global health initiative. While this must be interpreted in the context of there being an incredibly strong investment case for scaling up global COVID-19 vaccination, the scale and timing of fundraising can be compared to the Global Fund, which raised $14bn for the 2021-23 grant cycle ($4.7bn p.a.) through its sixth replenishment, and Gavi which raised $8.8bn for the period 2021-25 ($1.8bn p.a.) through the Global Vaccine Summit.[96, 97] It

can also be compared to the relative struggle to raise the required resources for the wider ACT-A (outside of the COVAX Pillar).[98, 99]

Dose donations: While principles for dose sharing were first published in December 2020, a number of stakeholders stated that the processes for accepting and administering dose donations were developed too late, causing delays for the first doses donated. This was additionally complicated by manufacturer restrictions to transferring doses, I&L requirements, geographical earmarks often imposed by donors and the short shelf life of some doses, in contravention of the principles and which required significant transactions costs for the Office of the COVAX Facility to administer.[100] It is, however, worth noting that had dose donations been a part of the initial resource mobilisation strategy it would have created a perverse incentive for donating countries to initially procure even more vaccine supplies in the knowledge that they could later offload unwanted stocks without incurring significant levels of wastage or transactions costs in donating doses bilaterally.

Annex C2.1.2 : Process tracing

The assessment is focused on the following hypothesis:

> *The AMC resource mobilisation strategy and activities have secured adequate resources for full and timely implementation of intended activities to meet COVAX AMC objectives.*

This hypothesis relates to resource mobilisation for the AMC, the aspect of the resource mobilisation strategy most central to COVAX's overall success. The use of process tracing provides a subjective assessment of whether, how and why the hypothesis has occurred as intended in rigorous, transparent, and repeatable way. It should be thought of not as an assessment of causality but as an assessment of confidence in causality.

The following table is used as a tool to map the evaluation team's expectations on evidence against the actual evidence gathered and set up the process tracing exercise.

Table C5: Application of process tracing (resource mobilisation)

Evidence to prove/disprove contribution claim	Test type	Actual evidence
Evidence of a diverse range of stakeholders from different constituency groups actively advocating for the full financing of the COVAX AMC.	Hoop	**Confirmed:** A highly diverse range of stakeholders from different constituency groups has actively advocated for the full financing of the COVAX AMC. This was particularly the case at the outset of the COVAX AMC and in early 2021, although reflective of issues in providing equitable access to COVID-19 vaccines during 2021, the level of stakeholder engagement in resource mobilisation tapered off during 2021.
Evidence of strong collaboration between COVAX Facility/AMC and AMC donors (emails, conference calls, in-person meetings between senior staff/Board members, data sharing).	Hoop	**Confirmed:** Although the evaluation team has not been party to this information, key informants have confirmed that a large team has been working since the AMC's inception to collaborate and engage with all potential AMC donors. These donors are mostly well known to Gavi and have been continually engaged throughout implementation through their representation on the Gavi Board and its committees, and membership of the AMC Engagement Group and its sub-committee, the AMC Investors Group.
Evidence of broad-based engagement of potential AMC donors in international discourse (meeting attendance, part of discussion, membership of Gavi/COVAX governance structures).	Hoop	**Confirmed:** AMC donors have been highly engaged in international discourse around and resource mobilisation for the COVAX AMC. This has included pledging conferences hosted by the UK, Japan and US, which have been well attended, including by many heads of state from Gavi's existing donor base and other countries, as well as from philanthropy, foundations and the private sector. Many AMC donors have made public declarations of support for the COVAX AMC, including to declare their own support and encourage others. As above, there is a similar group of donors for the AMC as for Gavi 5.0, with this group represented on the Gavi Board and its committees, as well as through their membership of the AMC Engagement Group and its sub-committee, the AMC Investors Group.
COVAX Facility request/ actions made in good time	Hoop	**Confirmed:** Gavi has maintained open dialogue and constant communications with AMC donors to maintain a high level of donor awareness on COVAX AMC needs, and gauge

(and shared with relevant people) to influence AMC donor decisions.		donor ability to contribute to set the level of ambition for investment opportunities, and inform the COVAX Facility's programmatic approach (for instance, to guide its ability to do deals and expend resources). This has been through both a resource mobilisation function, but also through their representation on the Gavi Board and its committees, and their membership of the AMC Engagement Group and its sub-committee, the AMC Investors Group. As such, donors have been made quickly aware of COVAX AMC needs and engaged in continual dialogue, with a view to positively influencing their decision making.
At least partial congruence in the timing and content of COVAX Facility/Gavi actions and statements from political leaders and/or pledges being made.	Hoop	**Confirmed:** AMC investment opportunities have been linked in part to Gavi's fundraising expectations, with set pledging conferences designed to give AMC donors an opportunity a platform to announce their support. There has been strong demand for these platforms, and they have been widely used by political leaders, ensuring that pledges made mirror the timing and overall resource request set out in COVAX AMC investment opportunities.
Political leaders endorse support for COVAX AMC at the scale required to meet COVAX AMC objectives.	Smoking gun	**Confirmed:** AMC investment opportunities have been fully funded. These have been linked to Gavi's fundraising expectations (based on continual donor engagement), as well as the estimated total resource requirement/need. Over this period, sufficient cash resources have been raised to meet COVAX AMC programmatic targets – i.e. with access secured to more than 4bn doses by the end of 2021.
AMC donor pledges, binding commitments and cash disbursements closely mirror the request, as set out in the COVAX AMC investment opportunity.	Smoking gun	**Confirmed:** As above, AMC investment opportunities have been linked in part to Gavi's fundraising expectations, with set pledging conferences designed to give AMC donors an opportunity and a platform to announce their support. These platforms have been widely used by political leaders, ensuring that pledges made mirror the request set out in COVAX AMC investment opportunities. While it took a number of months to convert donor pledges into binding commitments and cash disbursements, we understand that this was for the most part caused by the political and procedural processes that must be undertaken in donor countries prior to funds being released. For instance, in the US, Congressional approval is required which takes time to obtain. In Gavi's usual course of business, these delays are anticipated and built into the process of fundraising.
Most stakeholders engaged in the resource mobilisation strategy (who have an incentive to say it has been successful), and AMC donors (who do not have an incentive to say it has been successful), believe in the contribution claim.	Hoop	**Confirmed:** Stakeholders interviewed for this evaluation that have been engaged in the resource mobilisation strategy (and who have an incentive to say it has been successful), strongly believe in the contribution claim – i.e. that the AMC resource mobilisation strategy and activities have played a meaningful role in securing adequate resources for full and timely implementation. One prominent stakeholder stated that 'It is hard to see how we could have raised any more money, any more quickly'. Other stakeholders were also strongly supportive of the contribution claim.
AMC donors acknowledge that the COVAX AMC resource mobilization strategy was persuasive and appropriate, and an important factor in determining the scale and timing of their contributions.	Smoking gun	**Confirmed:** Although the evaluation has only weak data in this area, some AMC donors interviewed confirmed that the COVAX AMC offered a persuasive and appropriate resource mobilization strategy, enabling significant levels of support to be provided in a short space of time. This has been facilitated by the significant level of trust donors had in Gavi. It has also been facilitated by the exceptionally strong investment case for investing in global vaccination against COVID-19 for all countries, including donor countries themselves. Nonetheless, there is some evidence to suggest that Gavi's resource mobilisation approach harnessed this situation to good effect for resource mobilisation.

The passing of hoop tests affirms the relevance of the hypothesis but does not confirm it. The passing of smoking gun does confirm the hypothesis. As such, the exercise gives us considerable confidence that the AMC resource mobilisation strategy and activities have played a meaningful role in securing adequate resources for full and timely implementation.

Annex C2.2: Market shaping

This annex includes a section with supplementary content to the findings on market shaping (C2.2.1) and a summary of the process tracing exercise conducted (C2.2.2).

Annex C2.2.1 : Supplementary content to findings on market shaping

Context: The Gavi Board recognized in March 2020 that Gavi has the appropriate elements of market shaping activities to leverage for COVID-19 in addition to having mechanisms in place.[101] Significant benefits of Gavi administering the COVAX Facility including being recognised as key stakeholder, having a strong reputation and credibility with respect to immunizations, experience with market shaping and procurement financing, and the availability of ready staffing and legal framework which would take considerable effort to duplicate.[102] Although other options for managing the COVAX Facility were presented to the Board in early 2020, leveraging Gavi was the fastest way to establish a credible legal entity.[103]

Board members expressed support for the potential use of IFFIm and the AMC (Advance Market Commitment) in relation to this pandemic response.[104] In April 2020, Under the ACT Accelerator, one of Gavi's key deliverables is a COVID-19 Vaccine Global Access Facility (COVAX) to facilitate manufacturing and availability of vaccines by efficiently managing the supply and demand.[105] It is with this in mind that the design and implementation of COVAX's market shaping endeavors are evaluated.

In a vaccine market where the private sector stakeholders may not be motivated to take on excess risks, market shaping activities (both "push" investments in manufacturers and "pull" incentives in the form of demand guarantees) are anticipated to change the market dynamics to make new vaccine technology available. In the initial design, it was anticipated that COVAX would play a significant role in market shaping, increasing total supply through a combination of direct funding to product developers and manufacturers ("push") and the incentive effects of purchase commitments ("pull").

To understand Gavi's market shaping goals we can refer directly to their early design document[106] which states the need to ensure equity, making the Facility open to all participants, that all participants should have access to the vaccines at the same time (so LICs and LMICs would not have to wait for years), that they would have the largest and most diverse portfolio of vaccine candidates. The Facility should have the market leverage to mitigate demand risks and negotiate fair deals, created by the pooling of demand and resources.[107] This speaks specifically to Gavi's intention to engage in "pull" focused market shaping interventions through the COVAX Facility.[108]

Via the COVAX Facility there are three critical market shaping activities to assess against the intended impact of equitable access of vaccines to LIC and LMICs at the same time as HICs:

- AMC (Market Wide Guarantees and Pooled Global Resourcing)
- APAs (Advanced Purchase Agreements and Pooled Procurement)
- Technical Transfers (Increasing Total Manufacturing Capacity by Increasing Number of Manufacturers)

These three activities are showcased in the table below from a recent paper assessing COVAX's market shaping strategies through various instruments.[109]

Table 2: Illustrating market shaping influences of different instruments

Instrument	Theory of Change	Benefits
Pooled procurement	Aggregates demand. Reduces transaction costs in purchases. Increases market information	Greater accuracy offers incentives for investment. Suppliers can compete on volume and achieve economies of scale.
Push funding	Acts on increased market information, and supplier identification to build capacity.	Suppliers can compete on volume and achieve economies of scale. **New entrants.**
Technology transfer or vaccine development partnerships.	Reduces transaction and production costs. Incentivizes suppliers to invest more into vaccine production.	Leads to greater investment. **More competition.** Lower prices. **Might also lead to R&D.**

Table C4: COVAX Facility prices paid by vaccine product[110]

Presentation	Supplier	2021 COVAX AMC prices (per dose)	Prices achieved by other purchasers (UNICEF COVID-19 Vaccine Market Dashboard, noting data quality issues)			
			HIC	UMIC	LMIC	LIC
Ten dose vial, liquid formulation	AstraZeneca Vaxzevria[111]	$4	Min $2.19[112]; Av $3.23; Max $4	Min $3.16; Av $4.68; Max $6		
	Moderna Spikevax	$10	Min/Av/Max $40	Min/Av/Max $28.88		
	SII (multiple products)	$3	Min/Av/Max $5.25	Min $4; Av $4.88; Max $5.25		Min/Av/Max $4 AU/AVAT: $3
Six dose vial, concentrate for dilution	Pfizer	Estimate $6.75[113]	Min $14.70; Av $20.85; Max $28	Min $10; Av $12.33; Max $18	Min/Av/Max $7	AU/AVAT: $6.75
Five dose vial, liquid formulation	Janssen	$7.50	Min $8.50; Av $9.25; Max $10	Min/Av/Max $10		AU/AVAT: $10
Single dose vial, liquid formulation	Sinopharm	$5.50	Min/Av/Max $36	Min $9; Av $19.26; Max $31.1	Min $10; Av $14.53; Max $18.60	
	Sinovac			Min $10.30; Av $18.35; Max $29.75	Min $10; Av $14.62; Max $18	

Annex C2.2.2: Process tracing

The assessment is focused on the following hypothesis:

Through an expression of pooled demand, APAs, active portfolio management and interaction with manufacturers on production scale-up/technology transfer, the COVAX Facility was able to stimulate vaccine manufacturing capacity.

This hypothesis is at the heart of the COVAX Facility's raison d'être[114] and the outcome (increased manufacturing capacity) is important to the achievement of overall COVAX objectives. It is also an area where Gavi has made claims of success: "COVAX is providing manufacturers with the certainty to invest in rapid scale-up".[115]

The use of process tracing provides a subjective assessment of whether, how and why the hypothesis has occurred as intended in rigorous, transparent, and repeatable way. It should be thought of not as an assessment of causality but as an assessment of confidence in causality.

The following table is used as a tool to map the evaluation team's expectations on evidence against the actual evidence gathered and set up the process tracing exercise.

Table C5: Application of process tracing (market shaping)

Evidence to prove/disprove contribution claim	Test type	Actual evidence
Evidence of actions taken by the COVAX Facility being guided by recommendations and advice provided by the Independent Product Group, Procurement Reference Group and other relevant governance structures.	Hoop	**Confirmed:** A review of the IPG meeting minutes suggests that the IPG's recommendations on which vaccines to incorporate into the COVAX Facility portfolio have been acted upon.[116] The evaluators have not had access to the PRG meeting notes/reports, and as such are unable to confirm if the actions taken by the COVAX Facility have followed its recommendations. We understand that the MSDC, as a committee of the Board responsible for making decisions that are market and/or commercially sensitive, has been responsible for the actual decision on whether to incorporate vaccines into the COVAX Facility portfolio.
Evidence of strong collaboration between COVAX Facility and vaccine manufacturers (emails, conference calls, in-person meetings between senior staff/Board members, data sharing).	Hoop	**Unconfirmed:** Gavi as a PPP includes representatives of the vaccine industry from both industrialised and developing countries on the Gavi Board. In this function, and as drawn on by the Secretariat, these representatives have been heavily engaged in design and implementation decision making, as well as acting as focal points for wider industry consultation and communications. While there has been direct communication between the Office of the COVAX Facility (and UNICEF acting as the Procurement Coordinator and UNICEF and PAHO as Procurement Agents) and vaccine manufacturers, there is only weak evidence to suggest that strong collaborative working relationships have been established. Rather, these relationships appear to be transactional, with most informants stating that it was a seller's market with manufacturers dictating the terms of engagement. There are two instances where the COVAX Facility has benefitted from the engagement of other actors – firstly with the Gates involvement in establishing the deal with SII and, secondly, the USG facilitated purchase. The latter is an example of another purchaser being able to secure better terms (in terms of timely delivery) than the COVAX Facility was able to on its own.
Evidence of vaccine manufacturers being engaged in international discourse (meeting attendance, part of discussion, membership of Gavi/COVAX governance structures).	Hoop	**Confirmed:** Vaccine manufacturers have been highly engaged in the international discourse around COVID-19 vaccination, including high profile attendance at meetings of the G7 and various fora. This has included various Gavi meetings, such as the COVAX AMC Investment Opportunity Launch Event, One World Protected, and the DCVMN Annual General Meeting at which the Gavi Secretariat presented.[117]
COVAX Facility request/actions made in good time (and shared with relevant people) to influence vaccine manufacturers.	Hoop	**Unconfirmed:** While the COVAX Facility made some actions to influence vaccine manufacturer engagement and investment in good time, such as the market-wide commitment to purchase 2 billion doses, this was at the time non-committal and unfunded (something the Pneumococcal AMC worked hard to overcome by being fully funded with elaborate legal machinery to bind donors, Gavi, WB, UNICEF, and manufacturers to a detailed set of rules), with stakeholders feeding back that as a result this was not hugely influential to manufacturer decision making.

COVAX Facility request or actions endorsed or approved by vaccine manufacturer senior staff/Board members, or as per external communications.	Smoking gun	**Confirmed (in one instance):** There is little/no evidence for this, except in the case of SII which received a significant push investment, with financial backing from the Gates Foundation, to facilitate a technical transfer of the Oxford-AstraZeneca vaccine and the Novovax vaccine, linked to a deal to supply a significant volume of doses through the COVAX Facility and to low- and middle-income countries.[118]
Vaccine manufacturer pledges or stated intentions closely mirror COVAX Facility requests or actions.	Smoking gun	**Confirmed (in one instance):** There is little/no evidence for this, except in the case of SII where a push investment was made, with financial backing from the Gates Foundation, to facilitate a technical transfer of the Oxford-AstraZeneca vaccine and the Novovax vaccine, linked to a deal to supply a significant volume of doses through the COVAX Facility and to low- and middle-income countries.[119] In other instances, we understand from interviews that APA volumes, prices and timing of delivery were mostly dictated by manufacturers, rather than reflecting the COVAX Facility's desire/intent.
Vaccine manufacturer representatives acknowledge that COVAX Facility request/actions were an important input into the decision to increase vaccine manufacturing capacity.	Smoking gun	**Confirmed (in one instance):** There is little/no evidence for this, except in the case of SII where the push investment mentioned above is acknowledged to have provided a significant proportion of the overall cost of vaccine production.[120] In other instances, it appears more likely that manufacturers made decisions on whether and how to scale up manufacturing capacity on wider factors, with evidence of other purchasers appearing to be prioritized for supply and COVAX being supplied once a large proportion of their demand had been met.

The passing of hoop tests affirms the relevance of the hypothesis but does not confirm it. The passing of smoking gun does confirm the hypothesis, but only in the case of SII which benefitted from a significant push investment, outside of the COVAX Facility's core design. In at least this case, the exercise gives us confidence that the COVAX Facility was able to stimulate vaccine manufacturing capacity. There is, however, very little evidence to suggest that the COVAX Facility had a wider market effect.

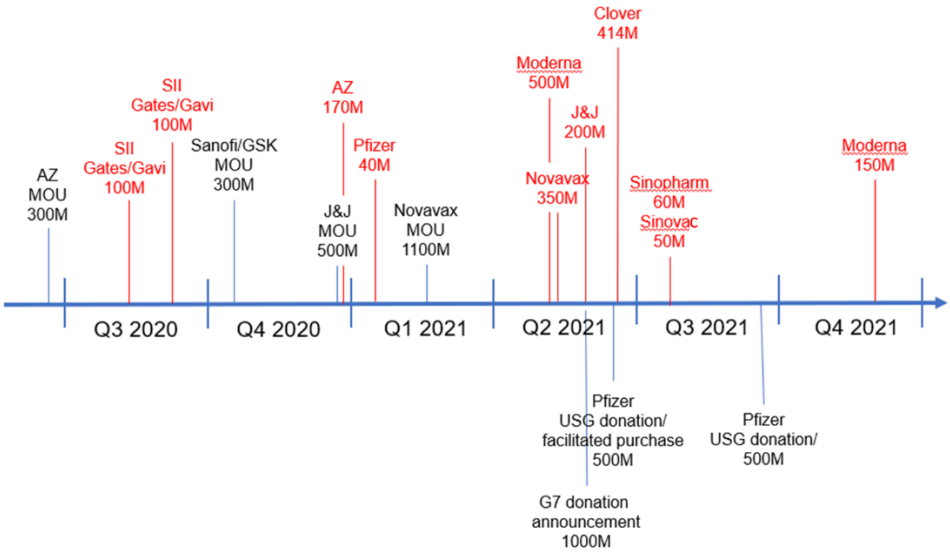
Annex C2.3: Procurement and supply

This annex includes a section with supplementary content to the findings on procurement and supply (C2.3.1) and a summary of the process tracing exercise conducted (C2.3.2).

Annex C2.3.1 : Supplementary content to findings on procurement and supply

Announced COVAX deals with firms are above the line; APAs in red. Selected donations to COVAX are below the line.

Figure C4: Timeline of COVAX supply deals



Annex C2.3.2: Process tracing

The assessment is focused on the following hypothesis:

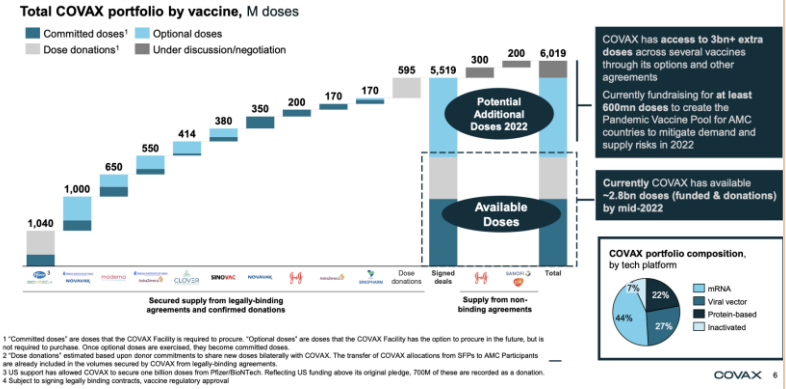
> *Through the establishment of APAs, an actively managed portfolio of vaccines, Gavi partner procurement functions and other Gavi Secretariat support, the COVAX Facility and AMC has ensured that vaccines are procured and delivered in line with COVAX objectives and targets.*

The use of process tracing provides a subjective assessment of whether, how and why the hypothesis has occurred as intended in rigorous, transparent, and repeatable way. It should be thought of not as an assessment of causality but as an assessment of confidence in causality.

The following table is used as a tool to map the evaluation team's expectations on evidence against the actual evidence gathered and set up the process tracing exercise.

Table C6: Application of process tracing (procurement)

Evidence to prove/disprove contribution claim	Test type	Actual evidence
Evidence of the Office of the COVAX Facility acting on recommendations and advice provided by various governance bodies inputting into decision making on vaccine portfolio and product selection.	Hoop	**Unconfirmed:** A review of the IPG meeting minutes suggests that most of the IPG's recommendations on which vaccines to incorporate into the COVAX Facility portfolio have been acted upon. The evaluators have not had access to the PRG meeting notes/reports, and as such are unable to confirm if the actions taken by the COVAX Facility have followed its recommendations. We understand that the MSDC, as a committee of the Board responsible for making decisions that are market and/or commercially sensitive, has been responsible for the actual decision on whether to incorporate vaccines into the COVAX Facility portfolio.

Evidence of APAs with vaccine manufacturers being put in place.	Hoop	**Confirmed:** As of December 2021, the COVAX Facility had signed APAs with 10 different vaccine manufacturers to secure access to, either through a firm commitment or option to purchase, 4.2 billion doses (against a target of 2 billion). Access was also secured to a further 700 million doses via a US facilitated purchase/donation, and to 595 million doses from dose donations.[121] 
Evidence of a diverse portfolio of vaccines being created and actively managed.	Hoop	**Confirmed:** As above, by December 2021 the COVAX Facility portfolio included 10 different vaccine manufacturers comprising a mix of technology platforms.[122] As shown above, by December 2021 the portfolio was comprised of mRNA (44%), viral vector (27%), protein based (22%), and inactivated (7%) vaccines. We understand that the approach to managing this portfolio evolved over time, from one that sought to secure a deal for all vaccine candidates that received EUL to one that was guided by a set of principles to ensure that the most beneficial and suitable vaccine candidates were selected and utilised. There were, however, even in the initial stages of developing the portfolio some preferred products for widespread use. The first was the AstraZeneca, which was made available (initially) at a 'not for profit' price, highly effective according to trial results, and had an added advantage over Pfizer and Moderna that it could be stored at ordinary fridge temperature, making worldwide rollout simpler and cheaper. This was despite early emerging evidence of links to blood clots and a number of countries changing guidance on use or stopping use altogether. The second preferred product was Janssen, which as a single dose and with relatively simple storage, would also be conducive to worldwide rollout. When supplies of some vaccines did not keep pace with expectations and demand, the portfolio was expanded, for instance to include Sinopharm and Sinovac products in mid-2021. The wider portfolio of vaccines offered (and continues to offer) a degree of resilience to the uncertainty of the COVID-19 pandemic, which became increasingly important over time for a multitude of reasons: • *First movers:* The COVAX Facility's initial strategy to secure doses for all vaccines that received EUL approval was successful, with APAs signed for Pfizer, AstraZeneca and SII, the first to receive EUL by mid-February 2021. APAs were also signed with Janssen, Moderna, Sinopharm and Sinovac, which received EUL between 15 March 2021 and 1 June 2021. • *Experience in vaccine manufacture and ability to scale up manufacturing capacity:* Whereas Pfizer had significant experience of bringing vaccine products to mass market, others did not. The COVID-19 vaccine was Moderna's first product to undergo a Phase 3 trial. It is also worth noting that mRNA vaccines had never before been used in humans. AstraZeneca did have significant expertise but only partnered with the University of Oxford on 30 April 2020. A portfolio approach offered some resilience to the substantial manufacturing issues incurred by some manufacturers. • *Ease of rollout and suitability for different contexts:* There are several aspects to this, most notably related to the requirement for ultra-cold chain (UCC), ability to store, number of doses and requirement for boosters: All vaccines appear to require booster doses to maintain vaccine effectiveness. • *Resilience to Variants of Concern:* Variants have affected vaccine effectiveness in different and important ways, as compared to the original SARS-CoV-2 virus – for instance, in relation to transmissibility; effect on health outcomes or other population groups; and evasion of the protective immunity vaccines (or infection) provide. Although the evidence is unclear whether some vaccines may be better placed to respond to variants, a portfolio approach offered a better chance that COVAX would be able to secure supplies of at least some of the most effective vaccines.
Evidence of strong collaboration (emails, conference calls, in-person	Hoop	**Confirmed:** Although the evaluators have not had access to the specific communications between the Office of the COVAX Facility and procurement partners, we understand that these have been continuous across all aspects of procurement, transport and delivery.

meetings, data sharing) between the Office of the COVAX Facility, AMC Delivery Partner and SFP Procurement Coordinator to establish and implement procurement, transport and delivery arrangements.		The available evidence, mostly based on stakeholder feedback, suggests that these arrangements have generally worked well. However, a number of points of feedback have been raised: • UNICEF was not initially included within the COVAX design discussions, and not treated on the same footing as the co-lead organisations (CEPI, Gavi, WHO). • Gavi took responsibility for contracting vaccine manufacturers, which had traditionally been UNICEF's responsibility, in which some stakeholders argued it had more experience and expertise. We note, however, that neither Gavi nor UNICEF had previously struck deals using Advance Purchase Agreements (APAs). • Gavi assuming this responsibility created some confusion over roles, responsibilities, and ways of working between organisations which could have been streamlined. • WHO and UNICEF, with in-country presence, were well placed to assume responsibility for transport and delivery arrangements, as well as to ensure national regulatory requirements had been met, NDVPs, indemnification and liability agreements and export/import authorisations were in place, and to support freight, logistics and storage arrangements. Gavi did engage in this space in what has been described as an 'all hands on deck' approach to getting countries ready to accept and roll out vaccines.
Evidence of strong collaboration (emails, conference calls, in-person meetings, data sharing) between the Office of the COVAX Facility, partners and participants to communicate indicative supply timelines and determine other delivery needs.	Hoop	**Confirmed:** Although problematic in its implementation, the COVAX Facility did seek to transparently communicate supply timelines with partners and participants. This was mainly through the publication of dose allocations, based on a process which was also made available to participants (although was subject to significant change over time – see section on allocation). The main issue experienced was due to the lack of predictable supply, caused by poor visibility from manufacturers and dose donating countries on the quantity and timing of doses that would be made available to the COVAX Facility. This restricted the extent to which the COVAX Facility was able to communicate indicative supply timelines to both partners and participants, and was a source of frustration for many.
Evidence of COVAX Facility support being provided in a timely manner to address delivery needs (e.g. in relation to putting in place or adapting NDVPs for AMC participants, putting in place indemnification & liability agreements and export/ import authorisations, as well as freight, logistics and storage arrangements).	Hoop	**Confirmed:** There is good evidence of WHO and UNICEF working at the country and regional level to inform assessments of delivery needs and put in place measures to ensure needs were met in order to facilitate the distribution and delivery of vaccines. This was in part supported by Gavi funding for 400 TA providers from December 2020 onwards. The scope of TA included supporting AMC participants to develop and gain approval for NDVPs, which provided strategic and operational guidance on vaccine introduction, and conducting Vaccine Introduction Readiness Assessment Tool (VIRAT) assessments. These processes were overseen by country EPI managers with support from country partners and Gavi's Senior Country Managers (SCMs). These TA providers, embedded within partner country offices (along with UNICEF and PAHO as procurement agents and Gavi's SCMs) have engaged with countries continuously to overcome hurdles to getting COVID-19 vaccines to ports. This has included the development and approval of NDVPs and subsequent plans, I&L, regulatory approvals, import permits/clearances, shipping, freight and logistics (during a global supply chain crisis), and storage arrangements, as well as additional readiness checks for some manufacturers. Stakeholders described these roles as critical to enabling the successful receipt of COVID-19 vaccines in many countries, including both COVAX and non-COVAX doses. The TA providers were also widely used to support vaccine rollout, including to support coordination mechanisms and working groups (e.g. for NITAG decision-making on prioritization of risk groups), to establish vaccine cold chain and logistics strategies and systems, to strengthen COVID-19 surveillance systems and for demand generation activities.
Evidence of APA terms and conditions related to the provision of vaccines (e.g. in terms of quantities and timings) being abided by.	Smoking gun	**Unclear:** Although there is no evidence of vaccine manufacturers directly contravening APA terms and conditions in 2020 or 2021, there is significant evidence of misaligned expectations between the COVAX Facility and vaccine manufacturers on the timing of supply. This is mostly a function of APAs including specific details on price and quantity, but not on the timing of supply. In some cases, this was in part due to the timing of APA deals being struck, often in 2020 before manufacturers could reasonably make guarantees on timing. However, this likely in effect allowed manufacturers to serve other purchasers before COVAX – many stakeholders have referred to COVAX being 'pushed to the back of the queue' for this reason (they have also linked this argument to a lack of upfront financing which delayed deal making, although this logic is questioned elsewhere in the report). This issue resulted in the COVAX Facility securing far fewer doses in 2021 than it anticipated.
Evidence of the actively managed portfolio of vaccines working to secure sufficient and timely supply to meet COVAX needs and targets.	Smoking gun	**Disputed:** The COVAX Facility sought to make early deals across a broad portfolio of promising vaccine candidates to incentivise rapid investment in manufacturing, and to ensure that it could create a diverse portfolio of vaccines with EUL that would enable it to overcome supply shocks and secure sufficient and timely supply to meet COVAX needs and targets. As above, the approach to managing this portfolio evolved over time, from one that sought to secure a deal for all vaccine candidates that received EUL to one that was guided by a set of principles to ensure that the most beneficial and suitable vaccine

		candidates were selected and utilised. The initial approach was a pragmatic one that was appropriate given the need to secure access to doses and the lack of any alternatives (partly a function of Operation Warp Speed restricting/prohibiting access to US-manufactured doses, and the lack of other vaccines with EUL approval). Nonetheless, the approach placed a high degree of reliance on the Astra Zeneca SII vaccine. When supply of this vaccine was disrupted due the Indian government's export ban this substantially affected the COVAX Facility's ability to secure sufficient and timely supply, which the wider portfolio was not able to cover in 2021. Even with additional APAs, substantial volumes of doses from non-APA sources via dose donations, and a USG-facilitated purchase, the COVAX Facility was not able to secure sufficient supply to meet COVAX needs and targets in 2021. The significant USG facilitated purchase of Pfizer doses, which was conducted outside of the COVAX 'portfolio', was of such a significant size that it has had profound consequences for the COVAX portfolio, for country delivery, and for the overall balance of supply and demand. On one hand, it alleviated the overall supply constraint and made supply much more predictable. On the other hand, it forced COVAX to accommodate to a vaccine that was not initially thought to be well-suited to weak health systems (because of UCC and syringe requirements). A number of stakeholders have fed back that this is likely to have influenced decision making of existing manufacturers and new entrants. There is also evidence of COVAX continuing to incorporate new vaccines into the portfolio fairly far into 2021, including with Novovax and Clover, at a time when many say it could have anticipated that it would end up with excess supply and/or that there would be little demand for these particular vaccines.
COVAX partners (notably the AMC Delivery Partner and SFP Procurement Coordinator) and participants acknowledge that the Office of the COVAX Facility actions to determine and respond to needs were an important input into the procurement and delivery process.	Smoking gun	**Unconfirmed:** Although the evaluation has only weak data in this area, stakeholders have generally reflected a perspective of the COVAX Facility doing a reasonable job to procure and secure access to doses. Others have been more negative and attributed the COVAX Facility's inability to secure access to doses as part of the justification for establishing the African Vaccine Acquisition Trust (AVAT) and for the PAHO Revolving Fund taking a more active role in vaccine procurement than originally envisaged. These views must, however, been seen in the context of the COVAX Facility securing access to more than 4 billion doses by the end of 2021, allocating 1.6 billion doses, and delivering 950 million doses – this in itself is a significant achievement.

The passing of hoop tests affirms the relevance of the hypothesis but does not confirm it. The failing of smoking gun does not eliminate the hypothesis but does weaken it. As such, the exercise gives us confidence that the COVAX Facility has acted on the advice of independent partners and put procurement mechanisms in place as intended, but this has not been sufficient to ensure that vaccines are procured and delivered in line with COVAX objectives and targets.

Annex C2.4: Allocation

This annex contains four sections. The first provides a general description of the allocation rounds that were conducted under Phase 1 of the allocation mechanism. The second provides a diagram to visualise the forcefield analysis conducted and explained in the main report. The third provides a summary of the process tracing exercise conducted. The fourth provides supplementary quantitative analysis conducted.

Annex C2.4.1: Description of allocation rounds conducted under Phase 1

Phase 1 of the allocation mechanism involved the allocation of 1.6 billion doses through 14 allocation rounds and 13 administrative adjustments, as summarised in the figure below. A further 493 million doses were allocated through dose sharing agreements, and 135 million doses through three cost sharing agreements.

As shown in Figure C5, and supported by Table C7, most allocation rounds and administrative adjustments went through different processes for the allocation of one or two vaccines, and many involved the allocation of small quantities of doses. A substantial proportion of these doses (45%) were allocated through administrative adjustments, rather than the formal allocation round process.

Figure C5: Doses allocated via allocation rounds and administrative adjustments within Phase 1 of the allocation mechanism, ordered chronologically, by vaccine

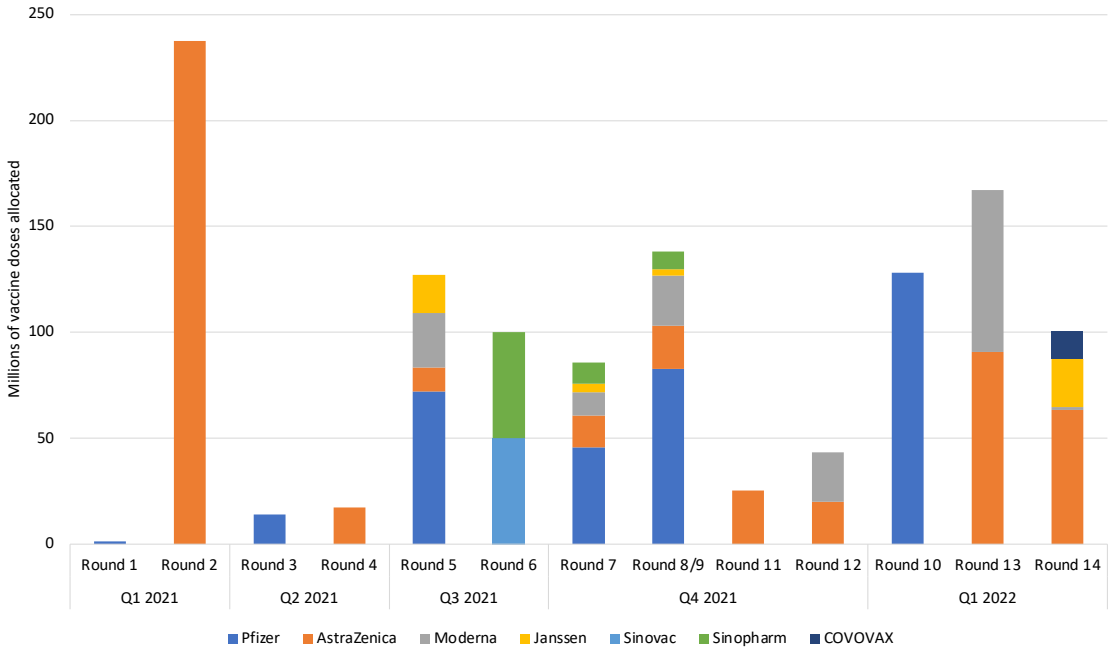


Table C7: Description of allocation processes within Phase 1 of the allocation mechanism, ordered chronologically

Allocation round/ admin adjustment (approval date)	Doses allocated[123]	# of countries	Anticipated timing of delivery	Description	Net effect on fairness/equity
Round 1 (Jan 2021)	• Pfizer: 1,200,420	18	Jan 2021	Linked to Pfizer's requirement to include some countries, cold chain requirements, and the JAT's decision to focus on a small number of countries given the extremely limited quantities involved.[124] This was not considered to be a part of the official allocation process and did not include a formal IAVG review (which was not yet established).	Unequal initial allocation prioritising just a few countries, albeit for a small quantity of doses.
Round 2 (Feb 2021)	• AZ Vaxzevria: 75,996,000 • SII COVISHIELD: 161,472,000 (later revised down to 30m)	142	Jan-May 2021	First large scale, 'full' allocation round. All countries allocated SII where eligible (as per SII licensing agreement) and remainder allocated AZ. 2 countries did not meet post allocation readiness check. India export ban meant many didn't receive any supply or no second shipment of allocated vaccines.	Large proportional allocation addressed prior inequity, although small states over prioritised in allocation and SFPs received more of allocated doses due to supply chain.
Round 3 (Mar 2021)	• Pfizer: 14,109,030	47 (29 SFPs)	Apr-Jun 2021	65 out of 87 AMC participants did not meet readiness checks, as required and determined by Pfizer.	Unequal allocation prioritising a few countries, mostly SFPs, which compounds earlier inequity.
Round 4 (Jun 2021)	• AZ Vaxzevria: 17,366,400	43	Jun 2021	Exceptional allocation to cover 2nd dose needs from Round 2 allocation and participants that did not receive any shipment against their original allocation of SII doses. Did not include a formal IAVG review. Although not factored into the formal allocation, dose donations start to increase COVAX dose throughput to AMC participants.	Serves to partly address earlier inequity.
Round 5 (Jul 2021)	• Pfizer: 72,190,170	99 (some excluded due to meeting pop cov targets)	Jul-Sep 2021	12m doses from the COVAX APA; and 60m sourced from US facilitated purchase for AMC participants and 6 SFPs in the AU. The requirement for countries to meet a readiness check was dropped from this round onwards. Although still not factored into the formal allocation, dose donations become more significant part of COVAX dose throughput to AMC participants, including 60m US donation of Pfizer, Moderna and Janssen doses, and Japan donation of 11m AZ doses.	Large proportional allocation goes a long way to addressing prior inequity.
Round 6 (Jul 2021)	• Sinovac: 50,000,000 • Sinopharm: 50,000,000	60 (many excluded due to opt outs or meeting pop cov targets)	Jul-Sep 2021	Both vaccines were incorporated into the portfolio in July 2021. The principle of seeking to allocate only a few different vaccine products to countries was dropped from this round onwards. Allocation factored in dose donations (but only those via COVAX from some countries) for the first time.	Large proportional allocation again partly addresses prior inequity.

Allocation round/ admin adjustment (approval date)	• Doses allocated[125]	# of countries	Anticipated timing of delivery	Description	Net effect on fairness/equity
Admin adjustment 1 (Sep 2021)	• Pfizer: 8,903,700	27	Sep-Dec 2021	Reallocated Round 5 doses from countries that refused and expressed that they were unable to absorb the allocated doses to others. Some Round 5 shipments were postponed for delivery in Q4-2021 for participants not ready to receive them. In accordance with the redistribution process, these doses are not lost for these Participants and will be shipped at a later date.	Reallocation from countries unable to absorb that may affect equity but does improve allocative efficiency.
Admin adjustment 2 (Sep 2021)	• Pfizer: 19,338,930	32	Sep-Dec 2021	Reallocated Round 6 doses from the Humanitarian Buffer and Participants who refused their Round 6 allocation. The total amount reallocation from R6 corresponds to roughly 1/3 of the total allocation. As the total quantity of doses up for reallocation exceeded 5M doses, the reallocation proposal was reviewed and validated by the IAVG.	Reallocation from countries unable to absorb that may affect equity but does improve allocative efficiency.
Round 7 (Sep 2021)	• Pfizer: 45,616,000 • AZ Vaxzevria: 15,000,000 • Moderna: 10,993,920 • Janssen: 3,996,000 • Sinopharm: 10,000,000	46	Oct 2021	5m Pfizer doses from the COVAX APA; and 40m sourced from US facilitated purchase. Exceptional allocation to focus on low vaccination participants (i.e. below 15%). As such, for the first time, allocation factored in supply from all (i.e. non-COVAX) sources. This was a significant departure from the allocation methodology and did not include a formal IAVG review. *(Note that due to limited demand from low coverage countries, the threshold for inclusion was expanded to include more countries.)* For the first time, participants were asked to express direct product preferences for all the vaccines in the COVAX Facility portfolio and a voluntary monthly allocation maximum, as well as a UCC vaccine allocation maximum.	Large allocation prioritising low vaccination countries again partly addresses prior inequity, but potentially challenged by Pfizer/USG earmarking and limited demand in some countries.
Admin adjustment 3 (Oct 2021)	• AZ Vaxzevria: 7,996,800	5		Urgent allocation due to short shelf life offered to participants that could absorb them in a short timeframe.	Unlikely to be in line with equitable objective, prioritising just a few countries with high absorptive capacity.
Admin adjustment 4 (Oct 2021)	• Sinovac: 4,039,400 • Sinopharm: 10,730,400	4		Configured to include SFP coverage from residual doses after the completion of a Sinopharm and Sinovac cost-sharing round, once it was confirmed that there was insufficient AMC demand due to financing issues.	Unlikely to be in line with equitable objective, prioritising just a few countries able to meet cost sharing financing requirements.
Admin adjustment 5 (Oct 2021)	• Pfizer: 1,167,660	2		Allocation for Optional Purchaser Pfizer APA close out.	Unlikely to be in line with equitable objective, prioritising just two SFPs.
Admin adjustment 6 (Oct 2021)	• Sinovac: 346,800	2		Further reallocation of Sinovac doses following the cost-sharing round to prioritise Optional Purchasers willing to purchase above their pro rata share.	Unlikely to be in line with equitable objective, prioritising just two SFPs.

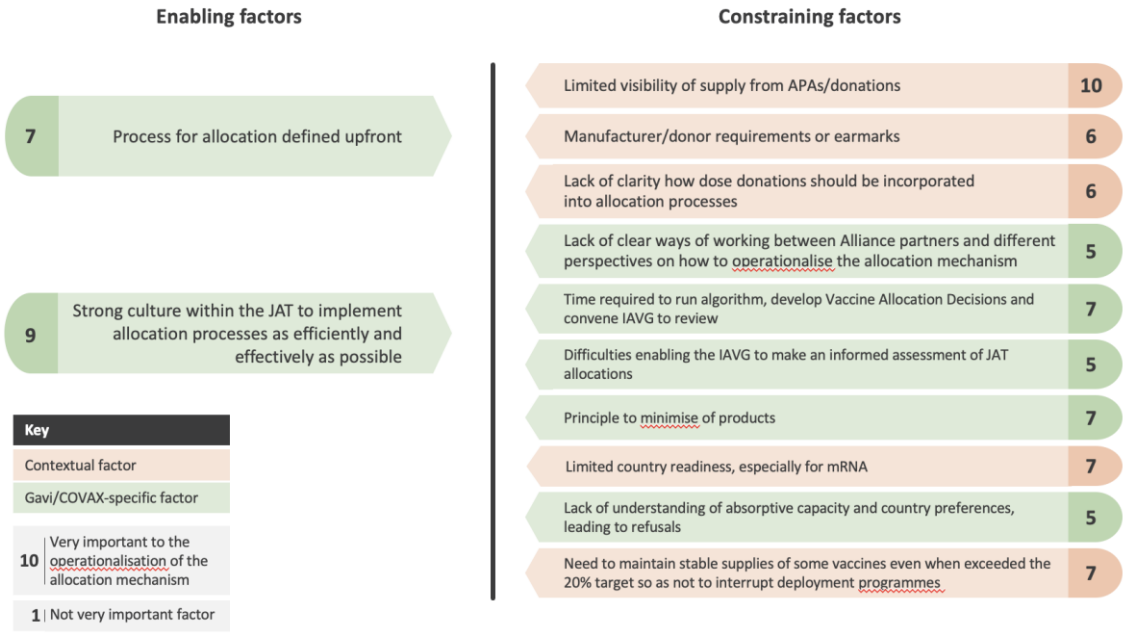
Allocation round/ admin adjustment	• Doses allocated[126]	# of countries	Anticipated timing of delivery	Description		Net effect on fairness/equity
Dose sharing (up to Oct 2021)	• Pfizer: 7,747,740 • AZ Vaxzevria: 65,708,710 • Moderna: 54,186,700 • Janssen: 24,340,900			Reflects donations received and allocated to 8 October 2021.		Unclear. Although most dose donations were allocated to AMC participants, it is not known whether and how the earmarks applied distorted overall equity.
Round 8 (Oct 2021)	• Pfizer: 82,860,570* • AZ Vaxzevria: 20,100,000 • Moderna: 23,748,480 • Janssen: 2,923,200 • Sinopharm: 8,355,600 **10m Pfizer doses from the COVAX APA; and 73m sourced from US facilitated purchase*	91	Nov-Dec 2021	Exceptional allocation to focus 50% of allocated doses to countries below 20% 'COVAX coverage'. This aimed to ensure that all Participants eligible to receive an allocation through COVAX are included in the round.	This was a significant departure from the allocation methodology, which was subject to a formal IAVG review.	Large allocation(s) that sought to balance the need for inclusivity and prioritise low vaccination countries. Again it partly addresses prior inequity, but challenged by Pfizer/USG earmarking and limited demand in some countries.
Round 9 (Oct 2021)				Exceptional allocation to focus 50% of allocated doses to countries below 20% total C-19 vaccination coverage. This aimed to target participants heavily reliant on COVAX (as for Round 7).		
Admin adjustment 7 (Oct/Nov 2021)	• Pfizer: 36,299,250	4	Jan 2022	Pre-allocation of Pfizer doses allocated in Round 10 to ensure January's early supply could be prepared to be shipped to 4 participants to keep these countries actively invested in delivering Pfizer.		Large allocation(s) that sought to prioritise AMC and AU countries. Again, it partly addresses prior inequity, but challenged by Pfizer/USG earmarking and limited absorptive capacity in some countries.
Round 10 (Nov 2021)	• Pfizer: 120,000,000	60 (54 AMC) *7 countries still not clear Pfizer readiness checks*	Jan-Mar 2022	Allocation to improve country predictability of Pfizer supply from USG facilitated purchase; the ability for COVAX Partners to plan for syringe arrivals; and accommodate supply changes and needs as the on-ground situation evolves over Q4-2021. Included a significant effort to gather and review country intelligence to ensure a realistic outcome so that this long-horizon allocation could account for UCC storage capacity, syringe availability, and country preferences. Appears that Pfizer readiness checks are reintroduced to allocation process.		
Admin adjustment 8 (Nov 2021)	• Pfizer: 8,175,960 (net of post allocation additions and reductions)	12	Jan-Mar 2022	After the algorithm was run, more participants were added to the list of allocated countries, and some were allocated more doses to reach their UCC caps. On the contrary, doses allocated to others were reduced due to limited absorptive capacity.		

Allocation round/ admin adjustment	• Doses allocated[127]	# of countries	Anticipated timing of delivery	Description	Net effect on fairness/equity
Round 11 (Nov 2021)	• SII COVISHIELD: 25,275,500	12	Nov-Dec 2021	Exceptional round for SII supply coming back online. Required rapid allocation to facilitate shipment by end-2021. Only for a small number of countries due to many being outside SII earmark, above 20% 'COVAX coverage', or not demanding the vaccine. As the volumes were still highly uncertain and confirmation from SII could come at a very late stage, the JAT requested validation to the IAVG on a "non-objection" basis.	Unclear. Although most doses were allocated to AMC participants, it is not known whether and how the limited eligibility distorted overall equity.
Round 12 (Nov 2021)	• SII COVISHIELD: 19,864,000 • Moderna: 23,400,620	19	Nov-Dec 2021	Exceptional round for additional SII and Moderna supplies made available from refused doses in earlier rounds and doses provided at short notice. Only for a small number of countries due to many having low absorptive capacity.	Unclear. Although most doses were allocated to AMC participants, it is not known whether and how the limited eligibility distorted overall equity.
Admin adjustment 9 (Nov 2021)	• Pfizer: 60,277,230	18	Nov-Dec 2021	Following Round 10 allocation of Pfizer doses, allocation of additional USG facilitated purchase Pfizer doses was provided to a number of high absorbing participants to continue their vaccination programs.	In isolation, this large allocation to a small number of countries would not have advanced an equity objective, but this allocation was factored into a later allocation round.
Admin adjustment 10 (Nov 2021)	• AZ Vaxzevria: 29,584,800	23	Jan-Mar 2022	Due to the imminent closure of the APA deal for AZ supply, ADMIN 10 was run to close-out remaining contractually obliged volumes of pro-rata shares owed to Optional Purchase participants.	Allocation for small number of SFPs, which, given known vaccine coverage rates at this time, would not support equitable allocation objective. This allocation was, however, factored into a later allocation round.
Round 13 (Dec 2021)	• AZ Vaxzevria: 33,499,200 • SII COVISHIELD: 57,132,000 • Moderna: 76,497,120	30	Jan-Mar 2022	Allocation to provide enhanced visibility and predictability of upcoming allocations to Facility participants and allow for improved forward planning. Countries updated their monthly allocation caps, indicating their capacity to absorb allocated doses from COVAX.	Unclear. Provided significant allocations to countries of all categories (AMC, SFPs). It is not known whether and how the limited eligibility distorted overall equity.
Admin adjustment 11	• Pfizer: 320,000,000		Mar-Sep 2022	Pfizer baseload allocation for USG facilitated purchase doses. These additional doses were accounted for in benefitting participants' coverage before running Round 14. Pfizer Task Team computed the 'baseload' allocation based on key assumptions, including: i) the number of people yet to be vaccinated in the adult population; ii) the percentage of Pfizer vaccines expected to be delivered through COVAX; and iii) capacity based on historic absorption of Pfizer doses and ultra-cold chain capacity.	Anticipating a situation where supply exceeded demand, this approximation of demand seeks to address earlier issues with inequity.

Allocation round/ admin adjustment	• Doses allocated[128]	# of countries	Anticipated timing of delivery	Description	Net effect on fairness/equity
Admin adjustment 12	• SII COVISHIELD: 130,000,000	1	Jan-Mar 2022	Allocation to the Government of India using Round 14 APA doses	Determined by the 2020 Gavi Board decision to allocate 20% of AMC doses to India. Given India's high vaccination coverage at this time, it would not have been eligible for Round 14 and as such, this allocation worked against the principle of equitable allocation.
Admin adjustment 13	• Janssen: 8,553,600	16	Jan-Mar 2022	Janssen close-out for SFPs using Round 14 APA doses and reallocations to fulfil required pro rata shares.	Allocation for small number of SFPs, which, given known vaccine coverage rates at this time, would not support equitable allocation objective.
Round 14 (Jan 2022)	• AZ Vaxzevria: 63,288,800 • Moderna: 1,441,440 • Janssen: 22,593,600 • COVOVAX: 13,056,000	60	Jan-Apr 2022	The first allocation where supply exceeded demand, requiring policy shifts to manage the allocation, including prioritization of supply and presenting this allocation as a "supply offer" to AMC Participants who could then decide on how many doses to accept as part of a bridging effort towards Phase 2 of the allocation process. First round where different sources of supply were pulled together for allocation, including donations, APA doses, and reallocations of both APA and donated doses. Countries updated their monthly allocation caps and product preferences.	Supply from both APA and donated doses were allocated together for the first time to allow for a more equitable distribution of available supply. Exclusion of countries with pop. cov. in excess of 70% coverage. Ability of countries to request more fully addresses earlier issues with inequity.

Annex C2.4.1 Forcefield analysis of factors influencing allocation

Figure C6: Forcefield analysis of factors influencing the operationalisation of the allocation mechanism



Annex C2.4.2 : Process tracing

As with other programmatic areas, process tracing is used to assess whether intended actions and activities have been implemented as intended, and whether the linkages and assumptions underpinning the ToC have worked as intended to produce the desired effect.

For allocation, the assessment is focused on the following hypothesis:

> *Through Gavi and the Office of the COVAX Facility's role to develop a good understanding of country needs, readiness and demand, and vaccine supply, and to the operationalise the WHO allocation framework, the allocation of COVAX doses across countries has been fair and equitable.*

The use of process tracing provides a subjective assessment of whether, how and why the hypothesis has occurred as intended in rigorous, transparent, and repeatable way. It should be thought of not as an assessment of causality but as an assessment of confidence in causality.

The following table is used as a tool to map the evaluation team's expectations on evidence against the actual evidence gathered and set up the process tracing exercise.

Table C8: Application of process tracing (allocation)

Evidence to prove/disprove contribution claim	Test type	Actual evidence
Evidence of strong collaboration between the JAT, Office of the COVAX Facility and participants (emails, conference calls, in-person meetings, data sharing) to derive country needs, preferences and readiness.	Hoop	**Confirmed:** COVAX partners were part of a substantial effort to develop a National Deployment and Vaccination Plan (NDVP) for each COVAX AMC participant, setting out country vaccination strategy (including vaccination product characteristic preferences), target groups (as a proxy for country needs for Phase 1 of the allocation mechanism), supply chain management and logistics capacities, and vaccine safety arrangements. For COVAX AMC participants, NDVPs were then reviewed by a Regional Review Committee (RRC), which included IRC members, to assess country preparedness and readiness for vaccine introduction.[129] Although stakeholders reflected that country needs and preferences were not adequately captured and reflected in allocation decision making in Phase 1, there

		were numerous efforts to do so, particularly for later rounds, albeit with substantial challenges to obtaining the level of insight required for all countries.
Evidence of strong collaboration between the JAT, deals team and others engaged in sourcing supply (e.g. Resource Mobilisation Team for dose donations) within the Office of the COVAX Facility to understand and forecast vaccine availability.	Hoop	**Unclear:** There was extremely limited predictability of supply throughout the period of observation. The main reason for this was due to a lack of transparency from manufacturers (and other purchasers) on the supply chain and where COVAX stood in the queue. It is, however, also worth noting that while stakeholders reflected that it made sense to utilise the Resource Mobilisation Team's established working relationships with donor countries to enable dose donations via COVAX, this caused a degree of separation from the Deals Team (responsible for securing supply via APAs) and also created some communications challenges with those responsible for allocation, procurement and other functions. In a number of instances, dose donations needed to be allocated within a few days. While many of these instances could not be avoided and did not necessarily reflect a lack of internal collaboration, others could have been better communicated. For instance, the Resource Mobilisation Team's negotiation of the USG-facilitated purchase of Pfizer doses, was only communicated to the allocation team at very short notice.
Evidence of COVAX Facility inputs to the JAT being provided in a timely and useful manner.	Hoop	**Unclear:** The JAT is comprised of staff from the Office of the COVAX Facility and WHO, with some evidence suggesting that the Office of the COVAX Facility has been highly engaged and dynamic in responding to the various requests made at short notice for information and analysis. There have, however, been issues in accessing timely information on sources of supply (see above) and reliable information on other (i.e. non-COVAX) sources of supply and other allocation inputs from countries and Alliance partners.
Evidence of JAT and Office of the COVAX Facility staff supporting the IAVG, as needed, to consider Vaccine Allocation Decision proposals and make recommendations.	Hoop	**Confirmed:** As members of the JAT, the Office of the COVAX Facility staff were responsible for administering the allocation algorithm and developing Vaccine Allocation Decisions for the IAVG's review. This involved a significant level of liaison and support to IAVG to enable members to make a recommendation to the WHO Deputy Director for approval. Although there were challenges in sufficiently informing the IAVG on the justification for JAT actions, stakeholders reported that this was due to the complexity of considerations and limited time available for the IAVG to meet and engage in the process, rather than a lack of JAT engagement.
Evidence of the JAT Vaccine Allocation Decision proposals utilising and being based on country needs, preferences and readiness, and forecasted vaccine availability.	Smoking gun	**Unconfirmed:** Vaccine allocations at the outset of Phase 1 were made to countries with NDVPs in place and of an appropriate level of quality, including details on country vaccination strategy (including vaccination product characteristic preferences or technology platform preferences), target groups (as a proxy for country needs), supply chain management and logistics capacities, and vaccine safety arrangements. Despite this, stakeholders have reflected that the initial Phase 1 allocation was primarily based on forecasted vaccine availability, rather than country needs, preferences and readiness, which were assumed to be secondary considerations in a supply constrained environment. There were numerous efforts to better reflect country needs and preferences in later rounds, particularly rounds 10, 13 and 14 (all for supply in 2022), albeit with substantial challenges to obtaining the level of insight required for all countries.
Gavi/Office of the COVAX Facility staff make a meaningful contribution within the JAT (as can be derived from meeting notes or observation), in line with the principles of the allocation framework.	Smoking gun	**Confirmed:** As above, the JAT is comprised of staff from the Office of the COVAX Facility and WHO, with evidence suggesting that Gavi-hired consultants and Office of the COVAX Facility staff have been highly engaged and dynamic in responding to the various requests made at short notice for information and analysis. While the actions of the JAT have mostly been in line with the principles of the allocation framework, there have been some exceptions. In particular, the principle to share doses across all COVAX countries to bring them up to a target level of coverage simultaneously did not account for other (non-COVAX) sources of supply, which reduced the ability of COVAX to meet its overall objectives of global equitable access. The JAT took a series of measures to counter this over time, such as through exceptional allocation rounds where a greater proportion of doses were allocated to countries reliant on COVAX supply and where coverage was low in an attempt to better ensure equitable access.
IAVG accept majority of JAT Vaccine Allocation Decision proposals, and IAVG report is validated by the WHO Deputy Director-General.	Smoking gun	**Confirmed:** The IAVG did request some minor amendments to Vaccine Allocation Decisions, for instance to further prioritise countries with large numbers of high risk groups, but overall analysis suggests that the IAVG accepted the majority of JAT Vaccine Allocation Decision proposals, which were validated by the WHO Deputy Director-General. Stakeholders have confirmed this but did note that the IAVG was not always in an informed position to rigorously analyse and question the Vaccine Allocation Decision proposals.
IAVG representatives acknowledge that COVAX Facility request/actions were an important input into the Vaccine	Smoking gun	**Confirmed:** All stakeholders, including IAVG members, have confirmed that COVAX Facility request/actions were an important input into the Vaccine Allocation Decision proposal process.

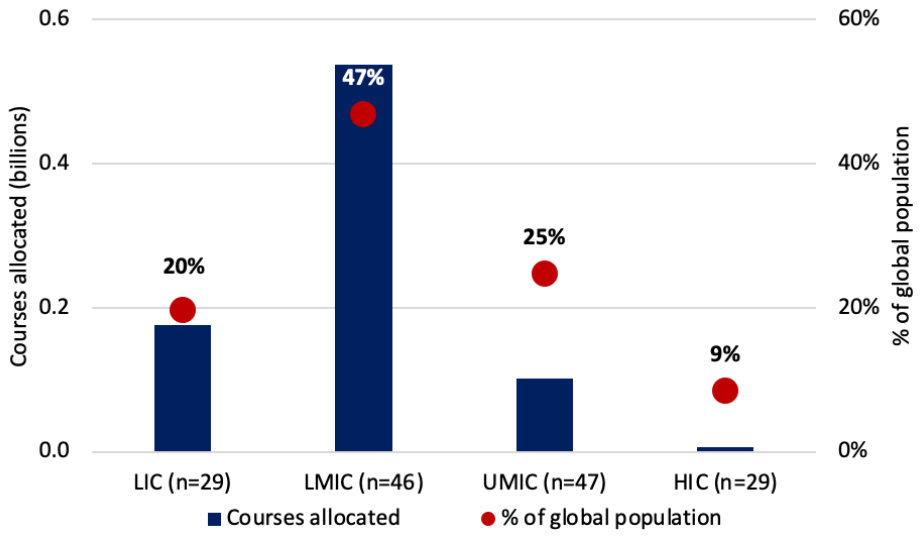
Allocation Decision proposal process.		

The passing of hoop tests affirms the relevance of the hypothesis but does not confirm it. The passing of smoking gun does confirm the hypothesis. As such, the exercise gives us considerable confidence that the COVAX Facility request/actions have played a meaningful role in developing and shaping the equitable allocation of COVAX vaccines.

Annex C2.4.3: Allocation and distribution quantitative analysis

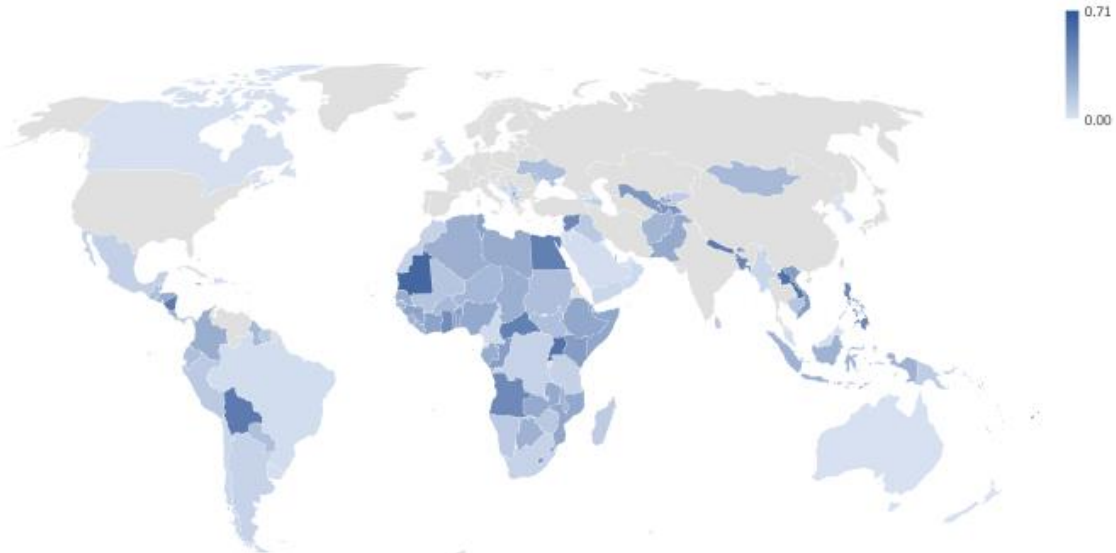
The COVAX Facility has allocated doses/courses to 153 countries which account for more than 80% of the global population. As shown in Figure C7, this has included 29 LICs, 46 LMICs (which account for the majority of the global population and almost half of courses allocated), 47 UMICs, and 29 HICs.

Figure C7: Courses allocated by participating country income grouping, and % of global population



Allocation of COVAX doses in Phase 1 varied significantly by country. Across all countries that received an allocation, the average allocation was 0.23 courses per capita. The minimum was 0.00 (multiple countries) and the maximum was 0.71 (Dominica) – see Figure C8.

Figure C8: Full courses allocated per capita within Phase 1 of the allocation mechanism, including dose donations and cost sharing, by participating country



Overall, doses allocated through COVAX in Phase 1, covering supply into Q1 2022, were sufficient to cover 14% of the population in all 153 participating SFP and AMC countries. Over the same period, and as shown in Figure C9, doses allocated to AMC participants were sufficient to cover 20% of the population, 6% through doses allocated via formal allocation rounds, 6% through administrative adjustments, and 8% through separate processes for dose donations. Reflective of the shift in approach away from the proportional allocation system, the proportion of the population covered through COVAX doses allocated varied from 71% in Dominica to less than 10% in eleven countries (including India which was subject to separate allocation rules).

Analysis conducted as part of this evaluation supports the findings of others, that the overall allocation of COVAX doses in Phase 1 was broadly in line with the objective of equitable access.[130] Nonetheless, a number of KIIs have indicated that the overall approach could have been more 'forward leaning' and the decision to shift away from the proportional allocation approach could have been adopted earlier and more aggressively.

Figure C9: Percentage of population covered through allocations, administrative adjustments and donations in Phase 1 (AMC countries only)[131]

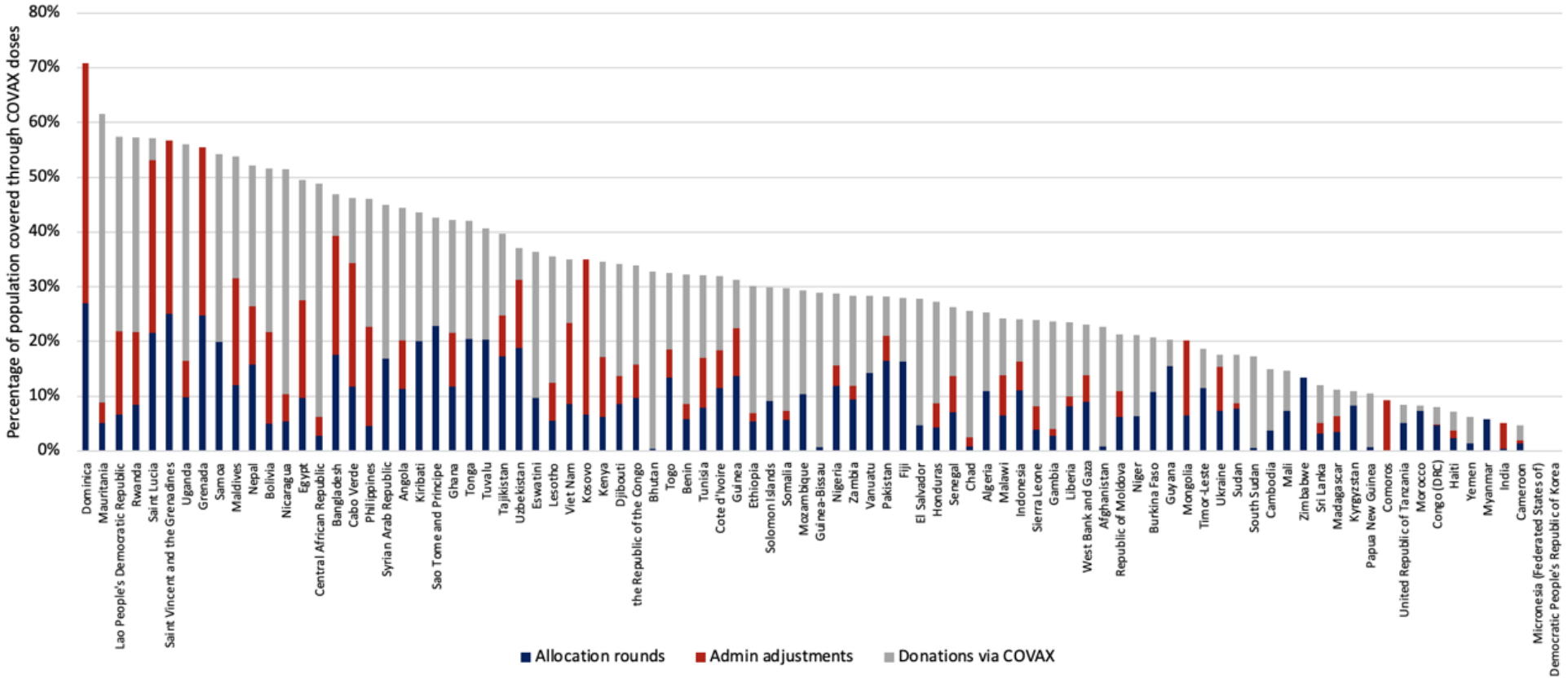
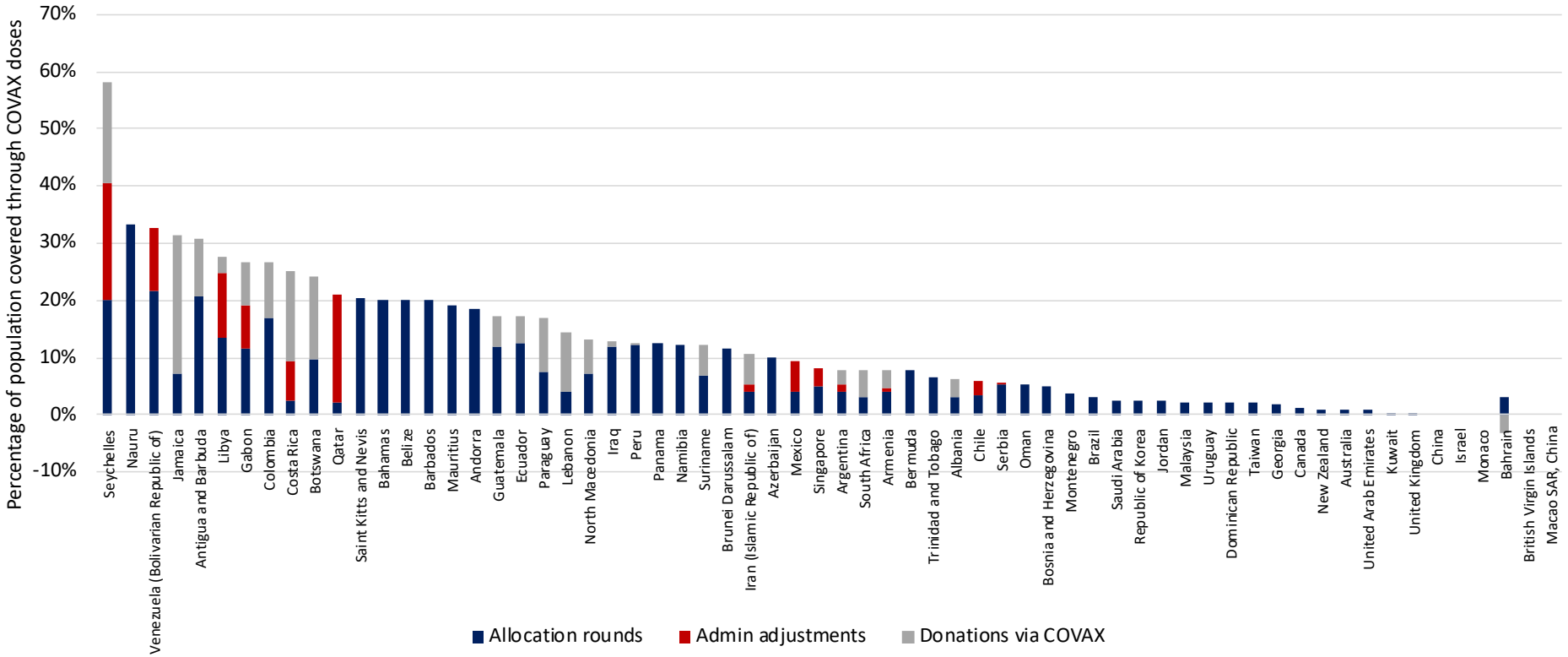
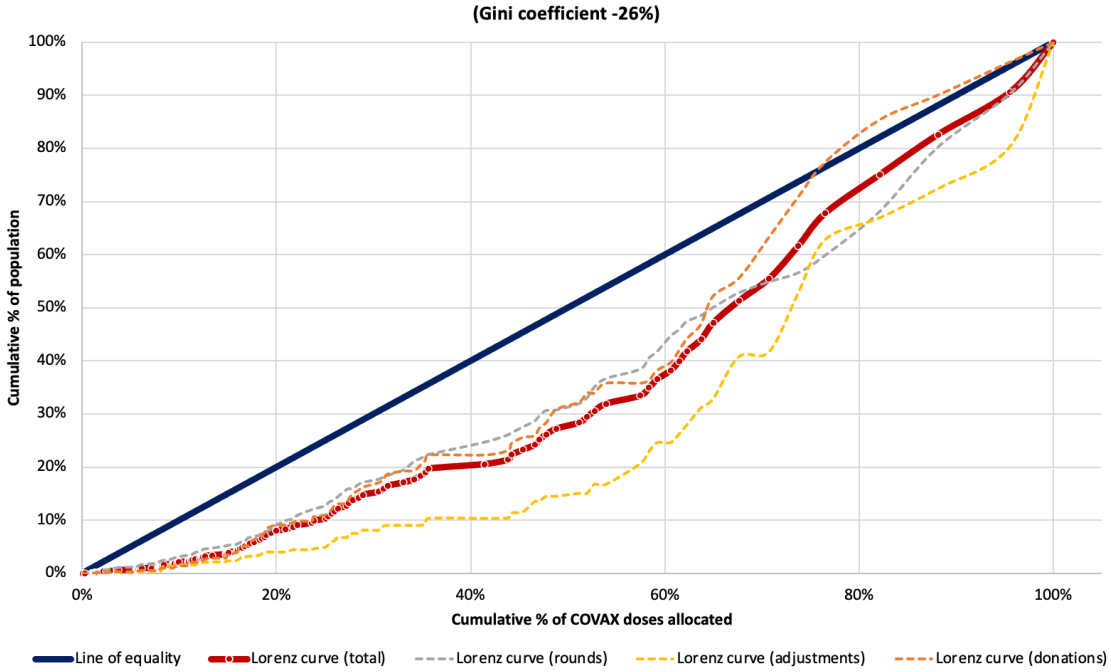


Figure C10: Percentage of population covered through allocations, administrative adjustments and donations in Phase 1 (SFP countries only)[132]



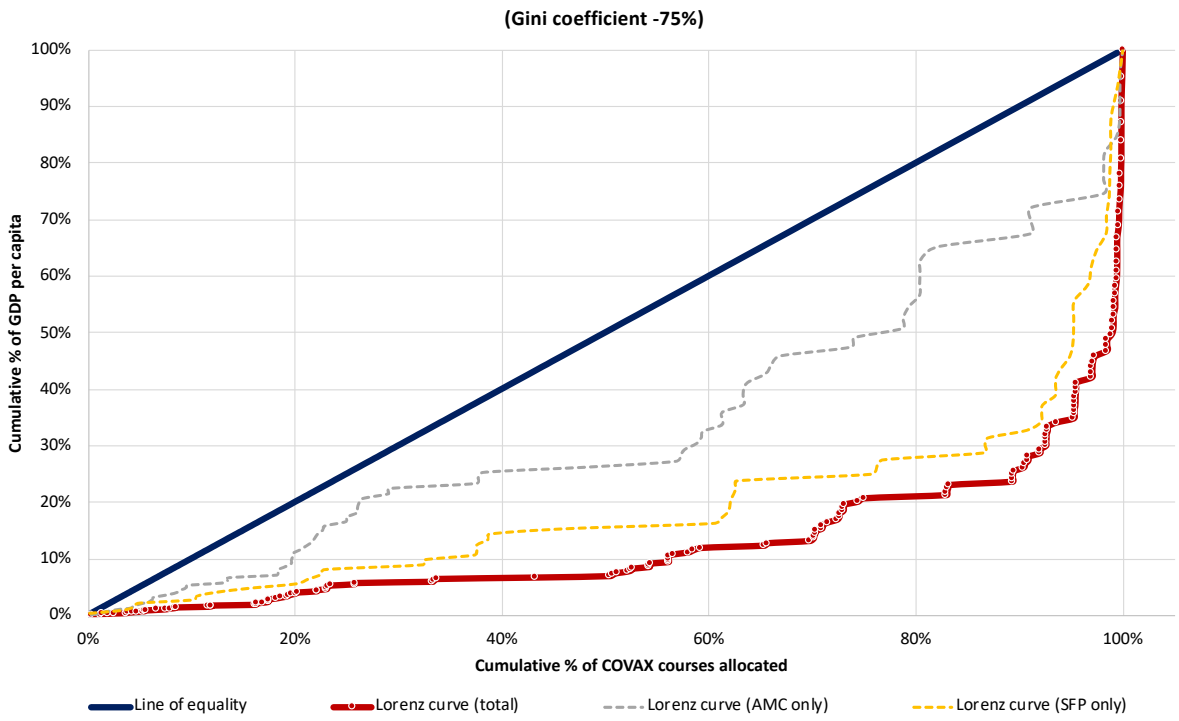
There was significant deviation from the principle of proportional allocation within Phase 1. Figure C11 shows a Lorenz curve where the cumulative percentage of total COVAX courses allocated in Phase 1 (in red) is mapped against the cumulative percentage of the target population – this excludes China (an SFP which was allocated some doses but not shipped any) and India (an AMC country but subject to an agreed cap on doses). This shows that there was significant deviation from the principle of proportional allocation. While this applies to courses allocated through rounds, administrative adjustments and dose donations, there is a significant difference between them, for instance with the allocation of dose donations tending to be more aligned to population size (Gini coefficient -19%) than rounds (Gini coefficient -24%), and especially for administrative adjustments, which were often allocated for small quantities and numbers of participants (Gini coefficient -42%).

Figure C11: Cumulative percentage of COVAX courses allocated vs cumulative percentage of the target population



The allocation of COVAX doses has been highly pro-poor. Figure C12 shows a Lorenz curve where the cumulative percentage of COVAX doses allocated is mapped against the cumulative percentage of GDP per capita among the countries in receipt of an allocation. This shows that the poorest 83 countries that comprise 20% of GDP per capita were allocated more than 70% of COVAX doses – i.e. they were highly over-prioritised relative to wealthier countries. Analysis of the SFPs in isolation shows a similar trend, with the richest countries being allocated relatively few doses. The allocation across AMC participants was more equal, but still weighted towards the poorest countries.

Figure C12: Cumulative percentage of COVAX doses allocated vs cumulative percentage of GDP per capita



Annex C2.5: Vaccine delivery support

This annex includes a section with supplementary content to the findings on vaccine delivery support (C2.5.1) and a summary of the process tracing exercise conducted (C2.5.2).

Annex C2.5.1 : Supplementary content to findings on vaccine delivery support

Table C9: Gavi CDS Funding categories, envelopes and status as at April 2022

Funding type	Sub-Category	Programmed (m$)	Requested (m$)	Consumed/Approved (m$)	Description	Timeline
CDS	*Bridge Funding CDS Early access*	270	270	235	Early Access windows of CDS disbursed to provide countries with sufficient funding to get ready for the imminent scale up of doses	Mar-Dec, 2021
					Rapid funding available through accelerated, non-IRC process	
	CDS Needs based	330	493	99	Needs-based window to support countries to cover urgent needs as they arise and fill critical funding gaps in national plans in the medium term	Window open
COVAX TA & CCE		150	150	125	WHO & UNICEF country-level staff to support on planning & implementation. Cold chain equipment	Envelope Committed
Additional targeted direct	UCC support	100	86	86	Centralized coordination and development of support to countries scale up	Launched & active

country support						UCC and prepare for Pfizer	
		Vaccine confidence				Scale-up support to help high risk countries monitor sentiment and design and roll-out demand activities	
		Stock management				Deploy surge support to monitor and strengthen stock management incl. through digital tools/eLMIS	
		Management Surge				Deploy surge management and leadership capacity in country to strengthen coordination/operations	
Cross-cutting			122	99	61	Catalytic or risk mitigating activities, incl. monitoring agents, facility insurance, humanitarian buffer and global/regional level TA	Launched & active
Unallocated buffer & Opex			10			Unallocated reserve and CDS operational cost for secretariat	
Total			**972**	**1.09B$**	**640**		

Box C5: COVAX relationship with the World Bank

Gavi and World Bank have a close working relationship as WB sits on the Gavi Board, including the PPC. World Bank is also co-leading the health systems connector of ACT-A.

As early as March 2020, the Bank approved a Multiphase Project Approach ("Facility") worth 8.2 bn US$ concessional loans to support on health sector responses with a focus on PPE, diagnosis, and treatment. Roughly one hundred projects were approved.

In October 2020 a follow up MPA of 12 billion US$ (later 20 bn US$) was labelled as vaccine response, as it allowed vaccine procurement. This resulted in 80 vaccine procurement projects approved for 70 countries, and 70-80% of WB funding approved for vaccine purchase.

The MPA in October 2020 came at a time that COVAX was already experiencing difficulties in striking deals with manufacturers due to SFP countries procuring bilaterally and limited funds in hand, so LMIC countries competing for scarce supplies was not helping COVAX. Moreover, some of the WB funds were allocated to AVAT, the regional vaccine procurement initiative of the African Union established out of frustration with the slow COVAX supply to the region.

Also, COVAX may have expected some of the 12bn US$ as a contribution to the AMC, to help overcome the difficulties in making APAs. The review found that the decision not to channel World Bank funds to AMC was made at the highest level in the World Bank, despite some member states' requests to support COVAX. Currently, World Bank proposals for a pandemic preparedness fund (FIF) do include a provision to channel funds to Gavi and CEPI.

In response to this decision, COVAX and World Bank staff jointly developed a 'cost-sharing' system in July 2021. Countries can use their own resources, including MDB loans, to procure doses via COVAX, in addition to the free COVAX doses. The cost-sharing system has less uptake than expected (15 countries procured 135 m doses as of April 2022) and may become largely redundant in 2022 as COVAX removed the 20% cap and now provides free vaccines as per country needs and absorption capacity, and supply is no longer a constraint.

As of 2022, absorption of the MPA is low (±12 billion out of 20 billion) for several reasons: 1) World Bank approval systems, even for 'quick release', take several months; 2) countries need time to absorb approved funding into real procurement; 3) countries may prefer to obtain free vaccines through COVAX or donations before procuring them, and the COVAX cap of 20% was lifted in 2022, and 4) countries had access to alternative funds for procuring vaccines.

Figure C13 : Overview of CDS Early Access application process

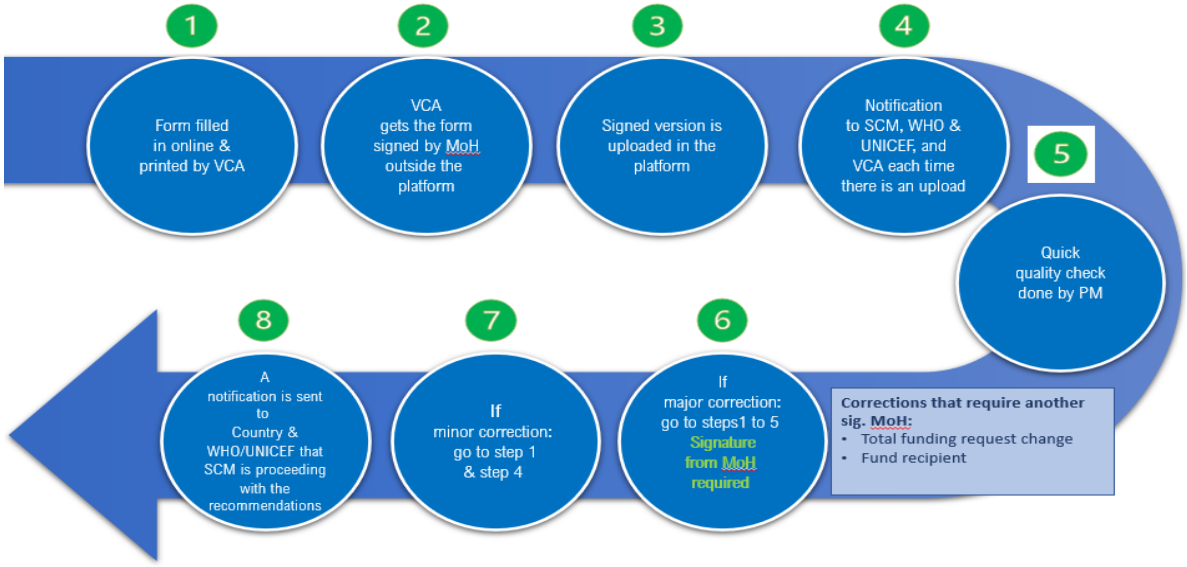


Figure C14 : Progress in Country Readiness Assessment by February 2021 (128 countries reporting)

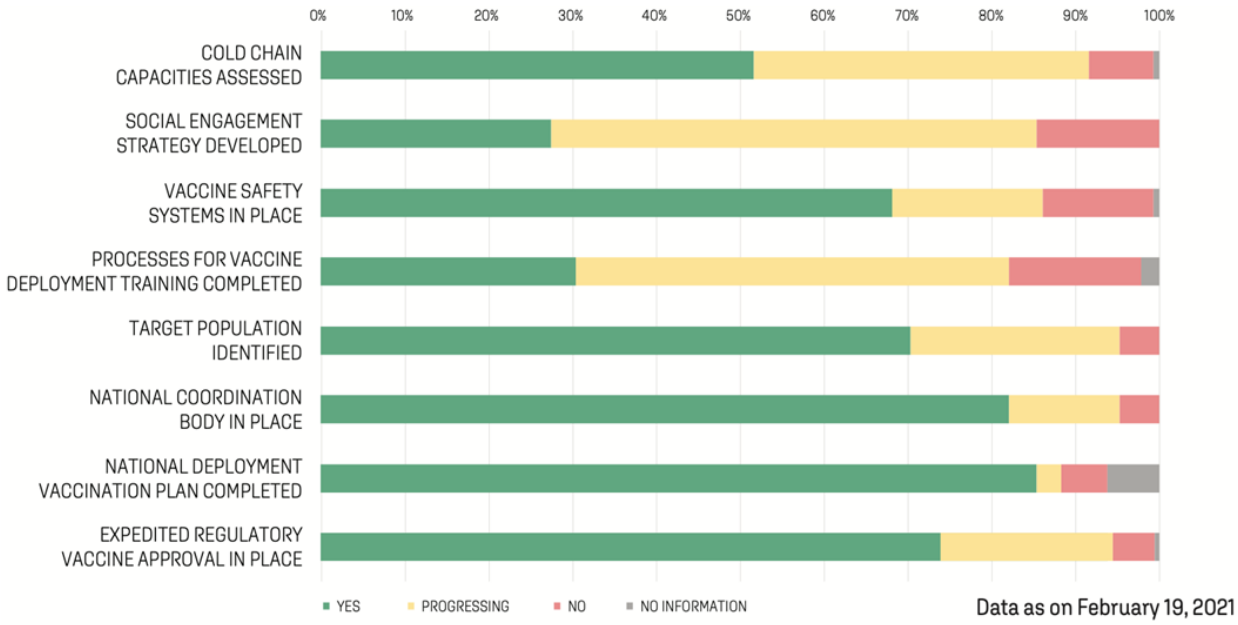
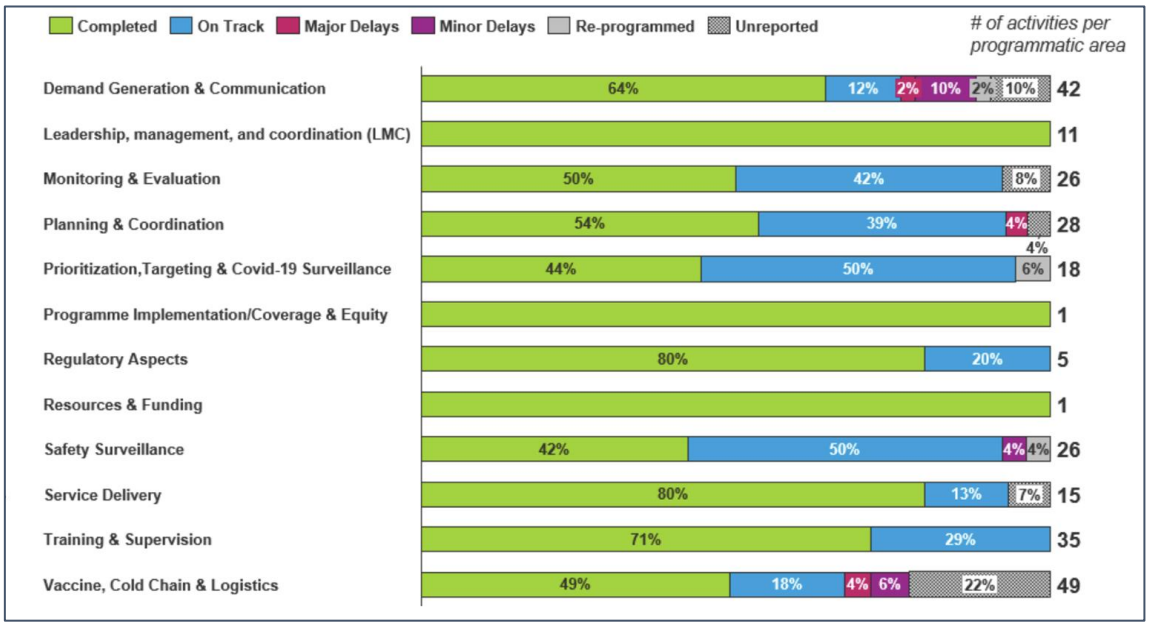


Figure C15: Reporting against TA process indicators across Gavi 57- countries (September 2021)



Annex C2.5.2 : Process tracing

The assessment is focused on the following hypothesis:

> *Gavi and COVAX AMC resources utilised for vaccine delivery funding and specialised technical assistance served to strengthen cold chain capacity and vaccine delivery readiness.*

The use of process tracing provides a subjective assessment of whether, how and why the hypothesis has occurred as intended in rigorous, transparent, and repeatable way. It should be thought of not as an assessment of causality but as an assessment of confidence in causality.

The following table is used as a tool to map the evaluation team's expectations on evidence against the actual evidence gathered and set up the process tracing exercise.

Table C10: Application of process tracing (vaccine delivery support)

Evidence to prove/disprove contribution claim	Test type	Actual evidence
Evidence of strong collaboration between the Office of the COVAX Facility, Gavi and partners for the development and dissemination of guidance, trainings, planning and monitoring tools, and advocacy materials in a timely manner.	Hoop	**Confirmed:** During 2020 through 2021, Gavi partners worked intensely to conduct readiness assessments and develop guidelines, integrated global frameworks, shared information platforms (i.e. C-19 partners' forum), trainings, and planning and monitoring tools to guide countries. While there were roles and responsibilities for different functions, we understand that an 'all hands on deck' approach was adopted, with strong collaboration between all stakeholders.
Evidence of the Office of the COVAX Facility/Gavi providing timely support to conduct VIRAT and CCE needs assessments and guide countries through application processes.	Hoop	**Confirmed:** Although these functions were supported primarily by Gavi partners (WHO and UNICEF), the Gavi Secretariat and SCMs in particular were helpful in facilitating these processes.
Evidence of IRC processes working in a timely and effective manner.	Hoop	**Confirmed:** IRC were adapted to improve the efficiency of application processes, and reflect that funding was being provided with a higher risk appetite than for usual Gavi business. For instance, IRC members were integrated into the Regional Review Committees that reviewed the country NDVPs, upon which Early Access funding was based. This meant that only a 1-page application for Early Access funding could be accepted without IRC approval. Similarly, for Needs based window, a rapid IRC review on monthly cadence meant countries could send applications when they were ready in a

		flexible process void of independent review. In total, all 90 COVAX AMC NDVPs received were approved and deemed ready at the end of 2021
Evidence of Gavi establishing grant management processes to enable implementation.	Hoop	**Confirmed:** Yes, there is strong evidence of Gavi establishing simple grant application and management processes to enable implementation, in line with the principle of providing support on a no regrets basis. This was particularly the case for CCE and Early Access CDS.
Evidence of Gavi making disbursements for CCE support and TA, and activities implemented.	Hoop	**Confirmed:** For the Early Access Window, despite a slower start than expected, with many countries waiting until the deadline to submit their application, the funds had begun to flow by Q3 in 2021. This was partly a function of the timing of country applications which weren't received until the end of the application window, and the speed at which Gavi was able to actually make the disbursement thereafter. Nonetheless, by the end of 2021, $196m of the $243m approved funds across all funding windows had been disbursed. In addition, direct country funding support was provided (for UCC, stock management, vaccine confidence, cross cutting delivery investments).
Evidence of Gavi resources being utilised as intended.	Hoop	**Confirmed, albeit with weak evidence and not at the scale envisaged:** By the end of 2021, Gavi had provided a range of CCE and TA (>5900 vaccine fridges and freezers, 180 walk in cold rooms, 150,000 passive devices, and >400 UNICEF, WHO in-country short term positions) .While Gavi had disbursed/committed well over >$500m for delivery support by end of 2021, these results are mostly attributable to the initial $150m provided in September 2020, with only limited implementation progress from other funding windows. Some of these Gavi resources were disbursed through partners like WHO and UNICEF, and the general assumption is these were utilized as intended for TA and CCE though the evidence is weak.
At least partial congruence between the utilisation of Gavi resources and improvement in cold chain capacity and vaccine delivery readiness.	Hoop	**Confirmed, although evidence is weak:** As above, Gavi provided >5900 CCE and supported a range of TA to the end of 2021. There is also anecdotal evidence suggesting that some improvements in capacity have been made, including reports of improvements to CCE infrastructure and vaccine delivery readiness based on activities by partners (WHO and UNICEF) with Gavi resources. This also includes HSS funds within countries repurposed for C-19 delivery activities.
The majority of stakeholders engaged the provision of CCE support and TA (who have an incentive to say it has been successful), and country representatives (who do not necessarily have an incentive to say it has been successful), believe in the contribution claim.	Hoop	**Unconfirmed:** Stakeholders are unanimously of the view that CDS is needed to support vaccine rollout at scale, as evidenced by the PPC statement "PPC members noted that delivery support for COVID-19 vaccines is critical for vaccine uptake and is also important for strengthening RI in line with Gavi 5.0 objectives which otherwise would be at risk in the absence of delivery funds". However, while stakeholders were positive about the design and general sense of implementation of CDS, most were unsure as to whether the support provided to date has led to the intended results.
Office of the COVAX Facility/Gavi actions endorsed, approved and/or supported by partners and/or country representatives.	Smoking gun	**Confirmed but weak:** There have been a number of issues with respect to the ownership and coordination of the health system part of ACT-A, and with the CRD workstream evolving into the VDP. This has involved mixed expectations of partners, such as between the World Bank and Gavi, misaligned objectives with regards delivery support, open criticism between COVAX partners, and competition for donor resources. However, anecdotal evidence suggests that Gavi and partners have been commended for stepping in at a critical time when it was obvious that countries were not able to finance vaccine delivery by other means.
Countries comply with guidance and submit required documentation in a timely manner and implement activities as intended.	Hoop	**Confirmed:** Country applications were mostly received within the deadline for applications for the early Access Window, but were still slightly slower than Gavi's expectations. Only 10 Needs Based applications were approved at the end of 2021 with the expectation that more would be received in early 2022. Several examples across countries confirm that CDS enabled them commence activities for vaccines roll out. As above, it appears that the initial $150m in Gavi funding was used to good effect in purchasing CCE and implementing TA, although there is no clarity on level of implementation progress made with funds from the Early Access and Needs Based funding windows.
Partner and country representatives acknowledge that Office of the COVAX Facility/Gavi request/actions were an important input to strengthening cold chain capacity and vaccine delivery readiness.	Smoking gun	**Confirmed:** Country representatives (including those representing partner organizations) in Liberia, Mozambique, DRC, India and Vietnam, among others, underlined the usefulness of cold chain strengthening and/or delivery support. While some mentioned the delay in support so that it followed vaccine supplies and the potential of support coming early, several respondents appreciated the speed, flexibility and usefulness of COVAX's inputs.

The passing of hoop tests affirms the relevance of the hypothesis but does not confirm it. There is also evidence confirming the smoking gun tests from key informant interviews giving us reasonable confidence that vaccine delivery funding and specialised technical assistance did work to strengthen cold chain capacity and vaccine delivery readiness.

Annex D: Module 3 (Results)

Annex D1.1: Analysis of supply, coverage, and equity

Figure D1: Vaccine coverage (full vaccination) for countries

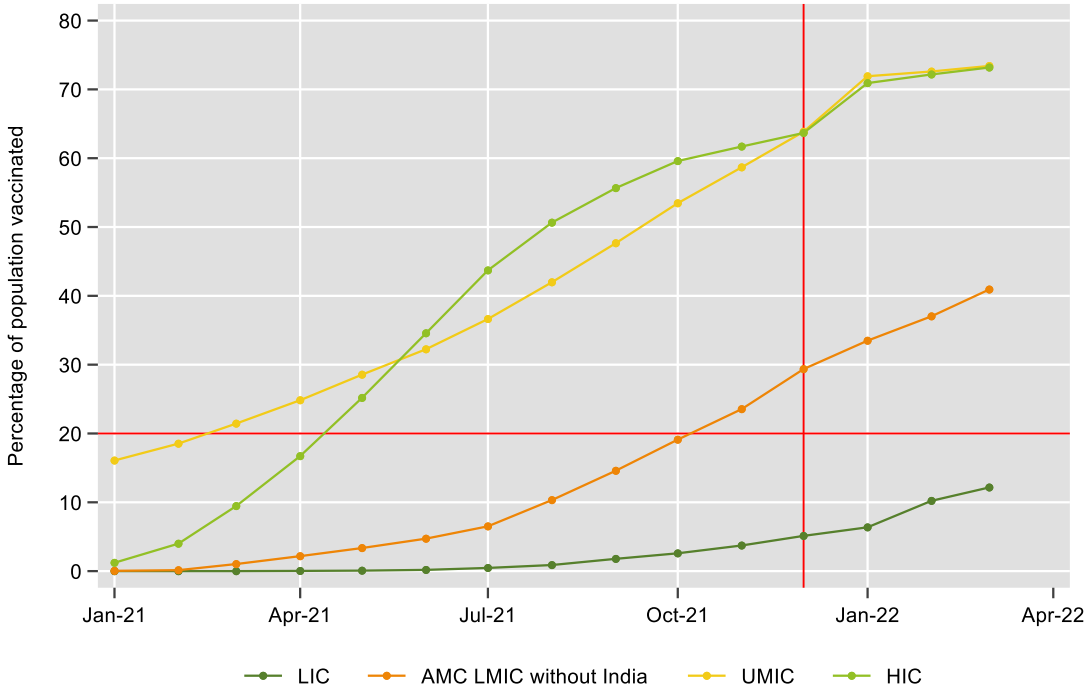
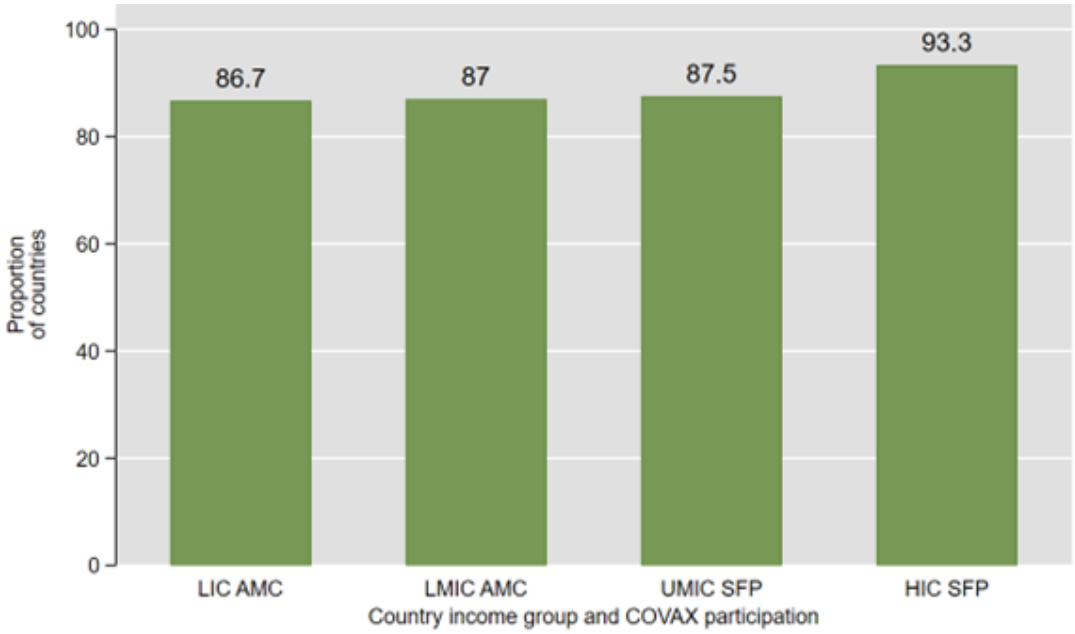


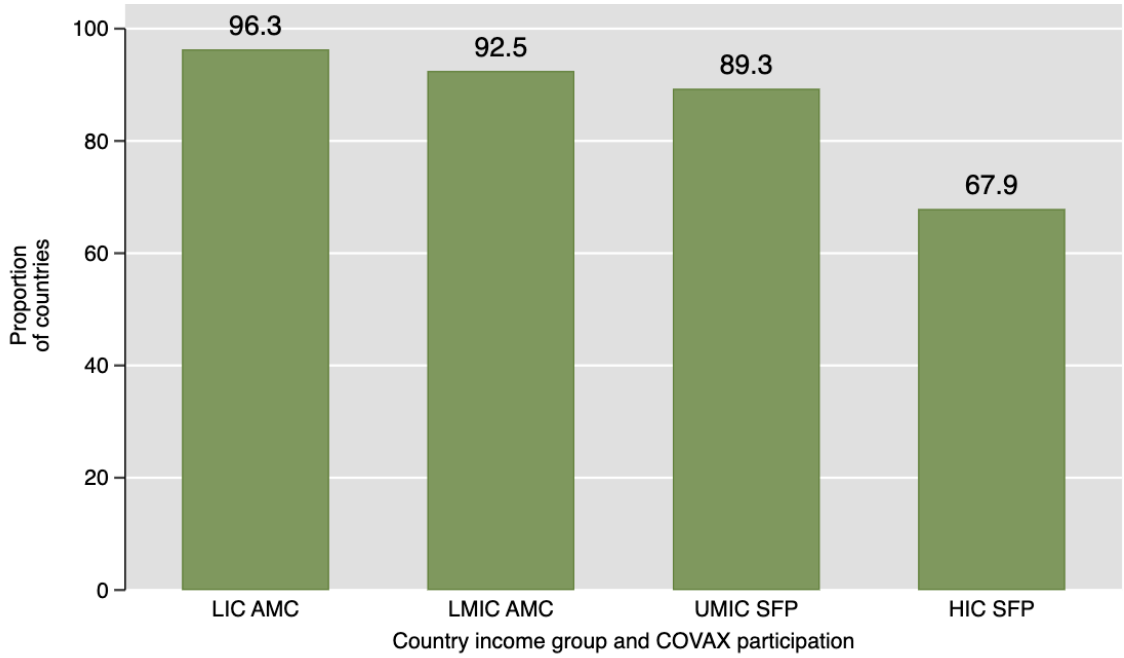
Figure D2: Percentage of countries with higher vaccination coverage (at least one dose) for population aged 60 or above than rest of the population as of December 2021



Source: eJRF, accessed August 2022.

Note: The data presented in Figure D2 is available for a limited set of countries reporting disaggregated data. The graph excludes India among LMICs due to unavailability of data. The age-disaggregated data is reported intermittently by countries and therefore numbers of countries reporting the data for any given month varies.

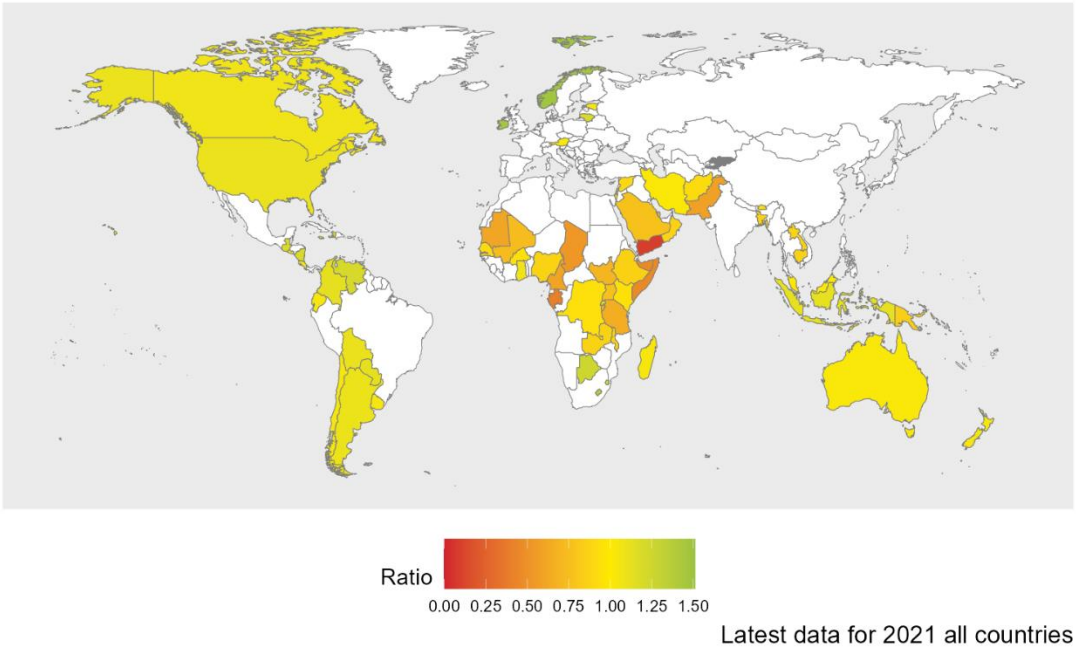
Figure D3: Percentage of countries with higher vaccination coverage (at least one dose) for healthcare workers than rest of the population as of July 2022



Source: Covid-19 Data Dashboard, https://infohub.crd.co/ accessed August 2022.

Note: The data presented in the Figure D3 is available for a limited set of countries reporting disaggregated data. There is likely underreporting of total number of health-care workers in LMICs and LICs resulting in potentially higher coverage rates in these countries.

Figure D4: Ratio of vaccination coverage rates for women to men as of December 2021



Source: eJRF, accessed August 2022

Note: The data presented in Figure D4 is available for a limited set of countries reporting disaggregated data. The gender-disaggregated data is reported intermittently by countries and therefore numbers of countries reporting the data for any given month varies. The colour yellow represents equal vaccination coverage for both genders whereas the greener the colour, the higher is the vaccination coverage of women compared to men. The graduation from yellow to red denotes lower vaccination coverage for women in comparison to the male population in the country.

Annex D1.2: Enablers and barriers influencing the achievement of the intended outcomes

In this section we highlight the enablers and barriers influencing achievement of results relating to vaccine access, country readiness to administer COVID-19 vaccines and vaccination coverage in participating countries. Overall, key informant interview and web survey respondents highlighted delays in supply, lack of alignment of resources with vaccine supply and the challenges created by the emergency context as significant barriers and the provision of resources (e.g. cold chain equipment, syringes, and PPE kits) and technical assistance, as well as delivery support funding and guidance as enablers for achievement of intended outcomes.

We found that in the context of vaccine access, final allocations and deliveries depended on manufacturers meeting supply commitments, as well as in-country preferences and readiness to absorb the allocated type of vaccines. Manufacturers not meeting supply commitments to COVAX on time during a global race for vaccines proved to be a critical barrier during the evaluation period, as argued in earlier sections. Indemnity and liability agreements also restricted access to humanitarian buffer regions.

Country readiness to absorb doses also acted as a barrier, and in turn depended on existing health system capacity; the lead time given to the country; and resources to provide regulatory approval, receive doses, and plan for vaccination roll-out. This is exemplified in DRC's experience, where respondents noted that 1,445,060 doses allocated in July 2021 had to be redeployed to six countries in the region due to concerns around high operational costs of rollout, low storage capacity and wastage of doses in DRC. Supply of doses close to expiry, particularly in the latter part of 2021, was also cited as a barrier in AMC countries.

In Vietnam, administrative processes within the country reportedly slowed acceptance of vaccine supplies. Another factor influencing vaccine access was the political perception and handling of the pandemic. For instance, in Brazil the leadership did not initially perceive the pandemic to be a threat and did not prioritize access to vaccines to respond to the pandemic despite high morbidity. In Vietnam too there was initial hesitation to access vaccines because of effective pandemic management and low rate of infection and death in 2020. These barriers and enablers are analysed in detail in the sections on Securing Vaccines and Allocation (also see Figure C6 in Annex C).

In relation to country readiness: testimonials and case study data attested to the importance of the timing and flexibility of the country delivery support funding provided by COVAX, particularly the early 'no regrets' funding. Respondents such as from Mozambique highlighted the value of dynamic, case by case assessment and support. However, respondents also highlighted barriers related to inadequate alignment of funding disbursement with vaccine supply. In Vietnam and Senegal, for example, it was initially a challenge to receive Pfizer, the COVID-19 vaccine available in largest quantity, due to not having ready ultra cold chain facilities or trained health staff to handle the vaccine till these gaps were bridged at a later stage. Preexisting cold chain capacity from previous investments made to control Ebola, like in DRC, proved an enabler in the rollout of COVID-19 vaccination. Testimonials from countries also highlighted that in the future investments made with delivery support would help support all immunization, including routine immunization.

As highlighted in findings 54 through 58, the complexity of CDS funding processes including coordinating across different sources of delivery support and mapping to country needs presented barriers to improving country readiness to rollout COVID-19 vaccination. As noted in finding 58, several informants presented the complexity of the Needs Based Window processes as a barrier to timely and need-appropriate readiness support. Respondents also highlighted that multilateral development banks such as World Bank had their own needs

assessment processes which were different from WHO's VIRAT, which added to the complexity of resourcing delivery support. We found that some of these barriers with respect to supporting country readiness are being addressed through the more targeted and coordinated (''one budget'') support provided by the COVDP since December 2021.

While being appreciative of the technical assistance and funding support available from different sources for different types of needs during the evaluation period, respondents in Burkina Faso, Senegal and Ghana, echoed challenges in coordinating funds from different sources. They noted that this resulted in multiple sources of funding for some activities while other related activities remained unfunded. In Ghana, for example, while cold chain equipment was funded, construction of cold rooms to house the equipment was reported to be a challenge.

Delays in COVAX releasing delivery support and internal administrative procedures not being adapted to emergency situations at country level were also highlighted as barriers leading to restricted operational funds for rollout. This was noted in Vietnam, as well as in DRC, where the vaccination campaign was initially restricted only to 6 of the country's 26 provinces. Some key informants also noted that the governments within some of the countries were more focused on investing available resources (like those from the World Bank) for the procurement of vaccines rather than for investing in delivery of those vaccines, which acted as a barrier. .

For scaling up vaccine coverage too there were important enablers and barriers. The barriers included unclear information about supply timelines and different vaccine options available. Also relevant was the quantum of non-COVAX-supplied vaccine doses available, such as doses received from bilateral agreements or loan-financed procurement or non-COVAX donations, as well as political will within the country to roll out vaccination before the doses expired. Strong health systems capacity to roll out vaccination rapidly was cited as an important enabler in vaccination uptake in Brazil, Colombia and Viet Nam case studies. In countries like Senegal and DRC where the health system capacity was strained, respondents pointed to the pressure on and exhaustion among health workers managing all public health services alongside COVID-19 rollout which acted as a barrier to scaling up coverage.

Another critical barrier was poor uptake of vaccines by individuals within countries despite outreach and campaigns, mainly due to the reduction in risk perception over time and the extent of misinformation, which increased over time.[133] This was highlighted in Senegal's case, where the average coverage remained less than 10% in January 2022. A combination of factors like the sharp drop in the risk perception with the advent of the Omicron variant in late 2021, coinciding with media rumors, misinformation, fears about AstraZeneca, and inadequate engagement of community and local government actors reportedly lowered demand for vaccines despite supply being available. In DRC too, informants highlighted rumors about vaccination as a barrier to vaccinating people at high risk of morbidity and mortality.

Annex E: Line of sight from findings to conclusions, recommendations and lessons

This section offers a number of conclusions drawn from the findings, and recommendations to evaluation users on a number of key areas. Table E1 below shows the 'line of sight' and linkages between findings, conclusions, recommendations and lessons learned.

Table E1: Line of sight from findings to conclusions, recommendations and lessons

Thematic area – end-to-end approach	Findings	Conclusions	Recommendations	Lessons
Establishing an equitable procurement and allocation mechanism – high level design	1, 4, 5	Conclusion 1: **The overall design of the COVAX Facility and AMC is coherent, ambitious, and remained responsive to a rapidly evolving context. The design suffered from too little engagement of LICs and MICs, however, and was too optimistic regarding the behaviors of HICs and vaccine manufacturers. Vaccine nationalism, vaccine diplomacy and commercial interests undermined the potential of market-based solutions to global vaccine equity in the context of a public health emergency.**	Recommendation 1.1: **Design choices should be based on the understanding that stakeholder behaviors will largely echo those seen in the early stages of the COVID-19 pandemic.** Recommendation 1.2: **Noting that a future international vaccine procurement and allocation mechanism may be one of many such mechanisms, it should be clear that its primary focus is to support those countries with the least ability to procure independently and most likely to depend on such a mechanism.**	Lesson A: **The experience of COVID-19 and other pandemics reminds us that HICs will prioritize national interests when securing vaccine supply. Commitment to global solidarity and equity will be secondary concerns.**
	5	Conclusion 1: **The COVAX Facility and AMC design was ambitious but assumed an unrealistic degree of global solidarity, and has been criticized by some key stakeholders as being too embedded in status quo.** The fact that assumptions regarding global solidarity were overly optimistic was clear even as the COVAX Facility and AMC was being established, as several major economies (USA, China, EU and Russia) did not participate in joint procurement, and many better-off countries moved aggressively to reserve vaccine for their own populations, undermining the COVAX Facility's ability to obtain doses for participating countries. Although COVAX Facility and AMC designers recognized that some countries would procure outside the mechanism, they did not	Recommendation 3.7: **Make greater use of soft power to influence the behavior of vaccine manufacturers and HICs.** This influence, which should be exercised in cooperation with funding and implementing partners (e.g. Gavi, WHO, UNICEF, World Bank), LMICs and civil society, could involve public communication, advocacy, transparency indices,clxxv translation of commitments to measurable targets, and other tools.	Lesson C: **Influencing HICs and pharmaceutical industry decisions to consider public health and social responsibility alongside national and commercial interests is very challenging. Advocacy combined with transparency and exposure (e.g., publicly sharing vaccine doses sharing commitments or forecast deliveries by suppliers) can be effective in influencing behavior, alongside complementary strategies including political agreements.**

		anticipate the scale of vaccine hoarding and other forms of vaccine nationalism and developed no strategy to counteract them. At the same time, some LICs and CSOs have criticized COVAX's design for not being ambitious enough in challenging the status quo and for relying on the existing global vaccine ecosystem to develop, produce and distribute vaccines rather than treating pandemic vaccines as a global public good. These critics also assert that the COVAX Facility has excessively accommodated commercial interests, including on I&L and deal transparency and by not pushing more aggressively for IP sharing and tech transfer.		
Working to increase global supply	36-45	Conclusion 5: **The COVAX Facility and AMC did not have sufficiently strong levers in 2020 and 2021 to influence the market and market actors to the extent intended. This can, in part, be seen as a failure of international solidarity to restrain the behavior of powerful stakeholders acting in their own interests. In this environment, the COVAX Facility did not have sufficient market power to compete successfully for vaccines against HICs with far greater resources at their disposal or to dramatically influence most manufacturers' decisions on manufacturing capacity.**	Recommendation 3.1: **Play a stronger role in expanding global supply, through increasing R&D and manufacturing capacity, and placing greater emphasis on tech transfer.** Recommendation 3.2: **Refine the approach to APAs through greater access to at-risk funding at the start of future outbreaks in order to allow tech transfer and purchase agreements with product developers to be struck earlier and at greater scale.** Recommendation 3.3: **Transparency on delivery queues should be a condition of APAs, and manufacturer behavior should be called out when transparency is not forthcoming or agreements on prioritization of delivery relative to other buyers are not honored.** Recommendation 3.4: **The importance of price in affecting access to vaccine supply in competition with HICs paying higher prices should be carefully analyzed, and consideration given to paying more competitive prices in certain circumstances.** Recommendation 3.5: **Dose-sharing commitments should be spelled out and broadened in order to facilitate other sources of vaccine supply ahead of the next pandemic**	Lesson B: **The COVAX experience shows the importance of a multi-pronged approach to ensuring equitable vaccine supply in the next pandemic. Increasing global vaccine supply through technology transfer, securing access for LMICs through conditions attached to push funding, funding to enable early signing of APAs, and examining trade-offs between price and timely access putting in place arrangement for efficient management of donations are all important.**

Operationalising a procurement and allocation mechanism – management	12, 13, 15, 16, 17, 20, 49	Conclusion 2: *Establishing and operationalizing the COVAX Facility and AMC* - **The governance and management of the COVAX Facility and AMC has been challenging. A common feature across the areas of the evaluation is one of complexity, with a lack of resource within the Office of the COVAX Facility to deal with the scope and scale of its responsibilities; and a lack of clarity over roles and responsibilities between governance bodies and implementing partners. In the midst of an emergency response, where speed is of the essence, these issues have reduced the efficiency of internal processes and added to the management burden of administering the COVAX Facility and AMC.**	Recommendation 2.2: **Build management structures that draw on the established systems, processes, staff and culture of an existing organization without allowing these structures and processes to impede unnecessarily the speed and flexibility required in emergencies.**	Lesson E: **In uncertain and complex circumstances, it is most helpful for the design to set out broad operating principles rather than fixed rules for operationalisation. Clarity on decision-making processes within those broad principles is also important for transparency and efficiency.** Lesson F: **Management systems and processes that allow for rapid and smooth engagement with all types of countries, including those that Gavi does not ordinarily engage with in RI operations, take time to put in place.**
External communications	50, 51	Conclusion 5 (Communications excerpt): **While external communications was used as a tool to mobilize resources, it was not actively used to influence, and likely had only a marginal effect on influencing, HIC procurement and vaccine manufacturer sales decisions during most of 2021.** Gavi is understandably reticent to criticize donor countries and manufacturers directly, given its dependence on them for funds and vaccine supply, but its decision to not call out behavior where it hampered COVAX Facility and AMC objectives was also based on the assumption that doing so would not be effective. The evidence upon which this assumption is based is unclear. However, the decision not to call out behavior where it hampered COVAX Facility and AMC objectives was a missed opportunity to make use of Gavi's soft power, and it prevented the COVAX Facility from accurately portraying to participating countries and other observers the challenges it was facing during most of 2021. .	**Recommendation 3.7: Make greater use of soft power to influence the behavior of vaccine manufacturers and HICs**. This influence, which should be exercised in cooperation with funding and implementing partners (e.g. Gavi, WHO, UNICEF, World Bank), LMICs and civil society, could involve public communication, advocacy, transparency indices,translation of commitments to measurable targets, and other tools.	Lesson G: **The content (accuracy, transparency, clarity of messaging) and quality (timeliness) of communication with countries on allocation details and forecast deliveries can significantly impact country and mechanism relations, confidence, and public perception of success.**

Operationalising a procurement and allocation mechanism – governance	7, 8, 9, 10, 11	Conclusion 1 (Engagement excerpt): **In terms of engagement, the design process was highly centralized and included limited direct input from stakeholders external to the Gavi Alliance, notably representatives of LIC ministries of health, health workers and humanitarian agencies.** The centralized process was driven by the need to establish the COVAX Facility and AMC rapidly as the pandemic was unfolding in 2020. By the time more adequate stakeholder engagement mechanisms were established, reputational damage had already been done. In contrast, donor countries and industry were substantially engaged in the design and are perceived by some to have had disproportionate influence.	Recommendation 1.4: **the process of designing an international vaccine procurement and allocation mechanism for the next pandemic should be more inclusive, transparent and accountable than was the case for the COVAX Facility and AMC. Global south countries, regional bodies, civil society and humanitarian agencies must have a meaningful role from the earliest design stages.** Recommendation 1.5: **The design of a future mechanism should begin well before the next pandemic, therefore allowing the time for broader engagement** Recommendation 1.3: **Decision making after a pandemic has begun, when speed is critical, should be overseen by a robust and participatory governance function.** Recommendation 2.1: **Establish a governance mechanism that: (a) oversees the entire initiative, including the actions of all participating agencies; and (b) balances participation with transparency and accountability. Governance should be as inclusive as the need for rapid decision-making permits. Where broad engagement is not possible, full transparency and public accountability on processes and outcomes become even more important.**	Lesson I: **Genuine participation in and transparency and accountability around decision making are crucial for engagement and effectiveness, especially if the involvement of all relevant multi-sectoral stakeholder groups is not feasible in the early stages of designing a pandemic response.**
Resource mobilization	23	Conclusion 2: (Resource mobilization): **Drawing on Gavi's strong pre-existing capacity and donor relationships, the design of the COVAX AMC enabled a highly effective resource mobilization effort, one of the fastest and largest fundraising campaigns in global health history**. A convincing investment case for donors aided fundraising but also created very high expectations that the COVAX Facility and AMC subsequently struggled to meet.	N/A	Lesson D: **A dedicated fundraising vehicle, supported by a strong investment case, a credible host agency and a multi-pronged fundraising approach, can raise substantial amounts of money in a short space of time (almost $10 billion within 12 months in the case of COVAX).**

Deal making	36-45	Conclusion 5: **The COVAX Facility did not have sufficiently strong levers in 2020 and 2021 to influence the market and market actors to the extent intended. This can, in part, be seen as a failure of international solidarity to restrain the behavior of powerful stakeholders acting in their own interests. In this environment, the COVAX Facility did not have sufficient market power to compete successfully for vaccines against HICs with far greater resources at their disposal or to dramatically influence manufacturers' decisions on manufacturing capacity.**	Recommendation 3.2: **Refine the approach to APAs through: greater access to at-risk funding at the start of future outbreaks in order to allow purchase agreements with product developers to be struck earlier and at greater scale; making transparency on delivery queues a condition of APAs; and considering the role of price in affecting access to supply in the context of competition with HICs.**	Lesson B: **The COVAX's experience shows the importance of a multi-pronged, balanced approach to ensuring equitable vaccine supply in the next pandemic. Increasing global vaccine supply through tech transfer; securing access for LICs and LMICs through conditions attached to push funding; securing funding to enable early signing of APAs; examining trade-offs between price and timely access and putting in place arrangements for efficient management of donations are all important.**
Allocation	48, 49, 50, 51	Conclusion 2 (Allocation): **The allocation mechanism was implemented in a highly flexible manner in the face of daunting obstacles, notably the unpredictability of vaccine supplies.** While this flexibility created challenges, overall an equitable allocation of COVAX doses was achieved by the end of 2021.	Recommendation 4: **Design a framework for global allocation of scarce commodities based on a set of guiding principles.**	Lesson E: **In uncertain and complex circumstances, it is most helpful for the design to set out broad operating principles rather than fixed rules for operationalisation. Clarity on decision-making processes within those broad principles is also important for transparency and efficiency.**
Vaccine delivery support	53, 54, 55, 56, 57	Conclusion 2 (Vaccine delivery support): **Within the time frame of the evaluation, less progress had been made in relation to vaccine delivery support.** Gavi's initial $150 million investment in TA and CCE appears to have been helpful, although it was delayed in some instances and insufficient to meet country needs for vaccine roll-out. A larger package of support, initially anticipated to be provided by others, did not come in time to support countries receiving the first shipments of vaccine doses. By the end of 2021, while more than $240 million had been approved through the various funding windows established for delivery support, few of these resources had actually been used at the country level.	Recommendation 5: **Strengthen coordination among global partners (donors, MDBs, multilateral agencies and TA providers) to ensure the timely availability of financial and technical support for vaccine roll-out.**	Lesson J: **Clarity on partnership working principles, roles/expertise required, and responsibilities for areas of work to support a pandemic response cannot be underestimated.** *This evaluation has focused on Gavi's role in administering the COVAX Facility and AMC, but not that of partners. As such, it is not well placed to recommend specific roles for Gavi in a future pandemic vis-à-vis partners.* Lesson H**: The provision of flexible funding on a no regrets basis can be extremely useful in a range of country contexts during emergency situations. Three of the case study countries specifically noted the contribution of flexible funding in helping them achieve vaccination coverage. CDS funds could be used to cover operational costs such as technical assistance, transport costs, per diems for vaccinators, etc.**

Annex F: Document review

This section provides and overview of the documents reviewed by the evaluation team during the initial Evaluability and Evaluation Design phase (August 2021 – January 2022) and the Formative Review and Baseline Study period (March – November 2022).

No.	Document Title	Source/author	Document Date
1	ACT-Accelerator Impact Report: Summary	ACT-A	23/04/2021
2	ACT Accelerator Facilitation Council. Vaccine manufacturing Working Group. Report to the G20	ACT-A	20/10/2021
3	Strategic Plan & Budget October 2021 to September 2022	ACT-A	28/10/2021
4	ACT-Accelerator Prioritized Strategy & Budget for 2021	ACT-A	12/04/2021
5	ACT now, ACT together2020-2021 Impact Report	ACT-A	01/04/2021
6	ACT-Accelerator Strategic Review - Inception report	ACT-A	17/08/2021
7	COVID-19 vaccine expiry forecast for 2021 and 2022	Airfinity	20/09/2021
8	Advance Market Commitment Engagement Group Meeting 5	COVAX	12/07/2021
9	Advance Market Commitment Engagement Group Meeting 1	COVAX	19/11/2020
10	Advance Market Commitment Engagement Group Meeting 3	COVAX	17/03/2021
11	Advance Market Commitment Engagement Group Meeting 2	COVAX	27/01/2021
12	"Advance Market Commitment Engagement Group Meeting 4"	COVAX	17/05/2021
13	A DOUBLE DOSE OF INEQUALITY	Amnesty International	22/09/2021
14	JCG Meeting Summary	CEPI	08/09/2020
15	2020 Annual Progress Report	CEPI	31/03/2021
16	Minutes of Board meeting #14	CEPI	24/06/2021
17	Minutes of Board meeting #13	CEPI	15/03/2021
18	CEPI mid-term review and COVID-19 response review: combined report	CEPI	01/05/2021

19	Equitable Access Committee (EAC) –26 May2020	CEPI	26/05/2020
20	Enabling Equitable Access to COVID-19 Vaccines: Summary of equitable access provisions inCEPI's COVID-19vaccine development agreements	CEPI	31/08/2021
21	Summary of CEPI Scientific Advisory Committee (SAC) meeting	CEPI	13/05/2020
22	Public summary Board meeting #10	CEPI	29/06/2020
23	Public Summary Board meeting #11	CEPI	16/09/2020
24	Public Summary Board meeting #12	CEPI	02/12/2020
25	Public summary of extraordinary Board meeting	CEPI	30/04/2020
26	Public summary of extraordinary Board meeting	CEPI	07/05/2020
27	Summary of Executive and Investment Committee (EIC) meeting, 7 July	CEPI	07/07/2021
28	Summary of CEPI Scientific Advisory Committee(SAC)meeting	CEPI	20/08/2020
29	Summary Equitable Access Committee (EAC) meeting May 7th2020	CEPI	07/05/2020
30	Summary of Executive & Investment Committee –14 April 2020	CEPI	14/04/2020
31	Summary of Executive and Investment Committee meeting–23 April2020	CEPI	23/04/2020
32	Addressing Market Failures: The Role of CEPI in Bridging the Innovation Gap to Prevent the Next Pandemic	CEPI	07/09/2021
33	A proposal to establish a globally fair allocation system for COVID-19 vaccines	CEPI	25/03/2020
34	COVAX Facility Information session with industry	CEPI/Gavi/WHO	12/08/2020
35	COVAX no-fault compensation program for AMC eligible economies (the "Program")	CEPI/Gavi/WHO	05/07/2021
36	COVAX Facility Risk Framework	Citi	25/11/2020
37	PRINCIPLES FOR SHARING COVID-19 VACCINE DOSES WITH COVAX	COVAX	18/12/2020
38	THE COVAX FACILITY: INTERIM DISTRIBUTION FORECAST	COVAX	03/02/2021
39	COVAX REDEPLOYMENT POLICY	COVAX	06/10/2021
40	COVAX GLOBAL SUPPLY FORECAST	COVAX	20/01/2021
41	Response to Joint Letter from Human Rights Watch, Public Citizen, MSF Access Campaign and Amnesty International–25March2021	COVAX	25/03/2021

42	BRIEFING NOTE FOR GOVERNMENTS AND ORGANISATIONS	COVAX	01/11/2020
43	COVAX FACILITY ADVANCE MARKET COMMITMENT (“AMC”) ENGAGEMENT GROUP MEETING 17 May 2021	COVAX	17/05/2021
44	COVAX FACILITY ADVANCE MARKET COMMITMENT (“AMC”) ENGAGEMENT GROUP MEETING17 March 2021	COVAX	17/03/2021
45	COVAX FACILITY ADVANCE MARKET COMMITMENT (“AMC”) ENGAGEMENT GROUPMEETING27 January 2021	COVAX	27/01/2021
46	THE SHARE HOLDERS COUNCIL MEETING(“THE COUNCIL”)18 May 2021	COVAX	18/05/2021
47	THE SHARE HOLDERS COUNCIL MEETING(“THE COUNCIL”)18 March2021	COVAX	18/03/2021
48	THE SHARE HOLDERS COUNCIL MEETING(“THE COUNCIL”)28January 2021	COVAX	28/01/2021
49	COVAX Facility Shareholders Council Final Minutesof Meeting 1 –2 November 2020	COVAX	01/11/2020
50	COVAX Facility AMC Engagement Group Summary Minutesof Meeting 1 –19November 2020	COVAX	01/11/2020
51	WSC Meeting (1/2)	COVAX	11/10/2021
52	Self-Financing Participants and AMC-Eligible economies	COVAX	12/05/2021
53	COVAX Introduction (Explainer)	COVAX	15/08/2021
54	Who's Who in COVAX	COVAX	01/05/2021
55	no title. File title: 01c - Annex A - ToRs of the COVAX AMC Engagement Group - March 2021	COVAX	01/03/2021
56	The Gavi COVAX AMC Investment Opportunity Launch Event - Participant list	COVAX	15/04/2021
57	The COVAX Facility and the AMC - DCVMN Annual General Meeting	COVAX	04/11/2020
58	COVAX Allocation Round 10Vaccine Allocation Decision	COVAX	11/09/2021
59	COVAX Allocation Round 12Vaccine Allocation Decision	COVAX	22/11/2021
60	COVAX Allocation Round 11Vaccine Allocation Decision	COVAX	11/05/2021
61	COVAX Allocation Round 8/9NEW Vaccine Allocation Decision	COVAX	13/10/2021
62	COVAX Global Supply Forecast	COVAX	14/12/2021
63	Fair allocation mechanism for COVID-19 vaccines through the COVAX Facility	COVAX	09/09/2020
64	COVAX: The Vaccine Pillar of the access to COVID-19 tools (ACT) accelerator structure and principles	COVAX	17/03/2021
65	COVAX Facility and COVAX AMC Theory of Change (TOC) and Evaluation update	COVAX	21/06/2021

66	COVAX Global Supply Forecast	COVAX	09/08/2021
67	FIRST ROUND OF ALLOCATION: ASTRAZENECA/OXFORD VACCINE	COVAX	02/03/2021
68	ALLOCATION ROUND 3: Pfizer-BioNTechVaccine, April –June 2021	COVAX	12/04/2021
69	ALLOCATION ROUND 4: AstraZeneca/OxfordVaccineExceptional allocation to address 2nddose needs and shipment delays	COVAX	16/07/2021
70	ALLOCATION ROUND 5: Pfizer-BioNTechVaccine	COVAX	15/07/2021
71	ALLOCATION ROUND 6: Sinopharm & SinovacVaccines	COVAX	04/08/2021
72	COVAX facility shareholders council terms of reference	COVAX	29/09/2020
73	COVAX facility shareholders council operating procedures	COVAX	29/09/2020
74	COVAX facility shareholders council executive committee terms of reference	COVAX	29/09/2020
75	COVAX AMC engagement group terms of reference	COVAX	29/09/2020
76	COVAX AMC stakeholders group terms of reference	COVAX	29/09/2020
77	COVAX facility consensus group terms of reference	COVAX	29/09/2020
78	COVAX facility independent product group terms of reference	COVAX	29/09/2020
79	COVAX AMC application guidance	COVAX	13/11/2020
80	Briefing Note Additional Information on Indemnification for COVAX AMC Participants	COVAX	01/11/2020
81	Allocation Mechanism for COVAX Facility Vaccines	COVAX	01/11/2020
82	Holding the World to Account: Urgent Actions Needed to Close Gaps in the Global COVID-19 Response	COVID Global Accountability Platform (COVID GAP)	18/11/2021
83	no title. File title: communities_civil_society_integration_within_the_act-a_vaccine_pillar_29072020	CSOs (collective signatories)	29/06/2020
84	ACT-Accelerator Strategic Review	Dalberg	08/10/2021
85	Q4 Global Forecast. One year on: vaccination successes and failures	Econonmist Intelligence Unit	2021
86	Ending the Covid-19 Pandemic: The Need for a Global Approach	Eurasia Group	25/11/2020
87	Gavi COVAX Reporting Framework Indicator Reference Sheets	COVAX	04/06/2021
88	COVAX: KEY STRATEGIC ISSUES	COVAX	28/09/2021

89	Gavi 5.0: An Overview of Key Issues	Gavi	28/09/2021
90	Report of the Chief Executive Officer	Gavi	16/06/2021
91	COVAX Pillar Strategy for 2022 and beyond	Gavi	28/09/2021
92	Annex B - Allocation Humanitarian Buffer and Contingency provision	Gavi	29/09/2021
93	Annex A - COVAX AMC pledges and donations	Gavi	30/09/2021
94	Annex B - Dose Donation to COVAX	Gavi	01/10/2021
95	COVAX Resource Mobilisation Update	Gavi	28/09/2021
96	Report of the Chief Executive Officer	Gavi	21/09/2021
97	Gavi Alliance Evaluation Advisory Committee Meeting	Gavi	18/11/2021
98	Gavi Alliance Governance Committee Meeting	Gavi	18/05/2021
99	Gavi Alliance Audit and Finance Committee Meeting	Gavi	21/10/2021
100	Gavi Alliance Audit and Finance Committee Meeting	Gavi	22/06/2020
101	Gavi Alliance Audit and Finance Committee Meeting	Gavi	23/07/2020
102	Gavi Alliance Audit and Finance Committee Meeting	Gavi	15/09/2020
103	Gavi Alliance Audit and Finance Committee Meeting	Gavi	23/11/2020
104	Gavi Alliance Programme and Policy Committee Meeting	Gavi	26/05/2020
105	Gavi Alliance Programme and Policy Committee Meeting	Gavi	28/10/2020
106	CIVIL SOCIETY AND COMMUNITY ENGAGEMENT APPROACH	Gavi	23/06/2021
107	no title. File title: 08 - Annex B - CSCE Theory of Change and Strategic Initiative	Gavi	
108	THE GAVI COVAX AMC AN INVESTMENT OPPORTUNITY	Gavi	
109	MARKET-SENSITIVE DECISIONS COMMITTEE CHARTER	Gavi	01/12/2020
110	Gavi Alliance Governance Committee Meeting	Gavi	08/09/2020
111	Gavi Alliance Governance Committee Meeting	Gavi	08/10/2020
112	Gavi Alliance Governance Committee Meeting	Gavi	24/11/2020

113	Gavi Alliance Governance Committee Meeting	Gavi	10/12/2020
114	Gavi Alliance Audit and Finance Committee 13 October 2020 Virtual Meeting	Gavi	13/10/2020
115	Gavi Alliance Audit and Finance Committee –COVAX 2/35 November 2020 Virtual Meeting	Gavi	05/11/2020
116	Gavi Alliance Audit and Finance Committee – COVAX 3 25 November 2020 Virtual Meeting	Gavi	25/11/2020
117	Gavi Alliance Audit and Finance Committee – COVAX 11 December 2020 Virtual Meeting	Gavi	11/12/2020
118	Gavi Alliance Audit and Finance Committee – COVAX 13 July 2021 Virtual Meeting	Gavi	13/07/2021
119	Gavi Alliance Audit and Finance Committee – COVAX 2 March 2021 Virtual Meeting	Gavi	02/03/2021
120	Gavi Alliance Audit and Finance Committee – COVAX 22 April 2021 Virtual Meeting	Gavi	22/04/2021
121	Gavi Alliance Audit and Finance Committee – COVAX 25 March 2021 Virtual Meeting	Gavi	25/03/2021
122	Gavi Alliance Audit and Finance Committee – COVAX 3 June 2021 Virtual Meeting	Gavi	03/06/2021
123	Gavi Alliance Audit and Finance Committee – COVAX 20 January 2021 Virtual Meeting	Gavi	20/01/2021
124	GaviAlliance Evaluation Advisory CommitteeMeeting14-15 April 2021Virtual meeting	Gavi	14/04/2021
125	GaviAllianceProgrammeandPolicyCommitteeMeeting1March2021Virtualmeeting	Gavi	01/03/2021
126	Gavi Alliance Programme and Policy Committee Meeting 19-20 May 2021 Virtual meeting	Gavi	19/05/2021
127	Draft Gavi 5.0 Theory of Changeand Learning Priorities	Gavi	15/12/2021
128	COVAX FACILITY OPERATIONALISATION AND VACCINE PROGRAMME	Gavi	29/09/2020
129	Report of the Chief Executive Officer	Gavi	15/12/2020
130	Lessons from Gavi's Advance Market Commitment for Pneumococcal Conjugate Vaccines	Gavi	30/07/2020
131	Alternative options explored for the administration of the Facility and key reasons for not exploring further	Gavi	30/07/2020
132	Annex B–Risk analysis	Gavi	30/07/2020
133	Annex D: Facility resourcing needs over time	Gavi	30/07/2020
134	Annex E: Participation model options	Gavi	23/06/2020
135	Annex F: Design of COVID-19 Delivery and System Strengthening (CDSS) envelope and cross-cutting delivery elements	Gavi	23/06/2020
136	Annex A:AMC eligible economies	Gavi	15/12/2020

137	Annex B:Pledges to the Gavi COVAX AMC	Gavi	15/12/2020
138	STRATEGIC PARTNERSHIPSWITH INDIA	Gavi	23/06/2021
139	Annex A - COVAX AMC support to India - Data Tables	Gavi	15/12/2020
140	COVAX AMC SUPPORT TO INDIA	Gavi	15/12/2020
141	COVID-19SITUATION REPORT#6	Gavi	12/04/2020
142	COVID-19SITUATION REPORT#10	Gavi	02/06/2020
143	COVID-19SITUATIONREPORT#11	Gavi	16/06/2020
144	COVID-19SITUATIONREPORT#12	Gavi	30/06/2020
145	COVID-19SITUATIONREPORT#13	Gavi	14/07/2020
146	COVID-19SITUATIONREPORT#14	Gavi	28/07/2020
147	COVID-19SITUATIONREPORT#15	Gavi	11/08/2020
148	COVID-19SITUATIONREPORT#16	Gavi	25/08/2020
149	COVID-19SITUATIONREPORT#17	Gavi	08/09/2020
150	COVID-19SITUATIONREPORT#18	Gavi	24/09/2020
151	COVID-19SITUATIONREPORT#19	Gavi	15/10/2020
152	COVID-19SITUATIONREPORT#20	Gavi	18/11/2020
153	COVID-19SITUATIONREPORT#5	Gavi	14/04/2020
154	COVID-19SITUATIONREPORT#7	Gavi	28/04/2020
155	COVID-19SITUATIONREPORT#8	Gavi	05/05/2020
156	COVID-19SITUATIONREPORT#9	Gavi	19/05/2020
157	COVAX buffer for high-risk groups in humanitarian situations	Gavi	22/03/2021
158	COVAX Facility Operationalisation and Vaccine Programme	Gavi	15/12/2020
159	Annex C - COVAX Reporting Framework	Gavi	15/12/2020
160	Annex A - Implications and Anticipated Impact	Gavi	15/12/2020

161	Annex A: Implications/Anticipated impact	Gavi	29/09/2020
162	Strategy and implications of COVID-19	Gavi	29/09/2020
163	Annex A: Terms of the COVAX AMC	Gavi	30/07/2020
164	Annex B: The COVAX AMC Group: proposed eligible economies	Gavi	30/07/2020
165	GAVI COVAX AMC	Gavi	30/07/2020
166	GAVI COVAX AMC & COVAX FACILITY STRUCTURE AND GOVERNANCE	Gavi	30/07/2020
167	COVID-19: GAVI'S IMMEDIATE AND INTERIM RESPONSE	Gavi	11/05/2020
168	GAVI'S ENGAGEMENT ON COVID-19	Gavi	19/03/2020
169	COVID-19 VACCINE DEVELOPMENT, ACCESS AND DELIVERY	Gavi	24/06/2020
170	COVID-19: VACCINE DEVELOPMENT, ACCESS AND DELIVERY	Gavi	24/06/2020
171	Gavi Alliance Board Meeting: Board minutes - March 2020	Gavi	19/03/2020
172	Gavi Alliance Board Meeting: Board minutes - May 2020	Gavi	11/05/2020
173	Gavi Alliance Board Meeting: Board minutes - June 2020	Gavi	24/06/2020
174	Gavi Alliance Board Meeting: Board minutes - July 2020	Gavi	30/07/2020
175	REVIEW OF DECISIONS: Board presentation - March 2020	Gavi	19/03/2020
176	REVIEW OF DECISIONS: Board presentation - May 2020	Gavi	11/05/2020
177	REVIEW OF DECISIONS: Board presentation - June 2020	Gavi	24/06/2020
178	REVIEW OF DECISIONS: Board presentation - July 2020	Gavi	30/07/2020
179	COVAX AMC FINANCIAL FORECAST	Gavi	23/05/2021
180	GAVI COVAX AMC	Gavi	22/03/2021
181	Annex C: COVAX Risk Report	Gavi	23/06/2021
182	Annex D: COVAX Country Participation Model: Risk Considerations	Gavi	23/06/2021
183	COVAX UPDATE	Gavi	23/06/2021
184	REVIEW OF DECISIONS	Gavi	22/03/2021

185	REVIEW OF DECISIONS	Gavi	23/06/2021
186	Risk & Assurance Report 2020	Gavi	
187	COVAX:KEYSTRATEGICISSUES	Gavi	28/09/2021
188	Dialogue with civil society: ACT-A and COVID-19 vaccines	Gavi/CEPI/WHO	27/10/2020
189	Supply Chain & Manufacturing Taskforce	Gavi/CEPI/WHO/UNICEF	12/05/2021
190	UNICEF SUPPLY DIVISION & GAVI:CCE Programme and Market updates on COVID-19 and Gavi 5.0	Gavi/Unicef	05/11/2020
191	Costs of delivering COVID-19 vaccine in 92 AMC countries Updated estimates from COVAX Working Group on delivery costs	Gavi/WHO/Unicef	08/02/2021
192	COVAX Facility & AMC: Documentation Project	Global Health Consulting	01/01/2021
193	Annex - Documentation Set: Synthesis of Core Design Decisions taken on the COVAX Facility and COVAX AMC Structures	Global Health Consulting	
194	Documentation Project: To synthesis core design decisions taken on the COVAX Facility and COVAX AMC	Global Health Consulting	08/01/2021
195	Global Health Cluster Position on COVID-19 vaccination in Humanitarian settings	Health Cluster	01/04/2021
196	Report of the Independent Allocation of Vaccines Group on the allocation of COVAX Facility secured vaccines	IAVG	15/03/2021
197	Report of the Independent Allocation of VaccinesGroupon the allocation of COVAX Facility secured vaccines	IAVG	15/07/2021
198	no title. File name: allocation-mechanism-for-vaccines.tmb-1920v	IAVG	
199	Summary of the July 2021 allocation round and decision making process, including graphs and data.	IAVG	22/02/2021
200	Allocation logic and algorithm to support allocation of vaccines secured through the COVAX Facility Explainer based on commonly asked questions	IAVG	15/02/2021
201	IAVG Vaccine Allocation Decision for Round 7	IAVG	17/09/2021
202	Report of the Independent Allocation of VaccinesGroupon the allocation of COVAX Facility secured vaccines	IAVVG	29/07/2021
203	A Proposal to End the COVID-19 Pandemic	IMF	01/05/2021
204	Engaging Civil Society to Support Equitable Access to COVID-19 Vaccines	International Vaccine Access Centre	21/10/2020
205	Report of the Joint Allocation Taskforce(JAT)onthedistributionofCOVAXFacilitysecuredvaccinesCOVAXFACILITYDISTRIBUTIONOFPFIZER/BioNTech	JAT	15/03/2021
206	Report of the Joint Allocation Taskforce(JAT)onthedistributionofCOVAXFacilitysecuredvaccinesCOVAXALLOCATIONROUND5/Q3AvailableSupply	JAT	06/07/2021

207	Report of the Joint Allocation Taskforce(JAT)onthedistributionofCOVAXFacilitysecuredvaccinesCOVAXALLOCATIONROUND4–Second Dose Needs	JAT	
208	no title. File name: the-jat-andiavg-formulate.tmb-1920v	JAT	
209	Vaccine Equity &Access in Crisis: COVID-19 Vaccination Updates from Conflict-Affected and Fragile States	MedGlobal	22/02/2021
210	Platform for ACT-A Civil Society & Community Representatives: Statement on the ACT-Accelerator Strategic Review (12 October 2021)	Platform for ACT-A Civil Society & Community Representatives	12/10/2021
211	Annex A - COVAX Buffer for high-risk groups in humanitarian situations	Gavi	01/03/2021
212	PFIZER'S POWER	Public Citizen	19/10/2021
213	COVID-19 and the cost of vaccine nationalism	RAND	2020
214	One for All: An Updated Action Plan for Global Covid-19 Vaccination	Rockefeller Foundation	01/06/2021
215	FINANCING COVID-19 VACCINATION EFFORTS WITH EQUITY	Save the Children	2021
216	Shareholders Council Meeting 5	SC	14/07/2021
217	Shareholders Council Meeting 2	SC	28/01/2021
218	Shareholders Council Meeting	SC	18/03/2021
219	Shareholders Council Meeting 4	SC	18/05/2021
220	COVAX Facility Shareholders Council Meeting 1	SC	02/11/2020
221	Access to Vaccines, Therapeutics, and Diagnostics	The Independent Panel for Pandemic Preparedness and Response	01/05/2021
222	COVID-19: Make it the Last Pandemic	The Independent Panel for Pandemic Preparedness and Response	2021
223	Dose of Reality: How rich countries and pharmaceutical corporations are breaking their vaccine promises	The People's Vaccine Coalition	21/09/2021
224	ASSESSING COUNTRY READINESS FORCOVID-19 VACCINES	The World Bank	01/03/2021
225	UNICEF Annual Report 2020	UNICEF	01/06/2021
226	ACT-Accelerator Vaccine Pillar(COVAX)Civil Society & Community Representation	WHO	14/09/2021

227	A World in Disorder. Global Preparedness Monitoring Board Annual Report 2020.	WHO	2020
228	Case for Private Sector Support	WHO	01/12/2020
229	COVID-19 Vaccination & COVAX rollout: WHO Member States Information Session	WHO	08/04/2021
230	Access to COVID-19 Tools Acceleratoroverview andupdate, July2021	WHO	01/07/2021
231	Strategy to Achieve Global Covid-19 Vaccination by mid-2022	WHO	
232	COVAX Update	WHO	25/02/2021
233	Global C-19 Vaccination Strategy – SAGE Extraordinary meeting	WHO	29/06/2021
234	COVAX Facility and AMC evaluation		21/06/2021
235	COVAX Facility and AMC Evaluation and global market assessment		21/06/2021
236	Annex B: COVAX Reporting Framework	Gavi	01/05/2021
237	Appendix 1: COVAX Country Participation Model: Analysis of the various demand scenarios and summary of SFP consultations	Gavi	01/05/2021
238	Appendix 1: COVAX Country Participation Model: Analysis of the various demand scenarios and summary of SFP consultations	Gavi	01/05/2021
239	COVAX Stakeholder Mapping	Gavi	17/03/2021
240	Explanatory note: Legal agreements with COVAX Facility Self-Financing Participants	Gavi	
241	COVAX Reporting Framework - ToC	Gavi	
242	How COVAX is mitigating uncertainty	Gavi	
243	Consultancy opportunity for evaluation advisory committee members	Gavi	26/07/2021
244	Advance Market Commitment Resource Mobilisation	Gavi	15/12/2020
245	COVAX Facility operationalisation and vaccine programme slide deck	Gavi	15/12/2020
246	Annex E - Draft Learning Agenda	Gavi	15/12/2020
247	Annex B - COVAX Budget 2021 and three-year forecast	Gavi	15/12/2020
248	One World Protected - Gavi-COVAX AMC Investment Opportunities	Gavi	15/04/2021
249	COVAX Global Supply Forecast	Gavi	01/04/2021

250	"The Advance Market Commitment Pilot for Pneumococcal Vaccines: Outcomes and Impact Evaluation"	Gavi	10/12/2015
251	COVAX Facility Explainer Participation Arrangements for Self-Financing Economies	Gavi	
252	Explanatory note: Legal agreements with COVAX Facility Self-Financing Participants	Gavi	
253	Strategy to Achieve Global Covid-19 Vaccination by mid-2022	WHO	06/10/2021
254	International Bank For Reconstruction And Development and International Development Association: Project Paper on a Proposed Additional Financing to the COVID-19 Strategic Preparedness and Response Program using the Multiphase Programmatic Approach (Global COVID-19 MPA)	World Bank	13/10/2020
255	Summary of Imperial College London's estimates of deaths averted due to COVID19 vaccination (from start of pandemic through till December 2021)	Gavi	Jun-21
256	No title. File title: CDS status with ceilings 30 Sep 2021	Gavi	30/09/2021
257	1CEPI RESULTS FRAMEWORKFOR COVID-19ACTIVITIES	CEPI	
258	2021 COVAX LEARNING SYNTHESIS	COVAX	28/02/2022
259	COVAX Delivery Risk Analysis and Monitoring	COVAX	01/03/2022
260	Risk Management Topic Session	COVAX	09/02/2022
261	Joint COVAX Facility, Delivery Leadership Team Meeting	COVAX	02/02/2022
262	Master Explainer	COVAX	09/03/2022
263	Update on COVID-19 Vaccine Delivery Partnership	COVAX	22/03/2022
264	Pillar LT Meeting COVAX Innovations and lessons learned + AOB	COVAX	17/03/2022
265	Covid Vx Delivery Support (CDS) operationalized through Early Access window and a Needs-Based Application	Gavi	01/09/2021
266	COVAX FACILITY STRUCTURE AND GOVERNANCE	Gavi	30/07/2020
267	Developing the COVAX Monitoring & Learning (M&L) Approach	Gavi	21/07/2020
268	STRATEGY, PROGRAMMES AND PARTNERSHIPS: PROGRESS, RISKS AND CHALLENGES	Gavi	23/06/2021
269	Sept 30 Extraordinary Board MeetingCOVAX Facility	Gavi	29/09/2020
270	COVAX FACILITY	Gavi	

271	A43340360 Advance Purchase Agreement_Template Long Form Agreement	Gavi	2021
272	Covax CDSS Application Design	Gavi	19/05/2021
273	Covax CDS Needs-Based Window	Gavi	27/09/2021
274	Directives de financement du Programme de soutien à la distribution de vaccins COVID-19 (CDS)	Gavi	01/07/2021
275	Covax CDS - Process for fast-track request needs-based funds	Gavi	Sep-21
276	Covax CDS- Process for full request needs-based funds	Gavi	Sep-21
277	Covax CDSS- Process for upfront funds	Gavi	Jun-21
278	Gavi Support for Delivery of Covid-19 Vaccines (CDS)	Gavi	
279	Scaline up vaccine delivery in AMC: Gavi support for Delivery of Covid-19 Vaccines (CDS)	Gavi	
280	CDS impact so far & forward looking objectives (Brainstorming)	Gavi	26/04/2022
281	CDS impact so far & forward looking objectives (Brainstorming)	Gavi	29/04/2022
282	COVID-19 Vaccine Delivery Support (CDS) CDS review | IRC Briefing session	Gavi	01/17/2021
283	Gavi support for Delivery of Covid-19 vaccines (CDS) - Timeline (DLT preparation)	Gavi	04/11/2021
284	COVID-19 Vaccine Delivery Support (CDS) - Brainstorming on redesign	Gavi	10/12/2021
285	No main title	Gavi	
286	Covid-19 Delivery Support (CDS) Needs Based Funding Window Request and Approval	Gavi	After June 2021 (but no precise date)
287	Delivery of Covid-19 Vaccines (CDS) and PFM	Gavi	12/10/2021
288	ANNEX B A&I 2022 Approved Plan	Gavi	16/11/2021
289	WHO'S WHO IN COVAX	Gavi	01/12/2021
290	Desk Review: Landscaping across partners –COVID-19 and COVAX MEL work	Gavi	N/A
291	2022Gavi Governance Calendar	Gavi	23/03/2022
292	Grant Agreement between the GAVI Alliance and the United Nations Children's Fund concerning the GAVI Alliance 2020-2021Covid-19 Vaccine Introduction: Preparation and Readiness Activities	Gavi	18/12/2021

293	Grant Agreement between the GAVI Alliance and the United Nations Children's Fund concerning GAVI 2020 Support for Covid-19 Vaccine Preparation and Readiness	Gavi	22-Oct-20
294	Two pathways for needs coverage till end of 2022	Gavi	
295	No main title. File title: CDS Needs Based - Timeline Tracking	Gavi	most likely October 2021
296	Short-term design enabling under 10 days disbursement leveraging HSS funds reprogramming	Gavi	
297	COVAX: A BROKEN PROMISE TO THE WORLD	MÉDECINS SANS FRONTIÈRES	21/12/2021
298	Considerations for choosing COVID19 vaccine products	WHO	18/03/2022
299	Letter - COMIRNATY® (Tozinameran - COVID-19 mRNA Vaccine), produced by BioNTech Manufacturing GmbH, a World Health Organization (WHO) recommended vaccine through WHO Emergency Use Listing (EUL) procedure Variation to extend the age indication	WHO	11/02/2022
300	ANNEX 1: GENERAL ALLOCATION FOR MAY-SEPTEMBER 2022 BY MONTH	Gavi	N/A
301	CVIC tool	WHO	10/05/2021
302	Gavi Budget + Reporting	Gavi	
303	COVID-19 Vaccine Global Access (COVAX) Facility	Gavi	11/06/2020
304	Accessing COVID-19 Vaccine Delivery Support (CDS) Early Access Window for urgent vaccine delivery needs and scale-up preparations	Gavi	25/06/2021
305	Application form to request the CDS early access funding for urgent vaccine delivery needs and scale-up preparations for Covid-19 vaccines received through the Covax facility	Gavi	25/06/2021
306	Application form for needs-based Covi-19 Vaccine Delivery (CDS) Support	Gavi	Oct-21
307	Application Form for needs-based Covid-19 Vaccine Delivery (CDS) Support	Gavi	22/09/2021
308	Introduction Poll	Gavi	
309	Submitting Covid-19 Delivery Support Application CDS Early Access Via the Partners Platform (Outstanding Questions for Feedback from Gavi and UNICEF)	Gavi	
310	Application form to request reprogramming of funding approved through the CDS early access window and needs-based window	Gavi	
311	Gavi Support for Delivery of Covid-19 Vaccines (CDS) : All you need to know about the CDS Needs-Based Window	Gavi	22/11/2021
312	Covid-19 Delivery Support (CDS) Needs Based Funding Window Request and Approval	Gavi	
313	APPLICATION FORM TO REQUEST REPROGRAMMING OF FUNDING APPROVED THROUGH THE CDS EARLY ACCESS WINDOW AND NEEDS-BASED WINDOW	Gavi	

314	Process: covid-19 Delivery Support (CDS) Needs Based Funding Window Request and Approval	Gavi	
315	Process: Reprogramming of Covid-19 Delivery Dupport (CDS) early access or needs based funding request	Gavi	27/04/2022
316	CDS NBW Pipeline	Gavi	31st Jan (assuming 2022?)
317	How to use remaining CDS / manage the allocation beyond existing envelope?	Gavi	01/04/2022
318	Gavi Support for Delivery of Covid-19 Vaccines (CDS) : All you need to know about the CDS Needs-Based Window	Gavi	28/10/2021
319	Gavi Support for Delivery of Covid-19 Vaccines (CDS) - Timeline - Weekly SFP Managers Meeting	Gavi	28/10/2021
320	Gavi Support for Delivery of Covid-19 Vaccines (CDS) - Timeline - Alignment on Timeline	Gavi	01/11/2021
321	CDS Needs-Based Window - Budget template & Review criteria - Meeting with IRC members	Gavi	02/11/2021
322	CDS Needs-Based Window - Review criteria & Review preparation - Meeting with IRC members	Gavi	05/11/2021
323	COVID-19 Vaccine Delivery Support (CDS) - Training session on application pre-screening & review	Gavi	18/11/2021
324	COVID-19 Vaccine Delivery Support (CDS) - Update to CRD Funder's Forum	Gavi	19/11/2021
325	COVID-19 Vaccine Delivery Support (CDS) - OCT update	Gavi	06/12/2021
326	COVID-19 Vaccine Delivery Support (CDS) - Update to CRD Funder's Forum	Gavi	10/12/2021
327	COVID-19 Vaccine Delivery Support (CDS)- Brainstorming on redesign | Delivery EOY Workshop	Gavi	16/12/2021
328	COVID-19 Vaccine Delivery Support (CDS) - Brainstorming on revised process	Gavi	14/01/2022
329	COVID-19 Vaccine Delivery Support (CDS) - CDS review | IRC Briefing session	Gavi	17/01/2022
330	COVID-19 Vaccine Delivery Support (CDS) - DLT Brainstorming	Gavi	19/01/2022
331	Gavi Support for Delivery of Covid-19 Vaccines (CDS) - All you need to know about the CDS Needs-Based Window	Gavi	20/01/2022
332	COVID-19 Vaccine Delivery Support (CDS)	Gavi	22/01/2022
333	COVID-19 Vaccine Delivery Support (CDS)	Gavi	22/01/2022
334	COVID-19 Vaccine Delivery Support (CDS) - Brainstorming on CDS redesign	Gavi	27/01/2022
335	Gavi Support for Delivery of Covid-19 Vaccines (CDS) - CDS update	Gavi	31/01/2022
336	Gavi Support for Delivery of Covid-19 Vaccines (CDS) - CDS update	Gavi	01/02/2022

337	COVID-19 Vaccine Delivery Support (CDS) - CDS redesign: DLT Discussion	Gavi	03/02/2022
338	COVID-19 Vaccine Delivery Support (CDS) - Withholding and disbursement of CDS funds | 3 possible options to address the use/impact of existing funds	Gavi	11/02/2022
339	COVID-19 Vaccine Delivery Support (CDS)	Gavi	08/03/2022
340	COVID-19 Vaccine Delivery Support (CDS) - South Sudan CDS Needs Based application – Gavi's share & unfunded request	Gavi	29/03/2022
341	GAVI Delivery funding activities	Gavi	29/03/2022
342	Covid-19 Vaccine Delivery Q&A session	Gavi	01/04/2022
343	COVID-19 Vaccine Delivery Support (CDS) - Update	Gavi	05/04/2022
344	COVID-19 Vaccine Delivery Support (CDS)	Gavi	07/04/2022
345	No main title. File title: 20220413_CDS Reallocation Proposal	Gavi	13/04/2022
346	COVID-19 Vaccine Delivery Support (CDS) - IRC Q&A	Gavi	13/04/2022
347	COVID-19 Vaccine Delivery Support (CDS) - CDS request overview : Somalia	Gavi	19/04/2022
348	COVID-19 Vaccine Delivery Support (CDS)- COVAX Monthly Country-Facing Staff Briefing	Gavi	19/04/2022
349	COVID-19 Vaccine Delivery Support (CDS) - DLT	Gavi	20/04/2022
350	COVID-19 Vaccine Delivery Support (CDS)	Gavi	02/09/2022
351	COVID-19 Vaccine Delivery Support (CDS)	Gavi	18/2/2022
352	COVID-19 Vaccine Delivery Support (CDS)	Gavi	22/04/2022
353	COVID-19 Vaccine Delivery Support (CDS)	Gavi	04/03/2022
354	No main title. File title: CDS redesign EO strawman	Gavi	
355	No main title. File title: Compilation of slides on the timeline	Gavi	
356	COVID-19 Vaccine Delivery Support (CDS) - Brainstorming on revised process	Gavi	
357	High demands on CDS envelope with a number of countries yet to access	Gavi	22/03/2022
358	No main title. File title: RE CDS NBW Dashboard - Template.msg	Gavi	
359	COVID-19 Vaccine Delivery Support (CDS) - CDS NBW update - Detailed status update for CDS Needs-Based requests received to-date	Gavi	01/02/2022

360	Gavi Support for Delivery of Covid-19 Vaccines (CDS) - CDS update – Needs Based Funding window	Gavi	09/02/2022
361	Gavi Support for Delivery of Covid-19 Vaccines (CDS) - CDS update – Needs Based Funding window	Gavi	16/02/2022
362	Gavi Support for Delivery of Covid-19 Vaccines (CDS) - CDS update – Needs Based Funding window	Gavi	23/02/2022
363	Gavi Support for Delivery of Covid-19 Vaccines (CDS) - CDS update – Needs Based Funding window	Gavi	01/03/2022
364	Gavi Support for Delivery of Covid-19 Vaccines (CDS) - CDS update – Needs Based Funding window	Gavi	08/03/2022
365	Gavi Support for Delivery of Covid-19 Vaccines (CDS) - CDS update – Needs Based Funding window	Gavi	11/03/2022
366	Gavi Support for Delivery of Covid-19 Vaccines (CDS) - CDS update – Needs Based Funding window	Gavi	15/03/2022
367	Gavi Support for Delivery of Covid-19 Vaccines (CDS) - CDS update – Needs Based Funding window	Gavi	21/03/2022
368	Gavi Support for Delivery of Covid-19 Vaccines (CDS) - CDS update – Needs Based Funding window	Gavi	25/03/2022
369	Gavi Support for Delivery of Covid-19 Vaccines (CDS) - CDS update – Needs Based Funding window	Gavi	29/03/2022
370	Gavi Support for Delivery of Covid-19 Vaccines (CDS) - CDS update – Needs Based Funding window	Gavi	05/04/2022
371	Gavi Support for Delivery of Covid-19 Vaccines (CDS) - CDS update – Needs Based Funding window	Gavi	12/04/2022
372	Gavi Support for Delivery of Covid-19 Vaccines (CDS) - CDS update – Needs Based Funding window	Gavi	20/04/2022
373	Gavi Support for Delivery of Covid-19 Vaccines (CDS) - CDS update – Needs Based Funding window	Gavi	26/04/2022
374	CDS NBF Status	Gavi	15/03/2022
375	CDS NBF Status	Gavi	21/03/2022
376	CDS NBF Status	Gavi	30/03/2022
377	CDS NBF Status	Gavi	05/04/2022
378	CDS NBF Status	Gavi	12/04/2022
379	CDS NBF Status	Gavi	21/04/2022
380	CDS NBF Status	Gavi	26/04/2022
381	CDS NBF Application Status	Gavi	20/12/2021
382	CDS NBF Updates	Gavi	06/12/2021
383	Gavi Support for Delivery of Covid-19 Vaccines (CDS) | Timeline - DLT Preparation	Gavi	04/11/2021

384	Gavi Support for Delivery of Covid-19 Vaccines (CDS) | Timeline - DLT Preparation	Gavi	08/11/2021
385	Gavi Support for Delivery of Covid-19 Vaccines (CDS) | Amounts requested - DLT meeting AOB	Gavi	15/11/2021
386	COVID-19 Vaccine Delivery Support (CDS) - DLT update	Gavi	10/12/2021
387	CDS NBF Updates	Gavi	28/11/2021
388	No title. File title: Quick analysis on Short term requests	Gavi	
389	No title. File title: 20220329 - CoVDP x ACT-A meeting v7 - slide 10 with Gavi update	Gavi	29/03/2022
390	No title. File title: 20220406 Waterfall slides	Gavi	06/04/2022
391	High demands on CDS envelope with a number of countries yet to access	Gavi	12/04/2022
392	Prescreening form - CDS Needs-based full request application	Gavi	
393	Guidance to IRC members - Independent review of Covax CDS Needs Based Request	Gavi	months after July 2021
394	Guidance to IRC members - Independent review of Covax CDS Needs Based Request	Gavi	months after July 2021
395	Guidance to IRC members - Independent review of Covax CDS Needs Based Request	Gavi	months after July 2021
396	Guidance to IRC members - Independent review of Covax CDS Needs Based Request	Gavi	
397	Prescreening form - CDS Needs-based full request application	Gavi	around December 13th 2021
398	Independent Review Committe (IRC) Country Report Remote review	Gavi	
399	CDS NBW tracker_revised5	Gavi	around early April 2022
400	Gavi CDS NBW Report	Gavi	14/01/2022
401	CDS NBW Pipeline	Gavi	14/01/2022
402	No title. File title: Automated_CDS NBW tracker (1)	Gavi	14/01/2022
403	Gavi CDS NBW Report	Gavi	21/01/2022
404	CDS NBW Pipeline	Gavi	21/01/2022
405	No title. File title: 20220121_Automated_CDS NBW tracker (1)	Gavi	21/01/2022

406	Gavi CDS NBW Report	Gavi	28/01/2022
407	CDS NBW Pipeline	Gavi	28/01/2022
408	CDS EAW Report	Gavi	28/01/2022
409	CDS EAW Report	Gavi	31/01/2022
410	CDS NBW Pipeline	Gavi	02/02/2022
411	CDS EAW Report	Gavi	02/02/2022
412	CDS NBF Pipeline	Gavi	11/02/2022
413	File title: 20220211_CDS NBW tracker_revised	Gavi	11/02/2022
414	File title: CDS NBW tracker_revised	Gavi	11/02/2022
415	File title: 20220217_CDS NBW tracker_revised	Gavi	17/02/2022
416	CDS NBF Pipeline	Gavi	17/02/2022
417	20220301_CDS NBW tracker_revised2	Gavi	01/03/2022
418	20220301_Conflict and Fragile_CDS NBW tracker	Gavi	01/03/2022
419	20220301_Core ESA_CDS NBW tracker	Gavi	01/03/2022
420	20220301_Core RoW_CDS NBW tracker	Gavi	01/03/2022
421	20220301_Core WCA_CDS NBW tracker	Gavi	01/03/2022
422	20220301_High Impact_CDS NBW tracker	Gavi	01/03/2022
423	20220301_Pipeline_CDS NBW tracker	Gavi	01/03/2022
424	20220308_Conflict and Fragile_CDS NBW tracker	Gavi	08/03/2022
425	20220308_Core ESA_CDS NBW tracker	Gavi	08/03/2022
426	20220308_Core RoW_CDS NBW tracker	Gavi	08/03/2022
427	20220308_Core WCA_CDS NBW tracker	Gavi	08/03/2022
428	20220308_High Impact_CDS NBW tracker	Gavi	08/03/2022
429	20220308_Pipeline_CDS NBW tracker	Gavi	08/03/2022

430	CDS NBW tracker_revised2	Gavi	08/03/2022
431	commented_20220308_Core ESA_CDS NBW tracker	Gavi	08/03/2022
432	commented2_20220308_Core ESA_CDS NBW tracker	Gavi	08/03/2022
433	20220315_CDS NBW tracker_revised3	Gavi	15/03/2022
434	Analysis	Gavi	15/03/2022
435	20220315_Conflict and Fragile_CDS NBW tracker	Gavi	15/03/2022
436	20220315_Core ESA_CDS NBW tracker	Gavi	15/03/2022
437	20220315_Core High Impact_CDS NBW tracker	Gavi	15/03/2022
438	20220315_Core RoW_CDS NBW tracker	Gavi	15/03/2022
439	20220315_Core WCA_CDS NBW tracker	Gavi	15/03/2022
440	20220315_PIPELINE AND BENCHMARKS_CDS NBW tracker	Gavi	15/03/2022
441	20220321_CDS NBW tracker_revised3	Gavi	21/03/2022
442	20220321_Conflict and Fragile_CDS NBW tracker	Gavi	21/03/2022
443	20220321_Core ESA_CDS NBW tracker	Gavi	21/03/2022
444	20220321_Core RoW_CDS NBW tracker	Gavi	21/03/2022
445	20220321_Core WCA_CDS NBW tracker	Gavi	21/03/2022
446	20220321_High Impact_CDS NBW tracker	Gavi	21/03/2022
447	20220321_Pipeline and benchmarks_CDS NBW tracker	Gavi	21/03/2022
448	20220328_CDS NBW tracker_revised3	Gavi	28/03/2022
449	20220328_Conflict and Fragile_CDS NBW tracker	Gavi	28/03/2022
450	20220328_Core ESA_CDS NBW tracker	Gavi	28/03/2022
451	20220328_Core RoW_CDS NBW tracker	Gavi	28/03/2022
452	20220328_Core WCA_CDS NBW tracker	Gavi	28/03/2022
453	20220328_High Impact_CDS NBW tracker	Gavi	28/03/2022

454	20220328_Pipeline and benchmarks_CDS NBW tracker	Gavi	28/03/2022
455	20220404_CDS NBW tracker_revised4	Gavi	04/04/2022
456	20220404_Conflict and Fragile_CDS NBW tracker	Gavi	04/04/2022
457	20220404_ESA_CDS NBW tracker	Gavi	04/04/2022
458	20220404_High Impact_CDS NBW tracker	Gavi	04/04/2022
459	20220404_Pipeline and benchmarks_CDS NBW tracker	Gavi	04/04/2022
460	20220404_RoW_CDS NBW tracker	Gavi	04/04/2022
461	20220404_WCA_CDS NBW tracker	Gavi	04/04/2022
462	20220411_Conflict and FragileCDS NBW tracker_revised4	Gavi	11/04/2022
463	20220411_CDS NBW tracker_revised4	Gavi	11/04/2022
464	20220411_ESA_CDS NBW tracker_revised4	Gavi	11/04/2022
465	20220411_High Impact_CDS NBW tracker_revised4	Gavi	11/04/2022
466	20220411_pipeline and bench marks_CDS NBW tracker_revised4	Gavi	11/04/2022
467	20220411_RoW_CDS NBW tracker_revised4	Gavi	11/04/2022
468	20220411_WCA_CDS NBW tracker_revised4	Gavi	11/04/2022
469	20220421_C&F_CDS NBW tracker_revised4	Gavi	19/04/2022
470	20220421_CDS NBW tracker_revised4	Gavi	19/04/2022
471	20220421_ESA_CDS NBW tracker_revised4	Gavi	19/04/2022
472	20220421_High impact_CDS NBW tracker_revised4	Gavi	19/04/2022
473	20220421_pipeline and benchmark_CDS NBW tracker_revised4	Gavi	19/04/2022
474	20220421_RoW_CDS NBW tracker_revised4	Gavi	19/04/2022
475	20220421_WCA_CDS NBW tracker_revised4	Gavi	25/04/2022
476	20220425_CDS NBW tracker_revised5	Gavi	25/04/2022
477	20220425_Conflict and Fragile_CDS NBW tracker_revised5	Gavi	25/04/2022

478	20220425_Pipeline and benchmark_CDS NBW tracker_revised5	Gavi	25/04/2022
479	20220426_CDS_ESA_NBW tracker_revised5	Gavi	25/04/2022
480	20220426_High Impact_CDS NBW tracker_revised5	Gavi	25/04/2022
481	20220426_RoW_CDS NBW tracker_revised5	Gavi	25/04/2022
482	20220426_WCA_CDS NBW tracker_revised5	Gavi	25/04/2022
483	Allotment of programme funding	Gavi	
484	COVID-19 vaccination Accelerated Campaign, 2022, Afghanistan	Gavi	
485	COVID-19 vaccination Accelerated Campaign, 2022, Afghanistan	Gavi	
486	no title. File name: Budget sheet C - Fixed sites Vaccinators and operational expenses	Gavi	
487	Budget sheet D – Cold chain needs and their estimates costs	Gavi	
488	no title. File name: Budget sheet E - Training including AEFI	Gavi	
489	CDS Budget + Reporting	Gavi	
490	APPLICATION FORM FOR NEEDS-BASED COVID- 19 VACCINE DELIVERY (CDS) SUPPORT	Gavi	Oct-21
491	Universal coverage with Covid-19 Vaccine - Afghanistan - National Deployment and Vaccination Plan 2.0 (2022)	Gavi	21/03/2022
492	Strengthening AEFI management in Afghanistan	Gavi	
493	Afghanistan COVAX TA Plan (WHO Country office)	Gavi	
494	FORMULAIRE DE DEMANDE DE SOUTIEN POUR LA DISTRIBUTION DE VACCINs cOVID-19 BASE SUR LES BESOINS (CDS)	Gavi	Oct-21
495	Budget CDS de Gavi et modèle de rapport	Gavi	2022
496	CDS Technical Assistance Plan	Gavi	
497	PLAN NATIONAL DE DEPLOIEMENT ET DE VACCINATION II CONTRE LA COVID-19 AU BURKINA FASO	Gavi	Oct-21
498	CVIC tool	Gavi	Mar-21
499	Rapport de la session extraordinaire du Comité de coordination inter agence du programme élargi de vaccination (CCIA) pour l'examen et l'adoption de la demande de soutient à la distribution des vaccins COVID-19 basé sur les besoins (CDS 2)	Gavi	05/11/2021
500	Outil d'inventaire & analyse de Gap de la Chiane du froid	Gavi	28/04/2021

501	no title. File title: Annex 2. DPV_Authorization for submission	Gavi	11/11/2021
502	RAPPORT DE LA REVUE INTRA ACTION DU PLAN NATIONAL DE DEPLOIEMENT ET DE VACCINATION CONTRE LA COVID-19 AU BURKINA FASO	Gavi	29/09/2021
503	Demande de soutien aux équipements de la chaîne du froid pour le CDS	Gavi	08/11/2021
504	Pre-screening form – CDS Needs-Based Full request Application	Gavi	29/11/2021
505	FORMULAIRE DE DEMANDE DE SOUTIEN POUR LA DISTRIBUTION DE VACCINs cOVID-19 BASE SUR LES BESOINS (CDS)	Gavi	09/11/2021
506	Budget CDS de Gavi et modèle de rapport	Gavi	08/11/2021
507	Plan d'assistance technique CDS	Gavi	11/11/2021
508	PLAN D!INTRODUCTION DU VACCIN CONTRE LE COVID-19 EN REPUBLIQUE DEMOCRATIQUE DU CONGO (RDC) revisé	Gavi	Oct-21
509	no title. File title: 05. DRC- COSTING & BUDGETISATION PNDV OUTIL2 S1_26MJJ_08112021 (3)	Gavi	08/11/2021
510	Compte rendu de la réunion Stratégique du Comité de Coordination Inter- Agences (CCIA Stratégique)	Gavi	09/11/2021
511	no title. File title: Annex 1. RDC-ESTIMATIONS COUTS _ WHO-2019-nCoV-Vaccine-deployment-tool-2021.3-eng-v2.2EZ_08112021	Gavi	08/11/2021
512	no title. File title: Annex 2. PLANIFICATION CAMPAGNE VACCIN COVID-19_08112021	Gavi	08/11/2021
513	Rapport de la revie intra-action (RIA)	Gavi	Aug-21
514	Pre-screening form – CDS Needs-Based Full request Application	Gavi	29/11/2021
515	Gavi Budget + Reporting	Gavi	08/11/2021
516	no title. File title: 03. CDS TA Plan 2021-22 - Ghana (2)	Gavi	
517	Pre-screening form – CDS Needs-Based Full request Application	Gavi	29/11/2021
518	APPLICATION FORM FOR NEEDS-BASED COVID- 19 VACCINE DELIVERY (CDS) SUPPORT	Gavi	08/11/2021
519	COVID-19 Vaccine Deployment and Vaccination Plan	Gavi	08/11/2021
520	CVIC tool	Gavi	10/05/2021
521	MINUTES OF NATIONAL TECHNICAL COORDINATION COMMITTEE MEETING	Gavi	03/11/2021
522	REPORT OF COVID-19 INTRA-ACTION REVIEW (IAR) IN GHANA COVID-19 VACCINATION PILLAR	Gavi	22/07/2021
523	no title. File title: CDS TA Plan 2021-22 - Ghana (2)	Gavi	

524	no title. File title: GHA COVAX CDS NB Budget_08Nov2021	Gavi	
525	APPLICATION FORM FOR NEEDS-BASED COVID- 19 VACCINE DELIVERY (CDS) SUPPORT	Gavi	09/11/2021
526	FORMULAIRE DE DEMANDE DE SOUTIEN POUR LA DISTRIBUTION DE VACCINS COVID-19 BASE SUR LES BESOINS (CDS)	Gavi	30/10/2021
527	FORMULAIRE DE DEMANDE DE SOUTIEN POUR LA DISTRIBUTION DE VACCINS COVID-19 BASE SUR LES BESOINS (CDS)	Gavi	09/11/2021
528	procès-verbal du comité interpartnaires de vaccination	Gavi	22/11/2021
529	Pre-screening form – CDS Needs-Based Full request Application	Gavi	13/12/2021
530	PLAN NATIONAL DE DEVELOPPEMENT DE LA VACCINATION CONTRE LA COVID 19 EN MAURITANIE	Gavi	25/10/2021
531	Budget CDS de Gavi et modèle de rapport	Gavi	
532	CDS Technical Assistance Plan	Gavi	
533	no title. File title: Annex1. CDS-CCE-Budget-fr	Gavi	
534	APPLICATION FORM FOR NEEDS-BASED SHORT TERM COVID-19 VACCINE DELIVERY (CDS) SUPPORT	Gavi	
535	no title. File title: Covid-19 - MOH approval letter	Gavi	
536	APPLICATION FORM FOR NEEDS-BASED COVID-19 VACCINE DELIVERY (CDS) SUPPORT	Gavi	12/11/2021
537	COVID-19 Technical Working Group Meeting Notes	Gavi	06/05/2021
538	SUMMARY OF COVID-19 VACCINATION REVIEW WORKSHOP NOTES	Gavi	23/09/2021
539	APPLICATION FORM FOR NEEDS-BASED COVID-19 VACCINE DELIVERY (CDS) SUPPORT	Gavi	12/11/2021
540	Pre-screening form – CDS Needs-Based Full request Application	Gavi	29/11/2021
541	COVID-19 NATIONAL VACCINE DEPLOYMENT PLAN (NVDP)	Gavi	Jul-21
542	COVID-19 Technical Working Group Meeting Notes	Gavi	06/05/2021
543	SUMMARY OF COVID-19 VACCINATION REVIEW WORKSHOP NOTES	Gavi	23/09/2021
544	no title. File title: 02. 13112021 DRAFT Gavi COVAX CDS Costing Template_EN_11-11-21 draft	Gavi	13/11/2021
545	Partie 1: informations sur le candidat	Gavi	07/03/2022
546	FORMULAIRE DE DEMANDE DE SOUTIEN POUR LA DISTRIBUTION DE VACCINS COVID-19 BASE SUR LES BESOINS (CDS)	Gavi	07/03/2022

547	Rapport de la réunion de validation du budget de subvention (CDS2) par le comité de coordination inter-agences (CCIA) 2021	Gavi	25/02/2022
548	no title. File title: Budget Vaccin Covid-19_2ème phase_Final (1)	CAR Government	
549	no title. File title: CAR _ CDS2 _ Gavi-COVAX-CDS-Budget-Template_FR_10032022 (3)	CAR Government	10/03/2022
550	PLAN NATIONAL DE DEPLOIEMENT ET DE VACCINATION POUR LE VACCIN CONTRE LA COVID-19 EN REPUBLIQUE CENTRAFRICAINE (RCA) 2	CAR Government	Jan-22
551	Allotment of programme funding	CAR Government	
552	no title. CAR_ONE TCA _NDVP- CDS GAVI 131221_OMS_UNICEF AEDES_2 (1)	CAR Government	13/12/2021
553	CDS Technical Assistance Plan	Gavi	14/02/2022
554	no title. File title: CHAD _ COSTING & BUDGETISATION PNDV OUTIL2_Variante2	Chad Government	
555	Allotment of programme funding	Chad Government	
556	CVIC tool	WHO	
557	No title. File title: TCHAD REVUE DES DEPENSES CDS1	Chad Government	
558	FORMULAIRE DE DEMANDE DE SOUTIEN POUR LA DISTRIBUTION DE VACCINS COVID-19 BASE SUR LES BESOINS (CDS)	Gavi	25/01/2022
559	Key Gavi COVAX meetings	Gavi	23/08/2021
560	Key Gavi COVAX meetings	Gavi	31/01/2021
561	Generic 4-week view: Facility and Pillar Meetings	Gavi	Feb-22
562	Generic 4-week view: Facility and Pillar Meetings	Gavi	Feb-22
563	Generic 4-week view: Facility and Pillar Meetings	Gavi	02/03/2022
564	Resources, COVAX Facility and Pillar meetings	Gavi	09/05/2022
565	COVAX governance	Gavi	Unknown
566	Communications, COVAX onboarding	Gavi	Unknown
567	No title. File title: CPP data 3 May 2022	Gavi	03/05/2022
568	Delivery leadership team update - Discussion Document May 2021	Gavi	May-21
569	RE: Delivery Leadership Team Meeting	Gavi	01/11/2021

570	RE: Delivery Leadership Team Meeting	Gavi	10/06/2021
571	RE: Delivery Leadership Team Meeting	Gavi	14/06/2021
572	RE: Delivery Leadership Team Meeting	Gavi	18/06/2021
573	RE: Delivery Leadership Team Meeting	Gavi	21/06/2021
574	RE: Delivery Leadership Team Meeting	Gavi	25/06/2021
575	RE: Delivery Leadership Team Meeting	Gavi	28/06/2021
576	RE: Delivery Leadership Team Meeting	Gavi	02/07/2021
577	RE: Delivery Leadership Team Meeting	Gavi	06/07/2021
578	RE: Delivery Leadership Team Meeting	Gavi	09/07/2021
579	RE: Delivery Leadership Team Meeting	Gavi	19/07/2021
580	RE: Delivery Leadership Team Meeting	Gavi	23/07/2021
581	RE: Delivery Leadership Team Meeting	Gavi	26/07/2021
582	RE: Delivery Leadership Team Meeting	Gavi	06/08/2021
583	RE: Delivery Leadership Team Meeting	Gavi	09/08/2021
584	SWAT Meeting Notes 10th August [SWAT Team + Others]	Gavi	10/08/2021
585	RE: Delivery Leadership Team Meeting	Gavi	12/08/2021
586	RE: Delivery Leadership Team Meeting	Gavi	20/08/2021
587	RE: Delivery Leadership Team Meeting	Gavi	23/08/2021
588	RE: Delivery Leadership Team Meeting	Gavi	13/09/2021
589	RE: Delivery Leadership Team Meeting	Gavi	20/09/2021
590	RE: Delivery Leadership Team Meeting	Gavi	26/09/2021
591	RE: Delivery Leadership Team Meeting	Gavi	04/10/2021
592	RE: Delivery Leadership Team Meeting	Gavi	04/10/2021
593	RE: Delivery Leadership Team Meeting	Gavi	11/10/2021

594	RE: Delivery Leadership Team Meeting	Gavi	18/10/2021
595	RE: Delivery Leadership Team Meeting	Gavi	25/10/2021
596	RE: Delivery Leadership Team Meeting	Gavi	31/10/2021
597	RE: Delivery Leadership Team Meeting	Gavi	07/11/2021
598	RE: Delivery Leadership Team Meeting	Gavi	08/11/2021
599	RE: Delivery Leadership Team Meeting -- Action items 11/15	Gavi	15/11/2021
600	RE: Delivery Leadership Team Meeting	Gavi	22/11/2021
601	RE: Additional DLT to discuss Demand in the context of COVID-19 vaccine delivery	Gavi	25/11/2021
602	RE: Delivery Leadership Team Meeting	Gavi	05/12/2021
603	RE: Delivery Leadership Team Meeting	Gavi	06/12/2021
604	RE: Delivery Leadership Team Meeting	Gavi	13/12/2021
605	RE: Bi-weekly Core DLT meeting	Gavi	10/02/2022
606	RE: Bi-weekly Core DLT meeting	Gavi	21/02/2022
607	RE: Bi-weekly Core DLT meeting	Gavi	09/03/2022
608	RE: Bi-weekly Core DLT meeting	Gavi	18/03/2022
609	RE: Bi-weekly Core DLT meeting	Gavi	21/03/2022
610	RE: Bi-weekly Core DLT meeting	Gavi	24/03/2022
611	E2E preparations for Q4 deliveries Upstream processes	Gavi	30/05/2021
612	RE: Delivery Leadership Team Meeting	Gavi	25/05/2021
613	RE: Delivery Leadership Team Meeting	Gavi	17/06/2021
614	No title. File title: DoseSharingTracker_Database	Gavi	No date
615	COVAX EO CHECK IN - JUNE 8 | FOR DISCUSSION	Gavi	08/06/2021
616	COVAX EO CHECK IN - JUNE 22 2021| FOR DISCUSSION	Gavi	22/06/2021
617	COVAX EO CHECK IN - AUGUST 24 2021 | FOR DISCUSSION	Gavi	24/08/2021

618	COVAX EO CHECK IN - SEPTEMBER 16 2021 | FOR DISCUSSION	Gavi	16/09/2021
619	COVAX EO CHECK IN - December 2021 | FOR DISCUSSION	Gavi	07/12/2021
620	COVAX EO CHECK IN - December 2021 | FOR DISCUSSION	Gavi	14/12/2021
621	COVAX EO CHECK IN - January 2022 | FOR DISCUSSION	Gavi	11/01/2022
622	COVAX EO Check-in FOR DISCUSSION February 22 2022	Gavi	22/02/2022
623	COVAX Facility– EO Check-in 3 MARCH 2021 | DISCUSSION DOCUMENT	Gavi	03/03/2022
624	N/A. File title: 20220105 - Steps_to_supply_HB_Doses	Gavi	20/08/2021
625	Action Points from Humanitarian Buffer Procurement Meeting - 5 Jan 2022	Gavi	05/01/2021
626	Action Points from Humanitarian Buffer Procurement Work Group – 6 April	Gavi	06/04/2021
627	Action Points from Humanitarian Buffer Procurement Working Group - 2 Feb	Gavi	07/02/2021
628	Action Points from Humanitarian Buffer Procurement Working Group - 2 March	Gavi	04/03/2022
629	Action Points from Humanitarian Buffer Procurement Working Group - 9 Feb	Gavi	09/02/2022
630	Action Points from Humanitarian Buffer Procurement Working Group - 9 March	Gavi	10/03/2022
631	Action Points from Humanitarian Buffer Procurement Working Group - 12 Jan	Gavi	12/01/2022
632	Application form for needs-based full term COVID-19 vaccine delivery (CDS) support	Gavi	26/01/2022
633	Pre-screening form – CDS Needs-Based Full request Application	Gavi	11/04/2021
634	Allotment of programme funding	Gavi	
635	Covid-19 Delivery Support Management Surge Support funding Terms of Reference (ToRs) for Country: Ethiopia	Gavi	
636	no title. File title: Ethiopia CDS-NBF Full Request Budget 15032022	Gavi	15/03/2022
637	no title. File title: 02. Clean_EthiopiaCDSFull_KJ (1)	Gavi	
638	CDS Technical Assistance Plan	Gavi	
639	Ethiopia National Deployment and Vaccination Plan for COVID- 19 Vaccines	Gavi	Dec-21

640	no title. File title: 05. Summary Costing reviesed_19 December 2021 (1)	Gavi	19/12/2021
641	Ethiopia National Deployment and Vaccination Plan for COVID-19 Vaccines	Gavi	Jul-21
642	CDS Technical Assistance Plan	Gavi	
643	no title. File title: CDS2 signé MS (1)	Gavi	31/03/2022
644	Allotment of programme funding	Gavi	
645	Plan National de déploiement de la vaccination contre la COVID-19	Gavi	Mar-22
646	FORMULAIRE DE DEMANDE DE SOUTIEN POUR LA DISTRIBUTION DE VACCINS COVID-19 BASE SUR LES BESOINS (CDS)	Gavi	11/03/2022
647	Plan National de déploiement de la vaccination contre la COVID-19	Gavi	22/03/2022
648	Precès verbal de la réunion	Gavi	16/03/2022
649	no title. File title: VF_Guinée _ CDS2 Gavi _Budget_ 25032022 (2)	Gavi	
650	APPLICATION FORM FOR NEEDS-BASED COVID- 19 VACCINE DELIVERY (CDS) SUPPORT	Gavi	31/03/2022
651	CDS Technical Assistance Plan	Gavi	
652	National Vaccine & Immunization Program Acceleration of COVID-19 Vaccination program in Kenya	Gavi	Aug-21
653	no title. File title: Gavi-covax-cds-budget Kenya	Gavi	
654	Alotment of programme funding	Gavi	
655	Minutes of the Covid-19 Vaccine Taskforce meeting held virtually, on 16/02/2022 at 10.00 A.M.	Gavi	16/02/2022
656	no title. File title: KGZ_Gavi-covax-cds-budget_FINAL_17.03.22	Gavi	17/03/2022
657	CDS Technical Assistance Plan	Gavi	
658	no title. File title: CDS_budget	Gavi	
659	no title. File title: KGZ_Gavi-covax-cds-budget_FINAL_17.03.22 (1)	Gavi	17/03/2022
660	Alottment of programme funding	Gavi	
661	APPLICATION FORM FOR NEEDS-BASED COVID- 19 VACCINE DELIVERY (CDS) SUPPORT	Gavi	17/03/2022
662	National Vaccination Deployment Plan for COVID-19 Vaccines, Kyrgyzstan	Gavi	09/08/2021

663	no title. File title: NDVP_3.1_signature page	Gavi	25/08/2021
664	National Vaccination Deployment Plan for COVID-19 Vaccines, Kyrgyzstan	Gavi	Mar-22
665	unable to read title. File title: National Vaccination Deployment Plan for COVID-19 Vaccines, Kyrgyzstan	Gavi	
666	THE MALAWI ENHANCED COVID-19 VACCINE DEPLOYMENT PLAN	Gavi	31/03/2022
667	APPLICATION FORM FOR NEEDS-BASED COVID- 19 VACCINE DELIVERY (CDS) SUPPORT	Gavi	31/03/2022
668	Cold Chain Investments	Gavi	
669	Management Surge Support funding Terms of Reference (ToRs) for Country: Ethiopia	Gavi	25/01/22
670	Gavi CDS Budget + Reporting Template	Gavi	15/03/22
671	Allotment of programme funding	Gavi	Apr-22
672	Pre-screening form – CDS Needs-Based Full request Application	Gavi	04/11/2022
673	Minutes of ICC	Gavi	26/01/22
674	Minutes of ICC	Gavi	26/01/22
675	Budget Proposal for Supply Chain and Logistics _ COVID 19 vaccination campaign	Gavi	19/12/21
676	Ethiopia National Deployment and Vaccination Plan for COVID19 Vaccines	Gavi	Dec-21
677	CDS Technical Assistance Plan	Gavi	2021-22
678	CDS Budget + Reporting Details	Gavi	31/12/22
679	Application form for needs-based full term COVID-19 vaccine delivery (CDS) support	Gavi	26/01/22
680	CDS Technical Assistance Plan	Gavi	2021-22
681	APPLICATION FORM FOR NEEDS-BASED COVID-19 VACCINE DELIVERY (CDS) SUPPORT	Gavi	24/01/22
682	CDS Budget + Reporting Details	Gavi	Jan-22
683	Part A: Applicant Form	Gavi	13/02/22
684	MINUTES OF THE INTER AGENCY COORDINATING COMMITTEE (ICC) MEETING HELD ON 20th JANUARY 2022	Gavi	20/01/22
685	NATIONAL COVID-19 VACCINE DEPLOYMENT STRATEGY	Gavi	24/01/22
686	CVIC Tool	Gavi	06/10/2021

687	Zambia COVID-19 Intra-Action Review (IAR)	Gavi	13/10/21
688	Action Points from Humanitarian Buffer Procurement Working Group - 16 Feb	Gavi	18/02/2022
689	RE: Wastage of vaccines	Gavi	No date
690	RE: (in English) Precedent letter to Minister of health re vaccine wastage	Gavi	04/05/2022
691	RE: (in French) Precedent letter to Minister of health re vaccine wastage	Gavi	29/04/2022
692	RE: (in Russian) Precedent letter to Minister of health re vaccine wastage	Gavi	21/04/2022
693	RE: (in Spanish) Precedent letter to Minister of health re vaccine wastage	Gavi	21/04/2022
694	NVX-CoV2373 COVID-19 vaccine (Nuvaxovid/Covovax) - Frequently Asked Questions	Gavi	01/03/2022
695	Vaccin anti-COVID-19 NVX-CoV2373 (Nuvaxovid/Covovax) Questions fréquemment posées (French RE: NVX-CoV2373 COVID-19 vaccine (Nuvaxovid/Covovax) - Frequently Asked Questions)	Gavi	01/03/2022
696	Вакцина против COVID-19 NVX-CoV2373 (Nuvaxovid/Covovax) Часто задаваемые вопросы (Russian RE: NVX-CoV2373 COVID-19 vaccine (Nuvaxovid/Covovax) - Frequently Asked Questions))	Gavi	01/03/2022
697	Vacuna NVX-CoV2373 contra la COVID-19 (Nuvaxovid/Covovax) Preguntas frecuentes (Spanish RE: NVX-CoV2373 COVID-19 vaccine (Nuvaxovid/Covovax) - Frequently Asked Questions))	Gavi	01/03/2022
698	Moderna Booster Dose Calculator	Gavi	N/A
699	Moderna Booster Language for SCMs External Use	Gavi	N/A
700	Minutes - Gavi Alliance Audit and Finance Committee Meeting	Gavi	13/07/21
701	Minutes - Gavi Alliance Audit and Finance Committee Meeting	Gavi	13/09/21
702	Minutes - Gavi Alliance Audit and Finance Committee Meeting	Gavi	13/10/21
703	Minutes - Gavi Alliance Audit and Finance Committee Meeting	Gavi	20/01/21
704	Grant Agreement between the GAVI Alliance and the United Nations Children's Fund concerning the GAVI Alliance 2020-2021 Covid-19 Vaccine Introduction: Preparation and Readiness Activities	Gavi	Dec-20
705	Grant Agreement between the GAVI Alliance and the United Nations Children's Fund concerning GAVI 2020 Support for Covid-19 Vaccine Preparation and Readiness	Gavi	22/10/21
706	AFRICA CDC WORKING GROUP TOPLINE FINDINGS REPORT	Gavi	16/02/22
707	AFRICA CDC WORKING GROUP NIGERIA REPORT	Gavi	03/09/2022
708	AFRICA CDC WORKING GROUP SENEGAL REPORT	Gavi	03/09/2022

709	COVID-19 Vaccine Perceptions: A 15-country study	Gavi	Feb-21
710	CDS NBW Update	Gavi	01/02/2022
711	CDS update – Needs Based Funding window	Gavi	02/09/2022
712	CDS update – Needs Based Funding window	Gavi	16/02/2022
713	CDS update – Needs Based Funding window	Gavi	23/02/2022
714	CDS update – Needs Based Funding window	Gavi	26/04/2022
715	CDS update – Needs Based Funding window	Gavi	20/04/2022
716	CDS update – Needs Based Funding window	Gavi	29/03/2022
717	CDS NBW Dashboard - 06/04/2022	Gavi	04/06/2022
718	CDS update – Needs Based Funding window	Gavi	23/02/2022
719	CDS update – Needs Based Funding window	Gavi	03/11/2022
720	CDS update – Needs Based Funding window	Gavi	23/02/2022
721	CDS update – Needs Based Funding window	Gavi	29/03/2022
722	CDS update – Needs Based Funding window	Gavi	03/11/2022
723	CDS update – Needs Based Funding window	Gavi	03/11/2022
724	CDS update – Needs Based Funding window	Gavi	03/11/2022
725	CDS update – Needs Based Funding window	Gavi	04/12/2022
726	CDS NBF Status	Gavi	15/03/2022
727	CDS NBF Status	Gavi	22/03/2022
728	CDS NBF Status	Gavi	29/03/2022
729	CDS NBF Status	Gavi	04/06/2022
730	CDS NBF Status	Gavi	04/12/2022
731	CDS NBF Status	Gavi	21/04/2022
732	CDS NBF Status	Gavi	26/04/2022

733	CDS NBW Tracker	Gavi	
734	GAVI CDS NBW REPORT	Gavi	14/01/2022
735	CDS NBW Pipeline	Gavi	14/01/2022
736	CDS NBW Tracker	Gavi	24/01/2022
737	GAVI CDS NBW REPORT	Gavi	24/01/2022
738	CDS NBW Pipeline	Gavi	21/01/2022
739	CDS NBW Tracker	Gavi	
740	GAVI CDS NBW REPORT	Gavi	28/01/2022
741	CDS NBW Pipeline	Gavi	28/01/2022
742	CDS NBW Tracker	Gavi	
743	CDS NBW Tracker	Gavi	
744	CDS NBW Pipeline	Gavi	02/02/2022
745	CDS NBW Tracker	Gavi	
746	CDS NBW Tracker	Gavi	
747	CDS NBF Pipeline	Gavi	02/11/2022
748	CDS NBW Tracker	Gavi	
749	CDS NBF Pipeline	Gavi	17/02/22
750	CDS NBF Pipeline	Gavi	
751	CDS NBW Tracker	Gavi	
752	CDS NBF Pipeline	Gavi	03/01/2022
753	CDS NBF Pipeline	Gavi	03/01/2022
754	CDS NBF Pipeline	Gavi	03/01/2022
755	CDS NBF Pipeline	Gavi	03/01/2022
756	CDS NBF Pipeline	Gavi	03/01/2022

757	CDS NBF Pipeline	Gavi	03/08/2022
758	CDS NBF Pipeline	Gavi	03/08/2022
759	CDS NBF Pipeline	Gavi	03/08/2022
760	CDS NBF Pipeline	Gavi	03/08/2022
761	CDS NBF Pipeline	Gavi	03/08/2022
762	CDS NBF Pipeline	Gavi	03/08/2022
763	CDS NBW Tracker	Gavi	
764	CDS NBF Pipeline	Gavi	03/08/2022
765	CDS NBF Pipeline	Gavi	03/08/2022
766	CDS NBW Tracker	Gavi	15/03/2022
767	CDS NBF Pipeline	Gavi	15/03/2022
768	Analysis	Gavi	no date
769	CDS NBF Pipeline	Gavi	15/03/2022
770	CDS NBF Pipeline	Gavi	15/03/2022
771	CDS NBF Pipeline	Gavi	15/03/2022
772	CDS NBF Pipeline	Gavi	15/03/2022
773	CDS NBF Pipeline	Gavi	15/03/2022
774	no title. File title: 03. CDS TA Plan 2021-22 - Burkina Faso	Gavi	
775	CDS Technical Assistance Plan	Gavi	2021-22
776	CVIC tool	Gavi	05/10/2021
777	Gavi CDS Budget + Reporting Template	Gavi	11/08/2021
778	APPLICATION FORM FOR NEEDS-BASED COVID19 VACCINE DELIVERY (CDS) SUPPORT	Gavi	11/08/2021
779	REPORT OF COVID-19 INTRA-ACTION REVIEW (IAR) IN GHANA	Gavi	21/07/2021
780	COVID-19 Vaccine Deployment and Vaccination Plan	Gavi	11/08/2021

781	MINUTES OF NATIONAL TECHNICAL COORDINATION COMMITTEE MEETING	Gavi	11/03/2021
782	NATIONAL COVID-19 VACCINE DEPLOYMENT PLAN, 2021	Gavi	Aug-21
783	ANNEX 1: GENERAL ALLOCATION FOR MAY-SEPTEMBER 2022 BY MONTH FOR - by country	Gavi	N/A
784	ANNEX 2: NOTIFICATION TO COVAX OF ALLOCATION DECISION (For Reference Only) (Available in English, French, Spanish, Russian)	Gavi	N/A
785	ANNEX 2: NOTIFICATION TO COVAX OF ALLOCATION DECISION (For Reference Only)	Gavi	N/A
786	Form of Dose Sharing Indemnity	Gavi	N/A
787	COVAX Indemnification Agreement - ASTRAZENECA AB	Gavi	N/A
788	COVAX Indemnification Agreement - SERUM LIFE SCIENCES LTD.	Gavi	N/A
789	CDS NBW Tracker	Gavi	21/03/2022
790	CDS NBF Pipeline	Gavi	21/03/2022
791	CDS NBF Pipeline	Gavi	21/03/2022
792	CDS NBF Pipeline	Gavi	21/03/2022
793	CDS NBF Pipeline	Gavi	21/03/2022
794	CDS NBF Pipeline	Gavi	21/03/2022
795	CDS NBF Pipeline	Gavi	21/03/2022
796	CDS NBW Tracker	Gavi	28/03/2022
797	CDS NBF Pipeline	Gavi	28/03/2022
798	CDS NBF Pipeline	Gavi	28/03/2022
799	CDS NBF Pipeline	Gavi	28/03/2022
800	CDS NBF Pipeline	Gavi	28/03/2022
801	CDS NBF Pipeline	Gavi	28/03/2022
802	CDS NBF Pipeline	Gavi	28/03/2022
803	CDS NBW Tracker	Gavi	04/04/2022

804	CDS NBF Pipeline	Gavi	04/04/2022
805	CDS NBF Pipeline	Gavi	04/04/2022
806	CDS NBF Pipeline	Gavi	04/04/2022
807	CDS NBF Pipeline	Gavi	04/04/2022
808	CDS NBF Pipeline	Gavi	04/04/2022
809	CDS NBF Pipeline	Gavi	04/04/2022
810	CDS NBW Tracker	Gavi	04/11/2022
811	CDS NBF Pipeline	Gavi	04/11/2022
812	CDS NBF Pipeline	Gavi	04/11/2022
813	CDS NBF Pipeline	Gavi	04/11/2022
814	CDS NBF Pipeline	Gavi	04/11/2022
815	CDS NBF Pipeline	Gavi	04/11/2022
816	CDS NBF Pipeline	Gavi	04/11/2022
817	ANNEX 1: GENERAL ALLOCATION FOR MAY-SEPTEMBER 2022 BY MONTH FOR Participant:	Gavi	N/A
818	[Country Name] and SERUM LIFE SCIENCES LTD. COVAX INDEMNIFICATION AGREEMENT	Gavi	N/A
819	CDS NBW Tracker	Gavi	21/04/2022
820	CDS NBF Pipeline	Gavi	21/04/2022
821	CDS NBF Pipeline	Gavi	21/04/2022
822	CDS NBF Pipeline	Gavi	21/04/2022
823	CDS NBF Pipeline	Gavi	21/04/2022
824	CDS NBF Pipeline	Gavi	21/04/2022
825	CDS NBF Pipeline	Gavi	21/04/2022

826	CDS NBW Tracker	Gavi	25/04/2022
827	CDS NBF Pipeline	Gavi	25/04/2022
828	CDS NBF Pipeline	Gavi	25/04/2022
829	CDS NBF Pipeline	Gavi	25/04/2022
830	CDS NBF Pipeline	Gavi	25/04/2022
831	CDS NBF Pipeline	Gavi	25/04/2022
832	CDS NBF Pipeline	Gavi	25/04/2022
833	CDS NBW Tracker	Gavi	no date
834	THE COVAX PARTICIPANT LISTED ON THE FOLLOWING PAGE-and-JANSSEN PHARMACEUTICA NV / AMC92 SUPPLEMENTALAGREEMENT	Gavi	N/A
835	THE COVAX PARTICIPANT LISTED ON THE FOLLOWING PAGE-and-JANSSEN PHARMACEUTICA NV / SFC SUPPLEMENTAL AGREEMENT	Gavi	N/A
836	COVAX Indemnification Agreement & Side Letter Template - Moderna Switzerland GmbH	Gavi	2021
837	COVAX Indemnification Agreement & Side Letter Template - MODERNA, INC.	Gavi	N/A
838	Moderna Product Handling Instructions	Gavi	N/A
839	Moderna Side Letter Template 2022	Gavi	N/A
840	(2021 versions) COVAX INDEMNIFICATION AGREEMENT & COVAX INDEMNIFICATION AGREEMENT FOR AGENCY-PROCURING COUNTRIES & COUNTRY SIDE LETTER -COVAX SUPPLY OF PFIZER VACCINE	Gavi	N/A
841	(Amendments) Amendment To COVAX Indemnification Agreement & Amendment To Country Side Letter	Gavi	N/A
842	(Archive) COVAX Indemnification Agreement & COVAX Indemnification Agreement for Agency-Procuring Countries & Country Side Letter - COVAX Supply Of Pfizer Vaccine	Gavi	N/A
843	(2022) COVAX Indemnification Agreement & Country Side Letter - COVAX Supply of Pfizer Vaccine	Gavi	N/A
844	Form of Dose Sharing Indemnity (Pfizer)	Gavi	N/A

845	(Previous version Sinopharm) COVAX Indemnification Agreement	Gavi	N/A
846	COVAX Indemnification Agreement	Gavi	N/A
847	COVAX Indemnification Agreement (Self Financing Partner)	Gavi	N/A
848	Comms to country on I & L process with SII (available in English, French, Spanish, Russian)	Gavi	N/A
849	Email template - SII IL Agreement (also available in French)	Gavi	N/A
850	Covax Model Indemnification Agreement (available in In Spanish, French & Russian)	Gavi	N/A
851	COVAX Collaboration Platform (CCP)ACCESSING & NAVIGATING THE CCP - (available in French, Spanish and Russian)	Gavi	N/A
852	Preparedness Steps for AMC Participants allocated Pfizer BioNTech vaccine for the first time	Gavi	N/A
853	N/A	Gavi	N/A
854	Template to specify ship-to location (also available in French, Spanish and Russian)	Gavi	N/A
855	Template to notify COVAX of 0.3ml syringe shipment timeline preferences (also available in French, Spanish and Russian)	Gavi	N/A
856	ANNEX Pfizer: USG Donations Bangladesh	Gavi	N/A
857	ANNEX Pfizer: USG Donations Cambodia	Gavi	N/A
858	ANNEX Pfizer: USG Donations Dominica	Gavi	N/A
859	ANNEX Pfizer: USG Donations Lao People's Democratic Republic	Gavi	N/A
860	ANNEX Pfizer: USG Donations Nepal	Gavi	N/A
861	ANNEX Pfizer: USG Donations Solomon Islands	Gavi	N/A
862	ANNEX Pfizer: USG Donations Tonga	Gavi	N/A

863	ANNEX Pfizer: USG Donations Uganda	Gavi	N/A
864	ANNEX Pfizer: USG Donations Tajikistan	Gavi	N/A
865	TERMS & CONDITIONS OF THE COVAX AMC FACILITY 2022 (also available in French, Spanish and Russian)	Gavi	N/A
866	TERMS & CONDITIONS OF THE COVAX AMC FACILITY 2022 (also available in French, Spanish and Russian)	Gavi	N/A
867	NVX-CoV2373 COVID-19 vaccine (Nuvaxovid/Covovax)Frequently Asked Questions March 2022(also available in French, Spanish and Russian)	Gavi	Mar-22
868	Form of Dose Sharing Indemnity	Gavi	N/A
869	Form of Dose Sharing Indemnity	Gavi	N/A
870	Form of Dose Sharing Indemnity	Gavi	N/A
871	ANNEX Pfizer: USG Donations	Gavi	N/A
872	Template to specify ship-to location	Gavi	N/A
873	Template to notify COVAX of 0.3ml syringe shipment timeline preferences	Gavi	N/A
874	Preparedness Steps for AMC Participants allocated Pfizer BioNTech vaccine for the first time	Gavi	N/A
875	N/A	Gavi	N/A
876	N/A	Gavi	N/A
877	(Email) [INVITATION/ INVITACIÓN/ ПРИГЛАШЕНИЕ] [DATE] Monthly Supply and Delivery Briefing and Q&A for Participants	Gavi	N/A
878	Aurelia Remarks – COVAX Participant Q&A 10 Feb 2021	Gavi	11/02/2021
879	AstraZeneca Webinar	Gavi	N/A
880	AZ Efficacy Webinar Q&A	Gavi	10-Feb
881	N/A - email precedent re AZ Efficacy Webinar	Gavi	N/A
882	N/A - spreadsheet of Job title, representing economy and date completed	Gavi	N/A
883	COVAX Facility Participant Q&A:Recent AstraZeneca Results	Gavi	10/02/2021

884	COVAX Facility Participant Q&A: Recent AstraZeneca Res	Gavi	11/02/2021
885	COVAX Facility Participant Q&A: Recent AstraZeneca Results	Gavi	12/02/2021
886	N/A - email Subject: [COVAX Facility] AstraZeneca Efficacy Webinar	Gavi	N/A
887	SFP briefing and Q&A	Gavi	31/03/2021
888	Monthly COVAX Briefing and Q&A will start at 12:30pm CET Monthly COVAX Briefing and Q&A for Gavi/WHO/PAHO/UNICEF staff	Gavi	25/01/2022
889	J&J NFC Briefing – Morning session	Gavi	N/A
890	Frequently asked questions from 1st April 2021 COVAX Participant briefings (also available in French, Spanish and Russian)	Gavi	12/04/2021
891	Checklist for preparing letters for Participants	Gavi	05/04/2021
892	Participant briefing on delivery updates	Gavi	01/04/2021
893	Participant briefing on delivery updates	Gavi	01/04/2021
894	Spreadsheet - name, user email, total duration	Gavi	N/A
895	Subject: [COVAX Facility] Briefing and Q&A on AZ and AZ/SII delivery updates	Gavi	N/A
896	Participant Briefing – Afternoon session Delivery updates and vaccine diversion, 01 April 2021	Gavi	01/04/2021
897	Participant Briefing – Morning session Delivery updates and early use of vaccines, 01 April 2021	Gavi	02/04/2021
898	Email chain: Subject: RE: Prep for Participant Briefings (Apr 1)	Gavi	31/03/2021
899	Participant briefing on safety of AZ COVID-19 vaccine	Gavi	23/04/2021
900	N/A - Invite to participants briefing	Gavi	N/A
901	FAQ for COVAX Participants on Vaccine Safety and Scientific Reviews of AstraZeneca COVID-19 Vaccine (Available in French, Spanish and Russian)	Gavi	06/05/2021
902	Participant Briefing – Afternoon session Vaccine safety, 23 April 2021	Gavi	23/04/2021

903	Participant Briefing – Morning session Vaccine safety, 23 April 2021	Gavi	23/04/2021
904	Invitations for Partners/Staff Comms liaisons; dose sharing; JAT (Mariabruna; Anais; Andrew Freeman; Anthony Nguyen)	Gavi	01/05/2021
905	FAQ for COVAX Participant Briefing and Q&A - 28 & 31 May 2021 (also available in French, Spanish and Russian)	Gavi	09/06/2021
906	Participant Update and Q&A	Gavi	28/05 & 31/05/2021
907	FAQ for COVAX Participant Briefing and Q&A - 28 & 31 May 2021	Gavi	08/06/2021
908	Participant Update and Q&A	Gavi	28/05 & 31/05/2021
909	Monthly Participant Briefing – Monday Afternoon session – 1.5 hours & Briefing notes	Gavi	31/052021
910	Working Agenda - Gavi/WHO/PAHO/UNICEF country-facing staff RE: term allocations, donations, prepardness steps, redristribution/redeployment policy	Gavi	24-Jun
911	Country-facing staff briefing and Q&A will start at 12:30pm CET	Gavi	24-Jun
912	Monthly Participant Briefing – Thursday Afternoon session – 1 hour	Gavi	08-Jul
913	Monthly Update and Q&A for COVAX Participants July 8th 9:30 am	Gavi	08/07/2021
914	WHO/UNICEF/Gavi country-facing staff briefing and Q&A	Gavi	29/07/2021
915	Submitted Q&A for August Monthly COVAX Participants Briefing (Also available in French, Spanish and Russian)	Gavi	10/08/2021
916	Participant Update and Q&A (also available in French, Spanish & Russian)	Gavi	10/08/2021
917	Topic & Presenter/Panellist list	Gavi	
918	WHO/UNICEF/Gavi country-facing staff briefing and Q&A	Gavi	
919	Session 1: MORNING 9-10:30am	Gavi	
920	Allocation Round 15 Letter	Gavi	04/01/2022
921	Monthly Participant Briefing – Friday Morning session – 1.5 hours 28 May 2021 – 10am to 11:30am CET	Gavi	28/05/2021
922	Less than a Lifeline: Challenges to the COVAX Humanitarian Buffer	Gavi	Sep-21

923	COVID-19 Vaccine Development and Rollout in Historical Perspective	Center for Global Development	01/02/2022
924	COVAX Allocation Round 14Vaccine Allocation Decision Proposal	COVAX	27/01/2022
925	The Gavi COVAX AMC Investment Opportunity	COVAX	01/01/2022
926	Dose donations pledge table	COVAX	23/03/2022
927	APPLICATION FORM FOR NEEDS-BASED COVID-19 VACCINE DELIVERY (CDS) SUPPORT	COVAX	
928	COVAX DATA BRIEF	COVAX	25/04/2022
929	LIST OF COUNTRIES IDENTIFIED FOR CONCERTED SUPPORT BY THE COVID-19 DELIVERY PARTNERSHIP	COVAX	
930	Situation Report #13	COVAX	14/12/2021
931	STRATEGY, PROGRAMMES AND PARTNERSHIPS: PROGRESS, RISKS AND CHALLENGES	Gavi	30/11/2021
932	FINANCIAL FORECAST	Gavi	30/07/2020
933	FINANCIALUPDATE, INCLUDING FORECAST-REVISED	Gavi	30/11/2021
934	COVAX: RESOURCE MOBILISATION UPDATE	Gavi	30/11/2021
935	Key Outcomes One World Protected - COVAX AMC SummitAssured resources for the Gavi COVAX AMC	Gavi	02/03/2022
936	ANNEX B A&I 2022 Approved Plan	Gavi	16/11/2021
937	Routine Immunisation & Covid-19 Vaccine Delivery Dashboard	Gavi	01/01/2022
938	Updated COVID-19 Delivery Support (CDS) Needs BasedFunding Window Programme Funding Guidelines	Gavi	01/03/2022
939	COVID-19 Impact & COVAX Delivery Tracking Parameters	Gavi	18/06/2021
940	Report from Audit and Investigations (Report to the Board 30th Nov - 2nd Dec 2021)	Gavi	02/12/2021
941	Annex B - Risk Analysis	Gavi	
942	Report of the Chief Executive Office (Report to the Board 30th Nov - 2nd Dec 2021)	Gavi	02/12/2021
943	Strategy, Programmes and Partnerships: Progress, Risks and Challenges (Report to the Board 30th Nov - 2nd Dec 2021)	Gavi	02/12/2021
944	Annex A - COVAX Reporting Framework	Gavi	2021
945	Annex B - Update on the Humanitarian Buffer	Gavi	2021

946	COVAX Key Strategic Issues	Gavi	02/12/2021
947	The Vaccine Alliance - Risk & Assurance Report (2021)	Gavi	2021
948	Risk Management Update	Gavi	02/12/2021
949	Governance Committee Chair Report	Gavi	02/12/2021
950	Programme and Policy Committee Chair Report	Gavi	02/12/2021
951	The Gavi COVAX AMC Investment Opportunity Launch Event	Gavi/USAID	15/04/2021
952	IFFIM CHAIR REPORT	IFFIm	30/11/2021
953	First National Hackathon for COVID-19 vaccination in Ivory Coast	The Geneva Learning Foundation	20/01/2022
954	CDS CCE Support	Gavi	
955	Summary of Findings of COVAX R&D and Manufacturing Investment Review	Gavi	
956	Gavi Digital Health Information StrategyCountry Segmentation Briefing Document	Gavi	01/01/2022
957	Notes from Helen- KII with Dave Cagan - regarding CDS	Gavi	30/06/2022
958	Allotment of programme funding	Gavi	24/02/2022
959	no title. File title: Malawi Enhanced NDVP budget_Final 23 June 2021	Gavi	23/06/2021
960	RE: Delivery Leadership Team Meeting	Gavi	15/11/2021
961	APPLICATION FORM FOR NEEDS-BASED COVID- 19 VACCINE DELIVERY (CDS) SUPPORT	Gavi	31/03/2022
962	MINUTES OF THE EPI SUBTWG MEETING HELD ON 24th March, 2022	Gavi	24/03/2022
963	Allotment of programme funding	Gavi	
964	no title. File title: 20220331Malawi CDC EAWLONGTERM Gavi-covax-cds-budget	Gavi	31/03/2022
965	no title. File title: MOZ AR CDS NBF FINAL	Gavi	
966	Allotment of programme funding	Gavi	
967	Action Points from Humanitarian Buffer Procurement Working Group - 23 Feb	Gavi	23/02/2022
968	Action Points from Humanitarian Buffer Procurement Working Group - 26 Jan	Gavi	27/01/2022

969	no title. File title: Email content on weekly procurement meetings	Gavi	No date
970	RE: Action Points from Humanitarian Buffer Procurement Work Group – 20 April	Gavi	21/04/2022
971	RE: Action Points from Humanitarian Buffer Procurement Working Group - 12 Jan	Gavi	25/01/2022
972	COVID-19 Vaccine Country Readiness & Delivery: Review of risks and red flags v1	Gavi	14/04/2021
973	COVID-19 Vaccine Country Readiness & Delivery: Review of risks and red flags	Gavi	20/04/2021
974	Covid-19 Vaccine Readiness & Delivery: Operational and implementation monitoring	WHO, Gavi, UNICEF	26/04/2021
975	Covid-19 Vaccine Readiness & Delivery: Operational and implementation monitoring weekly report summary notes and action items	WHO, Gavi, UNICEF	30/04/2021
976	Covid-19 Vaccine Readiness & Delivery: Operational and implementation monitoring	WHO, Gavi, UNICEF	05/05/2021
977	COVID-19 Vaccine Country Readiness & Delivery: Operational and implementation monitoring weekly report	WHO, Gavi, UNICEF	07/05/2021
978	Covid-19 Vaccine Country Readiness & Delivery: Operational and implementation monitoring	WHO, Gavi, UNICEF	21/05/2021
979	Covid-19 Vaccine Country Readiness & Delivery: Operational and implementation monitoring weekly Summary report	WHO, Gavi, UNICEF	28/05/2021
980	COVID-19 Vaccine Country Readiness & Delivery: Operational and implementation monitoring weekly review	WHO, Gavi, UNICEF	04/06/2021
981	COVID-19 Vaccine Country Readiness & Delivery: Operational and implementation monitoring weekly review	WHO, Gavi, UNICEF	11/06/2021
982	Countries at risk for expiry in AFRO (1/3)	WHO, Gavi, UNICEF	14/06/2021
983	COVID-19 Vaccine Country Readiness & Delivery: Operational and implementation monitoring weekly review	WHO, Gavi, UNICEF	18/06/2021
984	COVID-19 Vaccine Country Readiness & Delivery: Operational and implementation monitoring weekly review	WHO, Gavi, UNICEF	25/06/2021
985	COVID-19 Vaccine Country Readiness & Delivery: Operational and implementation monitoring weekly review	WHO, Gavi, UNICEF	06/08/2021
986	COVID-19 Vaccine Country Readiness & Delivery: Operational and implementation monitoring weekly review	WHO, Gavi, UNICEF	03/08/2021
987	COVID-19 Vaccine Country Readiness & Delivery: Operational and implementation monitoring weekly review	WHO, Gavi, UNICEF	17/08/2021
988	COVID-19 Vaccine Country Readiness & Delivery: Operational and implementation monitoring weekly review	WHO, Gavi, UNICEF	24/08/2021
989	COVID-19 Vaccine Country Readiness & Delivery: Operational and implementation monitoring weekly report	WHO, Gavi, UNICEF	07/05/2021
990	COVID-19 Vaccine Country Readiness & Delivery: Operational and implementation monitoring weekly review	WHO, Gavi, UNICEF	13/08/2021
991	COVID-19 Vaccine Country Readiness & Delivery: Operational and implementation monitoring weekly review	WHO, Gavi, UNICEF	20/08/2021
992	Terms and Conditions of Participation in the Gavi COVAX AMC	Gavi	

993	COVAX doses delivered	Gavi	04/11/2022
994	Humanitarian Buffer PLT update	COVAX	06/10/2022
995	Cumulative COVAX AMC pledges, cash and signed donor agreements	Gavi	Oct-21
996	Humanitarian Buffer Top 10 Learnings	Gavi	Nov-22
997	Gavi Talks: Key COVAX Learnings for Future Pandemic Preparedness and Response	COVAX	03/11/2022
998	Evaluation of Gavi's Initial Response to COVID-19: Final Report Volume I (main report)	Euro Health Group	25/10/2022
999	SFP Report - Update	COVAX	20/10/2022
1000	CDS high level summary 28th July 2022	Gavi	28/07/2022
1001	COVAX coverage methodology overview_2022-04-11	COVAX	11/04/2022
1002	Gavi 5.1 C19 vaccine programme and life-course approach	Gavi	10/06/2022

Annex G: Stakeholders interviewed

Annex G.1: Global stakeholders

No.	Name	Organization	Position	Stakeholder category
1	Paula Pohja-Hutchison	AstraZeneca	Global Policy Director Covid-19 Vaccines	Vaccine industry
2	Mitchell Warren	AIDS Vaccine Advocacy Coalition (AVAC)	Executive Director	Civil society
3	Orin Levine	Bill & Melinda Gates Foundation (BMGF)	Director, Global Delivery Programs at Bill & Melinda Gates Foundation	Global health influential actors
4	Mahima Datla	Biological E. Limited	Senior Vice President	Vaccine industry
5	Prashant Yadav	Center for Global Development (CGD)	Senior Fellow	Research and technical health institutes
6	Richard Hatchett	Coalition for Epidemic Preparedness Innovations (CEPI)	CEO	Partners and coordinating agencies
7	Lisa Hilmi	CORE Group	CEO	Civil society
8	Clemens Auer	European Healthforum Gastein	(Former) President	Global health influential actors
9	Saul Walker	Foreign, Commonwealth & Development Office (FCDO), UK Government	Deputy Director, Covid-19 Vaccines, Therapeutics and Diagnostics Strategy	SFP Representatives
10	Olga Golichenko	Frontline AIDS	Global Advocacy Lead: Health and Community Systems	Civil society
11	Afsheen Ahmad	Gavi, the Vaccine Alliance	Human resources, COVAX Focal Point	Office of the COVAX Facility and AMC
12	Alex Beecher	Gavi, the Vaccine Alliance	Executive Officer to the Managing Director of the COVAX Facility	Office of the COVAX Facility and AMC

13	Alex de Jonquieres	Gavi, the Vaccine Alliance	Director of Health System Strengthening	Office of the COVAX Facility and AMC
14	Anna Osborne	Gavi, the Vaccine Alliance	Head Product Management	Office of the COVAX Facility and AMC
15	Anne Cronin	Gavi, the Vaccine Alliance	Head of the Partners' Engagement Framework	Office of the COVAX Facility and AMC
16	Anthony Nguyen	Gavi, the Vaccine Alliance		Office of the COVAX Facility and AMC
17	Brenda Killen	Gavi, the Vaccine Alliance	Director, Governance	Office of the COVAX Facility and AMC
18	Daniel Thornton	Gavi, the Vaccine Alliance	COVAX Resource Mobilisation	Office of the COVAX Facility and AMC
19	Dominic Hein	Gavi, the Vaccine Alliance	Head, Market Shaping	Office of the COVAX Facility and AMC
20	Hannah Burris	Gavi, the Vaccine Alliance	Chief of Staff	Office of the COVAX Facility and AMC
21	Henry Lu	Gavi, the Vaccine Alliance	Senior Manager, Strategy	Office of the COVAX Facility and AMC
22	Ian McTavish	Gavi, the Vaccine Alliance	Director, Finance and Chief Accounting Officer	Office of the COVAX Facility and AMC
23	Jacob van de Blij	Gavi, the Vaccine Alliance	Head of Risk	Office of the COVAX Facility and AMC
24	Joanne Goetz	Gavi, the Vaccine Alliance	Head of Governance	Office of the COVAX Facility and AMC
25	Johannes Ahrendts	Gavi, the Vaccine Alliance	Director of Strategy, Funding and Performance	Office of the COVAX Facility and AMC
26	Keightley Reynolds	Gavi, the Vaccine Alliance	Senior Operations Officer, COVAX	Office of the COVAX Facility and AMC

27	Laura Craw	Gavi, the Vaccine Alliance	Senior Programme Manager, Monitoring	Office of the COVAX Facility and AMC
28	Mike Brison	Gavi, the Vaccine Alliance	Product Manager, Pfizer Program	Office of the COVAX Facility and AMC
29	Olly Cann	Gavi, the Vaccine Alliance	Communications Director	Office of the COVAX Facility and AMC
30	Santiago Cornejo	Gavi, the Vaccine Alliance	Director, Country Engagement	Office of the COVAX Facility and AMC
31	Shahrzad Yavari	Gavi, the Vaccine Alliance	Cold and Supply Chain Consultant	Office of the COVAX Facility and AMC
32	Simbarashe Mabaya	Gavi, the Vaccine Alliance	Senior Technical Advisor, Primary Healthcare	Office of the COVAX Facility and AMC
33	Simon Allan	Gavi, the Vaccine Alliance	Vaccine portfolio manager	Office of the COVAX Facility and AMC
34	Simon Duffield	Gavi, the Vaccine Alliance	Legal Director, COVAX	Office of the COVAX Facility and AMC
35	Stephanie Ulfig	Gavi, the Vaccine Alliance	Supply Chain Senior Manager	Office of the COVAX Facility and AMC
36	Thiago Luchesi	Gavi, the Vaccine Alliance	Senior Manager, Public Policy Engagement	Office of the COVAX Facility and AMC
37	Tiziana Scarna	Gavi, the Vaccine Alliance	Regulatory and Manufacturer Engagement	Office of the COVAX Facility and AMC
38	Will Cole	Gavi, the Vaccine Alliance	Senior Manager, US Strategy (Lead on COVAX coordination)	Office of the COVAX Facility and AMC
39	Levke Kooistra	Gavi, the Vaccine Alliance		
40	Sanne Wendes	Gavi , the Vaccine Alliance	Lead Design and Operationalisation	Office of the COVAX Facility and AMC

41	Wilson Mok	Gavi, the Vaccine Alliance	Head of Policy (Former)	Office of the COVAX Facility and AMC
42	Andrew Freeman	Gavi, the Vaccine Alliance	Co-Lead, Joint Allocation Taskforce (Former)	Governance and oversight bodies (COVAX Facility/AMC)
43	Meegan Lopez	Gavi, the Vaccine Alliance	COVAX Governance Lead	Governance and oversight bodies (COVAX Facility/AMC)
44	Aurelia Nguyen	Gavi, the Vaccine Alliance	Managing Director	Office of the COVAX Facility and AMC
45	Derrick Sim	Gavi, the Vaccine Alliance	Director of Vaccines Demand & Supply and COVAX	Office of the COVAX Facility and AMC
46	Marie-Ange Saraka-Yao	Gavi, the Vaccine Alliance	Managing Director, Resource Mobilisation and Private Sector Partnerships	Office of the COVAX Facility and AMC
47	Thabani Maphosa	Gavi, the Vaccine Alliance	Managing Director, Country Programmes	Office of the COVAX Facility and AMC
48	Seth Berkley	Gavi, the Vaccine Alliance	Chief Executive Officer and Board Member	PPC and Gavi Board
49	José Manuel Barroso	Gavi Board	Chair	PPC and Gavi Board
50	Suerie Moon	Graduate Institute of International and Development Studies, Geneva	Co-Director, Global Health Centre	Research and technical health institutes
51	Roger Connor	GlaxoSmithKline (GSK)	Vaccine industry - Industrialised Gavi Board Member President of Vaccines and Global Health	PPC and Gavi Board
52	Brook Baker	HealthGAP	Senior policy analyst	Civil society
53	Mohga Kamal	Independent Consultant	Consultant, Global Health Policy and Programmes and Access to Medicines	Civil society

54	Helen Rees	Independent member	Board member Programme and Policy Committee Chair	PPC and Gavi Board
55	Thomas Cueni	International Federation of Pharmaceutical Manufacturers & Associations (IFPMA)	Director General	Vaccine industry
56	Satoshi Ezoe	Japan Ministry of Foreign Affairs	Director, Global Health Policy	SFP representatives
57	Kate Elder	Médecins Sans Frontières (MSF)	Senior Vaccines Policy Advisor at Médecins Sans Frontières (MSF) Access Campaign	Civil society
58	Grata Endah Werdiningtyas	Minister for Foreign Affairs, Indonesia	Co-Chair, AMC Engagement Group	AMC representatives
59	Adolphus Clarke	Ministry of Health Liberia	Program Manager, Expanded Programme on Immunization Member of COVID-19 Response, Incidence and Management System	AMC representatives
60	Liya Wondwossen	Ministry of Health, Ethiopia	Advisor to Minister Lia Tadesse on COVAX-related matters	AMC representatives
61	Gayle E. Smith	ONE Campaign	CEO	Civil society
62	Jillian O'Neil	Pfizer	Senior Director, mRNA Global Portfolio Planning and Partnerships Lead	Vaccine industry
63	Karrar Karrar	Save the Children	ACT-A CSO representative on the COVAX pillar	Governance and oversight bodies (COVAX Facility/AMC)
64	Parag Deshmukh	Serum Institute of India (SII)	Additional Director, Global Strategic International Business Development	Vaccine industry
65	Sharmina Sultana	UNICEF Mozambique	Maternal and Child Health Specialist	AMC representatives
66	Andrew Jones	UNICEF	Principal Advisor & Chief, Vaccine Centre at UNICEF Supply Division	Partners and coordinating agencies

67	Gian Gandhi	UNICEF	Covid-19 Tools (Vaccines, Diagnostics, Therapeutics) strategy and coordination, and health emergency preparedness	Partners and coordinating agencies
68	Carmen Tull	USAID	Deputy Director, Office of Maternal and Child Health and Nutrition	SFP representatives
69	Mariangela Simao	WHO	Assistant Director General Access to Medicines, Vaccines and Pharmaceuticals	Governance and oversight bodies (COVAX Facility/AMC)
70	Ann Lindstrand	WHO	Unit Head, Essential Program of Immunization	Partners and coordinating agencies
71	Claudia Nannei	WHO	Senior Technical Officer	Partners and coordinating agencies
72	Erika Dueñas Loayza	WHO	Head of Intellectual Property Unit, Access to Medicines	Partners and coordinating agencies
73	Kate O'Brien	WHO	Director of the Department of Immunization, Vaccines and Biologicals	PPC and Gavi Board
74	Edinam Agbenue	WHO Burkina Faso	Vaccines safety/quality officer	AMC representatives
75	Mamata Murthi	World Bank	Vice President for Human Development	Partners and coordinating agencies
76	Michael Kent Ranson	World Bank & Gavi Board Member	Senior Economic (Health)	PPC and Gavi Board

Annex G.2: Country Case Study Stakeholders

All key informants interviewed for the six country case studies requested to remain anonymous. The tables below identify on each line the organization that the key informant belongs to, and the stakeholder category.

Brazil

No.	Organization	Stakeholder Category
77	Fiocruz/Biomanguinhos	Manufacturing Organization
78	Global Health Strategies	Development Partner
79	Fiocruz	Research Institution/Patents and International Properties Researcher
80	AISA / Ministry of Health	Government
81	PAHO	Development Partner
82	Consultant/Worked at Ministry of Health	Researcher/Epidemiologist
83	ABRASCO (Brazilian Public Health Association)	Civil Society Organization
84	Fiocruz	Research Institution/Global Health Researcher
85	Ministry of Foreign Affairs	Government
86	Gavi	Gavi

Colombia

No.	Organization	Stakeholder Category
87	National Academy of Medicine	Academia
88	Fundación IFARMA	NGO
89	Javeriana University- Department of Clinic Epidemiology	Academia
90	Ministerio de Salud y Protección Social- Dirección de Medicamentos (until 2022)	Government
91	Center for Global Development	NGO
92	Ministerio de Salud y Protección Social (until 2022) / Sinovac (2022)	Government
93	Gavi	Gavi

Democratic Republic of Congo (DRC)

No.	Organization	Stakeholder Category
87	Ecole de Santé Publique de Kinshasa, Groupe Technique Consultatif pour la vaccination (GTCV),	Academia
88	PATH	NGO
89	PEV	Government
90	PEV	Government
91	PEV	Government

92	PEV/PATH	Development Partners
93	CHAI	NGO
94	CAGF Ministère de la Santé	Government
95	USAID	Development Partners

India

No.	Organization	Stakeholder Category
96	UNICEF, India	Development Partner
97	Serum Institute of India	Vaccine Delivery
98	National Technical Advisory Group on Immunisation in India (NTAGI)	Government
99	BMGF	Development Partner
100	BMGF	Development Partner
101	NTAGI & WHO	Academia
102	Gavi	Gavi Secretariat
103	Previously WHO	Academia / Civil Society

Senegal

No.	Organization	Stakeholder Category
104	Ministère de la Santé	Government
105	Ministère de la Santé	Government
106	WHO - Senegal	Development Partner
107	UNICEF - Senegal	Development Partner
108	Réseau Islam et Population	CSO
109	Réseau des Organisations Communautaires de base	CSO
110	Université Cheikh Anta Diop de Dakar	Academia
111	Ministère de la Santé	Government

Vietnam

#	Organization	Stakeholder Category
112	Ministry of Health	Government, National COVID-19 coordination committee member
113	National Institute of Hygiene And Epidemiology	Government, National COVID-19 coordination committee member
114	Ministry of Health	Ministry of Health, Vaccine Department & General Department of Preventive Medicine

115	National Institute Of Hygiene And Epidemiology & National EPI	EPI
116	National EPI	EPI
117	Pasteur Institute of Nha Trang	EPI
118	National Institute of Hygiene and Epidemiology of Vietnam	EPI
119	AstraZeneca Vietnam	Manufacturing representatives
120	Research and Training Center for Community Development (RTCCD)	CSO
121	Woolcock Institute Vietnam	CSO
122	Former Ministry of Health	CSO
123	PATH	Development Partners
124	UNICEF	Development Partners
125	WHO	Development Partners
126	Hanoi Medical University	Academia

Annex H: Lessons learned

A significant amount of learning related to the design and implementation of COVAX has been documented internally by Gavi as well as partners and wider stakeholder groups. This section surfaces the 11 lessons that have emerged as **most critical** to reflect on for future pandemic preparedness thinking as well as for course correction, Gavi 5.0 and 5.1.

Design lessons

Lesson A

Establishing an equitable procurement and allocation mechanism – high-level design

Most relevant for:
Future pandemic preparedness

The COVAX experience and other pandemics remind us that HICs will prioritize national interests when securing vaccine supply. Commitment to global solidarity and equity will be secondary concerns.

The evaluation found that there was limited assessment of needs and risks in mid-2020 and some of the assumptions on which the design and programmatic strategies were based turned out to be, in hindsight, flawed.[134] This includes for example, the assumption that HICs would jointly tackle the pandemic in a spirit of global solidarity. We have learned through the COVAX experience (and earlier H1N1) that (1) financial resources are not the only barrier to securing scarce resources, and (2) there are many precedents of countries ignoring international treaties given national interest. The COVID-19 experience suggests that the ability of an initiative such as COVAX to secure vaccines in the context of vaccine nationalism is limited. In future pandemics strongly affecting HICs, such an initiative may have to rely more on other strategies, including e.g. standing commitments to dose sharing. More fundamental proposals to reimagine the geopolitical and market system also assume that international treaties (e.g. the World Trade Organization) are adhered to and that preparedness funding is available to produce and procure public goods.

Related findings: 5

Implementation lessons

Lesson B

Working to increase global supply

Most relevant for:
Future pandemic preparedness

The COVAX experience shows the importance of a multi-pronged approach to ensuring equitable vaccine supply in the next pandemic. Increasing global vaccine supply through technology transfer, securing access for LMICs through conditions attached to push funding, funding to enable early signing of APAs, and examining trade-offs between price and timely access putting in place arrangement for efficient management of donations are all important.

Given the challenges of ensuring equitable access in the context of supply shortage, increasing global vaccine supply capacity to relieve shortage as quickly as possible should be a high priority.The COVAX Facility experience has demonstrated that manufacturing capacity for vaccines is currently too limited to meet global demand in a timely manner, and the supply base is not diverse enough to safeguard against reliance on a relatively small number of manufacturers primarily located in certain countries and regions. Especially given the challenge COVAX faced in competing against HICs for vaccine supply, we have learned that greater and more diversified manufacturing capacity is needed during pandemics. Making use of this capacity will require tech transfer. Outside of COVAX's deal with SII, to help it produce the AstraZeneca vaccine, and some CEPI push funding, COVAX played only a modest role in

facilitating tech transfer. In 2022, however, COVAX has recognized the need to invest more in increasing global manufacturing and to promote sharing of IP and technology transfer in the context of preparing for future pandemics. Pandemic treaties and pandemic funds could support and subsidize research, development and production of vaccines with conditions on data and technology sharing (as under the COVID-19 Technology Access Pool initiative).[135]

Related findings: 36-45

Lesson C

Most relevant for:

Future pandemic preparedness

Influencing HICs and pharmaceutical industry decisions to consider public health and social responsibility alongside national and commercial interests is very challenging. Advocacy combined with transparency and exposure (e.g., publicly sharing vaccine doses sharing commitments or forecast deliveries by suppliers) can be effective in influencing behavior, alongside complementary strategies including political agreements.

The COVAX experience has shown that the vaccine ecosystem is fundamentally inequitable, as it favors countries with resources and means of production. Despite remarkable achievements to develop, produce and distribute billions of vaccines across the world, many countries have lost confidence in the ability of the global health agencies, including the COVAX partners, to counteract the inequitable impact of vaccine nationalism, vaccine hoarding and vaccine diplomacy.[136] Countries have also lost confidence in the ability and willingness of the pharmaceutical companies in the Global North to put global health before shareholder interests. One example from COVAX's resource mobilization experience suggests that transparent public-faced reporting could be one way to influence more socially responsible manufacturing behavior. Setting up public-facing trackers of dose donations is a well-used resource mobilization strategy and appeared to work well to foster a sense of competition among donors, for example. This could be extended to report on vaccine manufacturer compliance to pre-agreed principles related to the predictability, quantity and timing of supply, for instance.

Related findings: 19

Lesson D

Resource mobilization

Most relevant for:

Future pandemic preparedness

A dedicated fundraising vehicle, supported by a strong investment case, a credible host agency and a multi-pronged fundraising approach, can raise substantial amounts of money in a short space of time (almost $10 billion within 12 months in the case of COVAX).

The COVAX AMC established a strong resource mobilization function, drawing on Gavi's pre-existing capacity and building on continuous fundraising efforts and three distinct fundraising rounds. A wide range of stakeholders reflected that the fundraising function worked professionally and effectively to implement a need-based, opportunistic and ambitious fundraising strategy. This was supplemented by engagement of a wide range of stakeholders to advocate for the COVAX AMC and support resource mobilization around key events. Fundraising for the COVAX AMC was also supported by the design of the AMC as a fundraising vehicle that provided something tangible for donors to support, and by the inclusion of SFPs in the COVAX Facility. In particular, a number of stakeholders suggested that the latter created a global model which gained traction and appealed to a broad donor base.

Related findings: 23

Lesson E

Operationalizing a procurement and allocation mechanism – *management*

Most relevant for:
Course correction
Gavi 5.1
Future pandemic preparedness

In uncertain and complex circumstances, it is most helpful for the design to set out broad operating principles rather than fixed rules for operationalization. Clarity on decision-making processes within those broad principles is also important for transparency and efficiency.

While in some instances, the COVAX Facility's intent to operate through broad principles held, in others operational rules and processes put in place contradicted these. In several COVAX instances, operating under broad principles proved helpful to respond to challenges of the time (e.g. I&L and NFCS). However, in other instances, where rules rather than operating principles were adopted, operational agility was compromised. Using the programmatic area of allocation as an example, the COVAX Facility experience demonstrated that while defined, robust processes and rules for allocation were perceived as important for legitimacy and credibility, these were time-consuming and not agile and/or flexible enough to respond when their underlying assumptions did not hold (e.g. that all economies would secure their vaccines via COVAX).[137] A further example of lack of agility was observed when COVAX needed to be able to respond to the supply situation rapidly, needing to have the capacity to switch manufacturers and account for donor preferences by adopting donations.

Related findings: 49

Lesson F

Most relevant for:
Course correction
Gavi 5.0 & 5.1
Future pandemic preparedness

Management systems and processes that allow for rapid and smooth engagement with all types of countries, including those that Gavi does not ordinarily engage with in RI operations, take time to put in place.

The time required to establish these should not be underestimated – e.g. in the context of future pandemic scenarios, as well as in the context of Gavi's Zero Dose and MIC agendas that imply the Secretariat working with countries in 'former' or 'never' Gavi countries. At the time of administering COVAX, the Gavi Secretariat systems and processes were insufficient to allow for rapid and smooth engagement with Brazil. The Brazil case study found that new processes, systems and legislation to enable operations between the government of Brazil and Gavi were set up but suffered from delays. For example, a legal framework had to be set up to enable the country to join the COVAX mechanism and, later on, to enable the country to donate COVAX doses. Such legal and operational requirements could be a potential barrier to other MICs' engagement with COVAX. Supporting MICs and other SFP countries with such hurdles may also have provided an additional 'distraction' for Facility staff during a highly pressured time. This lesson implies that should a future mechanism decide that the inclusion of non-Gavi countries is advantageous, learning from this evaluation around the types of administrative hurdles likely to be encountered in upstream (Gavi Secretariat) and downstream (countries) levels should inform process and systems adaptations ahead of the next pandemic.[138]

Related findings: 12 and country case studies

Lesson G

Most relevant for:
Course correction
Gavi 5.0 & 5.1
Future pandemic preparedness

The content (accuracy, transparency, clarity of messaging) and quality (timeliness) of communication with countries on allocation details and forecast deliveries can significantly impact country and mechanism relations, confidence, and public perception of success.

While there was a desire and while efforts were made within the Office of the COVAX Facility to be transparent and timely in its communications to countries, the lack of predictability of vaccine supplies made it difficult to do so with any degree of certainty. This created a dilemma on what to communicate and when, balancing the need to be accurate with timely information that conveyed the degree of uncertainty. Ultimately, the fact that COVAX was unable to accurately predict and then communicate vaccine allocations to countries in a timely manner meant it was challenging for participant countries to communicate early, strategically and coherently downstream, to prepare communities to receive the vaccine. Not having struck the right balance when communicating uncertain supply information, and not having adequate feedback loops with countries, contributed to some countries' frustration and sense of not being listened to. Finally, the complexity of documentation and the speed with which countries needed to absorb and understand detailed documentation[139] presented additional challenges for countries.

Related findings: 50, 51

Lesson H

Most relevant for:
Course correction
Gavi 5.0 & 5.1
Future pandemic preparedness

The provision of flexible funding on a no regrets basis can be extremely useful in a range of country contexts during emergency situations.

Three of the case study countries (DRC, Senegal and India) specifically noted the contribution of flexible funding in helping them achieve vaccination coverage. CDS funds could be used to cover operational costs such as TA, transport costs, per diems for vaccinators, etc.

Related findings: Learning from country case studies

Lesson I

Operationalizing a procurement and allocation mechanism – *governance*

Most relevant for:
Future pandemic preparedness

Genuine participation in and transparency and accountability around decision making are crucial for engagement and effectiveness, especially if the involvement of all relevant multi-sectoral stakeholder groups is not feasible in the early stages of designing a pandemic response.

The challenges and trade-offs between speed of decision making and inclusion are real. Having systems **already** in place to ensure appropriate levels of accountability, transparency and consultation during design (and implementation) processes, therefore, is a critical component of pandemic preparedness.

Hearing and valuing diverse, including dissenting, voices during the design phase is especially important in an unprecedented emergency context.[140] COVAX – and earlier pandemic and emergency contexts –

has repeatedly demonstrated the need to engage with country governments, communities and CSOs from the start. Had more participating country and CSO voices been heard – during COVAX design especially, but also during implementation – there would, arguably, have been a greater chance of COVAX anticipating and responding to challenges such as country product preferences and demand drops that became apparent through late 2021–2022.[141]

Where pre-existing governance arrangements are not adequate to meet any novel requirements, new arrangements must offer transparency and accountability measures in addition to participation. The COVAX Facility made significant efforts to engage its constituent groups. However, some governance arrangements have been described as a mechanism for communications rather than genuine stakeholder engagement, with decision-making processes, especially linked to design decisions, unclear. This contributed to HICs and the vaccine industry ultimately having more power and influence over design decisions concerning the COVAX Facility than beneficiary countries and civil society. In turn, this contributed to narrow-sighted decisions (I&L without an end date, optional purchase), and reputational damage to COVAX (media reporting).[142] Neglecting to do this well in COVAX may have contributed to AMC countries but also upper-middle-income SFPs feeling less ownership of COVAX compared to regional procurement mechanisms such as PAHO and AVAT.

Related findings: 15, 16, 17

Lesson J

Vaccine delivery support

Most relevant for:
Future pandemic preparedness

Clarity and agreement on partnership working principles, roles and expertise required and responsibilities for areas of work to support a pandemic response cannot be underestimated.

Developing a shared understanding and agreement around – even if tentative – end-to-end strategic vision, specific expertise required and the delineation of roles among partners is vital. An example to illustrate the importance of drawing on the right expertise experienced through COVAX in this area relates to the design of the Humanitarian Buffer. The lack of meaningful engagement in problem analysis and strategic planning from humanitarian agencies, including the Inter-Agency Standing Committee, contributed to the design being blind to some of the realities of humanitarian settings. This resulted in delays in the implementation of the buffer and reputational damage to COVAX. Stakeholders pointed to a lack of clarity over roles and responsibilities between the many different bodies established, such as for allocation and decision making on which vaccine candidates to include in the COVAX Facility portfolio. Finally, several stakeholders commented that the focus of the COVAX AMC was almost exclusively on **vaccines** and not on **vaccinations**, suggesting that COVAX did not have the full expertise to hand during design to be able to consider sufficiently the challenges associated with administering as well as supplying vaccines.

Related findings: 18

Endnotes

[1] Reading: green=held; orange=partially held; red=not/minimally held; grey=unclear
[2] These are the fundamental requirements formulated by CEPI/COVAX at the outset.
[3]Assumptions fpr program areas relate to the specific theories of change – see annex 1
[4] Cost-sharing was originally defined as 'counterpart contribution requirement' (the Gavi definition) but later to 'using non-COVAX resources to procure from COVAX'
[5] Clinton, C., Sridhar, D. (2017). *Governing Global Health: Who Runs the World and Why?*
[6] Hoffman, S., Cole, C., Pearcey, M. (2015). *Mapping Global Health Architecture to Inform the Future*. Centre on Global Health Security, Chatham House. Accessed at: https://www.chathamhouse.org/sites/default/files/field/field_document/20150120GlobalHealthArchitectureHoffmanColePearcey.pdf
[7] The Gavi Board is comprised of four permanent seats for representatives of the Gates Foundation, UNICEF, WHO, and World Bank, and eighteen rotating seats, 5 from developing country governments, 5 from donors, 1 from research health institutes, 1 from developing country vaccine industry, 1 from industrialised country vaccine industry, 1 from civil society, and 9 independents.
[8] Clinton, C., Sridhar, D. (2017). *Governing Global Health: Who Runs the World and Why?*
[9] Hoffman, S., Cole, C., Pearcey, M. (2015). *Mapping Global Health Architecture to Inform the Future*. Centre on Global Health Security, Chatham House. Accessed at: https://www.chathamhouse.org/sites/default/files/field/field_document/20150120GlobalHealthArchitectureHoffmanColePearcey.pdf
[10] The Gavi Board is comprised of four permanent seats for representatives of the Gates Foundation, UNICEF, WHO, and World Bank, and eighteen rotating seats, 5 from developing country governments, 5 from donors, 1 from research health institutes, 1 from developing country vaccine industry, 1 from industrialised country vaccine industry, 1 from civil society, and 9 independents.
[11] Lindgren, K.-O., Perrson, T. (2010). Input and Output Legitimacy: Synergy or Trade-off? Empirical evidence from and EU survey. *Journal of European Public Policy,* 17(4), pp.449-467.
[12] Fierce Pharma. (2011, May 27). *GAVI board hit with conflict of interest woes.* Accessed at: https://www.fiercepharma.com/vaccines/gavi-board-hit-conflict-of-interest-woes.
[13] Médecins Sans Frontières Access Campaign. (2021, December 21). *COVAX: A Broken Promise to the World*. Accessed at: https://msfaccess.org/covax-broken-promise-world.
[14] Gavi. (2018). *Conflicts of Interest Policy for Governance Bodies: Version 3.0.* Gavi Alliance. Accessed at: https://www.gavi.org/sites/default/files/document/corporate-policies/Gavi%20Conflict%20of%20interest%20policy.pdf.
[15] Clinton, C., Sridhar, D. (2017). *Governing Global Health: Who Runs the World and Why?*
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[23] Gavi Board. (2020, December 2). *Review of Decisions*. Accessed at: Gavi Alliance Board Review of Decisions - 30 November-2 December 2021
[24] Dalberg. (2021). *ACT-Accelerator Strategic Review: An independent report prepared by Dalberg.*
[25] The Gavi Board decided at its December 2021 meeting to establish a temporary Steering Committee of the Board with delegated authority over delivery related strategy and decisions of the COVAX Facility, and to oversee COCVID-19 vaccine delivery support provided by COVAX. This is intended to include representation of key partners not on the Gavi Board (e.g. AU/AVATT) to maximise coordination.
[26] This includes the Research and Development and Manufacturing Investment Committee (RDMIC); Technical Review Group (TRG); SWAT teams, including Clinical Development and Operations SWAT, Enabling Sciences SWAT, Manufacturing SWAT, and Regulatory Advisory Group (RAG); WHO Strategic Advisory Group of Experts (SAGE) Working Group on Covid-19 vaccines; Policy and Allocation Working Groups, including Vaccine Strategy Sub-Working Group, and Vaccine Policy Sub-Working Group.
[27] COVAX. (2020). *COVAX: The Vaccine Pillar of the access to COVID-19 tools (ACT) accelerator structure and principles.*
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[30] 11 current members
[31] 13 current members
[32] 13 current members
[33] Assuming 57 members (SFP representatives), plus 5 additional representatives
[34] Assuming 92 members (AMC eligible economy representatives), plus 5 additional representatives
[35] Assuming top 10 bilateral donors plus UNICEF, World Bank, ADB, and PAHO.
[36] Assuming 6 members from each of Office of the COVAX Facility and WHO
[37] IAVG TORs state that members should have a balance of skills, experience and expertise in the following areas: global immunization and/or infectious disease epidemiology; emergency public health response; access to medicines and health products and its related issues in international settings and lower income countries, including relevant regulatory and legal processes; immunization programmes, vaccine programme implementation and service delivery; international health diplomacy, law and policy.
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[42] We note that the co-chairs of the AMC Engagement Group and Shareholders Council did present directly at the October 2021 Gavi Board meeting.
[43] Later in 2021, we understand that SFP countries continued to join COVAX Shareholder Council meetings even when they were not expecting any COVAX doses as the meetings were a reliable source of information as to what was going on and who was doing what.
[44] Cross, R. and Carboni, I. (2021, December 8). *When collaboration fails and how to fix it*. MIT Sloan Management Review, Winter 2021. Accessed at: https://sloanreview.mit.edu/article/when-collaboration-fails-and-how-to-fix-it/
[45] Based on the framing adopted in the Accountability Reports 2008 and 2011: Lloyd, R., Warren, S. and Hammer M. (2008). *2008 Global Accountability Report.* One World Trust. Accessed at: https://acfid.asn.au/sites/site.acfid/files/resource_document/Pathways-to-Accountability-II.pdf; Hammer M. and Lloyd R. (2011). *Pathways to Accountability II - The 2011 revised Global Accountability Framework*. One World Trust. Accessed at: http://www.oneworldtrust.org/uploads/1/0/8/9/108989709/2008_global_accountability_report.pdf.
[46] Mopan. (2020). *MOPAN 3.1: Methodology*. Accessed at:
https://www.mopanonline.org/ourwork/themopanapproach/Methodology_3.1_FinalUnformatted.pdf.
[47] Cross, R. and Carboni, I. (2021, December 8). *When collaboration fails and how to fix it*. MIT Sloan Management Review, Winter 2021. Accessed at: https://sloanreview.mit.edu/article/when-collaboration-fails-and-how-to-fix-it/
[48] These are that: governance structures provide a comprehensive view on the investment of public funds, enabling the right decisions to be taken in a timely manner; appropriate members are selected for critical advisory groups; decision making is done in an impartial and fair manner, with appropriate consideration given to conflicts of interest, which are identified and managed appropriately; and information on critical discussions and progress is provided in a transparent and timely manner. COVAX. (2020, 17 March). COVAX: The Vaccine Pillar of the access to COVID-19 tools (ACT) accelerator structure and principles.
[49] Gavi. (2022, February 28). *2021 COVAX LEARNING SYNTHESIS: Shifting from programme design to delivery & demand.*
[50] Internal groups include the Executive Office, Facility Leadership Team, Delivery Leadership Team, Operational Coordination Team, and Cross Facility PMO. Groups including external staff include the COVAX Coordination Meeting (CCM), chaired by the Gavi Board Chair and the CEPI Board Chair; the Pillar Leadership/Institutional Leads' meeting (formerly known as RSSE, and composed of institutional leads from CEPI, Gavi, WHO and UNICEF), and the Workstream Conveners' calls, attended by operational leads for the COVAX Facility, WHO and CEPI.
[51] Aid Transparency Index. (2020). *Gavi, The Vaccine Alliance*. Accessed at: https://www.publishwhatyoufund.org/the-index/2020/gavi/.
[52] International Organization for Standardization. (2018). *Risk management — Guidelines.* (ISO Standard No. 31000:2018). Accessed at: https://www.iso.org/obp/ui/#iso:std:iso:31000:ed-2:v1:en.
[53] This was a challenging issue for the Board and its committees, with stakeholders noting that some members (particularly those from a more corporate background) were happier to accept the higher level of risk associated with the COVAX Facility, while others (those more used to working in development and Gavi's core mandate) were less comfortable, particularly with the prospect of putting donor funds at greater risk than usual.
[54] MM Global Health Consulting. (2021, August). *Documentation Project: To synthesis core design decisions taken on the COVAX Facility and AMC.*
[55] MM Global Health Consulting. (2021, August). *Documentation Project: To synthesis core design decisions taken on the COVAX Facility and AMC.*
[56] REF AFC-20~1.PDF; Gavi. (2020, September 15). *Report to the Audit and Finance Committee: COVAX FACILITY.* (complete citation to come).
[57] The design decision to accept Committed or Optional Purchase models was presented in the September Board paper, but was not approved by the Board. MM Global Health Consulting. (2021, August). *Documentation Project: To synthesis core design decisions taken on the COVAX Facility and AMC.*
[58] As of December 2020, the risk matrix was still described by the Governance Committee as "incomplete and that many of the risks described do not have any proposed mitigation. Gavi. (2020). *Governance Committee Meeting 10 December 2020.*
[59] However, there is now, in mid-2022, uncertainty as to whether and to what the Board's expressed risk appetite still applies, with different teams appearing to take different approaches.
[60] Gavi. (2020, July 30). *Gavi Alliance Board Meeting. Minutes.*; Gavi. (2020, July 23). *Gavi Alliance Audit and Finance Committee Meeting: Minutes.*; Gavi. (2020, July 30). *Covax Facility Structure and Governance: Report to the Board.*; Gavi. (2020, July 30). *Financial Forecast: Report to the Board*.
[61] Gavi. (2020, July 30). *Gavi Alliance Board Meeting. Minutes*.
[62] Again, while it is unclear what this relates to, it is assumed to include all of the costs incorporated into the above estimate, as well as the costs linked to AMC92 engagement, procurement costs and the AMC replenishment process. Gavi. (2020, December). *AMC Resource Mobilisation: Report to the Board*.
[63] This includes nearly $10m for Gavi staff embedded in Gavi support departments including legal, finance, KMTS (IT), and HR. In addition to headcount cost the budget includes outsourcing costs such as legal advisory, audit, IT development, media content, and translation services. These roles will be primarily supported by consultants on fixed-term contracts. Gavi. (2020). *Annex B: COVAX Budget 2021 and three-year forecast: Report to the Board*.
[64] Gavi. (2020). *Annex B: COVAX Budget 2021 and three-year forecast: Report to the Board*.
[65] Overhead expenses are the aggregate of fundraising, management and general expenses (excluding indirect programme expenses such as those related to programme implementation and performance monitoring). https://www.gavi.org/sites/default/files/2022-06/GAVI-Alliance-2021-Annual-Financial-Report.pdf. (complete citation to come).
[66] Of this, SFPs accounted for $6m in 2020 and $9m in 2021. https://www.gavi.org/sites/default/files/2022-06/GAVI-Alliance-2021-Annual-Financial-Report.pdf.(complete citation to come).
[67] Operating expenses are the aggregate of overhead expenses, Secretariat programme implementation expenses and partners' programme implementation expenses in relation to evaluations and assessments. https://www.gavi.org/sites/default/files/2022-06/GAVI-Alliance-2021-Annual-Financial-Report.pdf. (complete citation to come).

[68] Gavi's 2021-2025 budget included $90m for Secretariat capacity. Gavi has raised $8.8bn for implementation over this period. Document cited: Gavi (2020) Gavi Alliance Audit and Finance Committee Meeting 21 October 2020 – Meeting Minutes
[69] https://www.theglobalfund.org/media/12003/corporate_2021annualfinancial_report_en.pdf.
[70] https://www.gov.uk/government/publications/raising-the-standard-the-multilateral-development-review-2016.
[71] Gavi (2021) Report to the Board: COVAX AMC Financial Forecast – 23-24 June 2021. Agenda Item 04b; Gavi (2021) Report to the Board: Financial Update, Including Forecast (Revised) – Agenda Item 03
[72] For instance, Sridhar Venkatapuram (Senior Lecturer in Global Health and Philosophy at King's College, London) was quoted as saying that communications were used "essentially speak to rich country leaders and rich countries, and to try to get them to join and cooperate, while not giving us a really good indication of the kind of precarious situation that we were in"; Browne, G. (2021, December 20). *2021 Revealed the Depths of Global Vaccine Inequity*. WIRED. Accessed at: https://www.wired.co.uk/article/2021-vaccine-inequity
[73] Gavi's internal learning points to anecdotal evidence of some people losing their jobs for not getting access to doses and/or being held responsible for delayed timelines for receipt of vaccines. Gavi. (2022, February 28). *2021 COVAX LEARNING SYNTHESIS: Shifting from programme design to delivery & demand.*
[74] This included providing regular briefing sessions, FAQs, biweekly newsletters and situation reports, in addition to official notification letters on dose allocations and frequent bilateral exchanges. Gavi. (2021, June). *Report of the Chief Executive Officer: Report to the Board*.
[75] Gavi. (2022, February 28). *2021 COVAX LEARNING SYNTHESIS: Shifting from programme design to delivery & demand.*
[76] For instance, Médecins Sans Frontières Access Campaign. (2021, December 21). *COVAX: A broken promise to the world.* Accessed at: https://msfaccess.org/sites/default/files/2021-12/COVID19_IssueBrief_Covax_1708_ENG_21.12.2021.pdf; Furneaux, R., Goldhill, O. and Davies, M. (2021, October 8). *How Covax failed on its promise to vaccinate the world*. The Bureau of Investigative Journalism. Accessed at: https://www.thebureauinvestigates.com/stories/2021-10-08/how-covax-failed-on-its-promise-to-vaccinate-the-world
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[79] *AccountAbility. (2015). Accessed at: AA1000 Stakeholder Engagement Standard 2015. https://www.accountability.org/static/940dc017198458fed647f73ad5d47a95/aa1000ses_2015.pdf*
[80] Clinton, C., Sridhar, D. (2017). *Governing Global Health: Who Runs the World and Why?*
[81] Gavi. (2020). *Gavi's Commitment To Diversity, Equality And Inclusion*. Accessed at https://www.gavi.org/sites/default/files/document/corporate-policies/Gavi-diversity-equality-and-inclusion-statement.pdf.
[82] Gavi. (2020). *Risk and Assurance Report*. Accessed at: https://www.gavi.org/sites/default/files/document/strategy/Risk-and-Assurance-Report-2020.pdf.
[83] AccountAbility. (2015). Accessed at: *AA1000 Stakeholder Engagement Standard 2015.* https://www.accountability.org/static/940dc017198458fed647f73ad5d47a95/aa1000ses2015.pdf
[84] https://www.globalfinancingfacility.org/sites/gff_new/files/images/GFF_CS_Engagement_Strategy_EN.pdf.
[85] https://www.theglobalfund.org/media/2531/core_globalfundstrategy2017-2022_strategy_en.pdf.
[86] https://www.theglobalfund.org/media/10396/crg_jointregionalplatform_casestudy_en.pdf.
[87] https://www.theglobalfund.org/media/11223/strategy_globalfund2023-2028_framework_en.pdf.
[88] Multiple signatories (2020) Letter to the Gavi Board members expressing concerns on conditions for ensuring equitable access of future COVID-19 vaccines under the Gavi-led COVAX Facility and COVAX AMC.
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[90] Moon, S. et al. (2022, January 29). Governing the Access to Covid-19 Tools Accelerator: towards greater participation, transparency, and accountability. *The Lancet*, 399. Accessed at: https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(21)02344-8.pdf
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[92] Gavi (2020) Report to the Board: COVAX Facility Operationalisation and Vaccine Programme
[93] Gavi (2020) Report to the Board: Report of the Chief Executive Officer (15-17 December 2020)
[94] Gavi (2021) Report to the Board: COVAX Resource Mobilisation Update
[95] Ibid.
[96] https://www.theglobalfund.org/en/news/2021/2021-11-11-united-states-to-host-next-global-fund-replenishment-conference/.
[97] https://healthpolicy-watch.news/us-8-8-billion-pledged-for-gavi-the-vaccine-alliance-smashing-us-7-4-billion-goal/.
[98] Dalberg (2021) ACT-Accelerator Strategic Review. Accessed at https://www.who.int/publications/m/item/act-accelerator-strategic-review.
[99] A potential issue which is not in scope for this evaluation and has not been explored is whether successful resource mobilisation for the COVAX Facility has adversely affected fundraising for other agencies involved in and pillars of the ACT-A.
[100] https://www.politico.eu/article/millions-europe-donated-coronavirus-vaccines-arrival-blame/amp/.
[101] Gavi (2020) Gavi Alliance Board Meeting Minutes – Teleconference, 19 March 2020
[102] Gavi (2020) Gavi COVAX AMC and COVAX Facility Structure and Governance: Board Meeting (Virtual) – PowerPoint Presentation. 30 July 2020.
[103] Ibid.
[104] Gavi (2020) Gavi Alliance Board Meeting Minutes – Teleconference, 19 March 2020
[105] Gavi (2020) Gavi Alliance Programme and Policy Committee Meeting (Virtual Meeting) Minutes. 26-27 May 2020.
[106] Hatchett, R. (2020) A proposal to establish a globally fair allocation system for COVID-19 vaccines.
[107] Gavi (2020) Report to the Board: COVAX Facility Structure and Governance, Agenda Item 04b
[108] Volta Capital, Pandemic Action Network, Africa CDC (2021) *Addressing Market Failures: The Role of CEPI in Bridging the Innovation Gap to Prevent the Next Pandemic.*
[109] Market Shaping and Market Access in the Global Vaccines Market: Approaches for the Future, Padmashree Gehl Sampath.
[110] https://www.unicef.org/supply/media/11336/file/Covid-19-vaccine-prices.pdf.
[111] Special terms and conditions apply to the price.

[112] The reference price of $2.19 comes from a now deleted tweet from an EU official in Belgium and is unverifiable at this time. https://www.washingtonpost.com/world/eu-coronavirus-vaccines-cheaper-than-united-states/2020/12/18/06677e34-4139-11eb-b58b-1623f6267960_story.html (complete citation to come).
[113] Supplier has not agreed to the publication of prices but this has estimated/reported by others. This is also close to the reported US facilitated purchase deal of $2bn for 300m doses. Cited document: The Independent Panel for Pandemic Preparedness and Response (2021) *Access to Vaccines, Therapeutics and Diagnostics*.
[114] "The COVAX Facility will make investments across a broad portfolio of promising vaccine candidates (including those being supported by CEPI) to make sure at-risk investment in manufacturing happens now." https://www.gavi.org/covax-facility#gavi . (complete citation to come).
[115] https://www.gavi.org/sites/default/files/covid/covax/Gavi-COVAX-AMC-Investment-Opportunity.pdf. (complete citation to come).
[116] There is a lack of clarity on the IPG's guidance for the SII COVISHIELD vaccine. The IPG initially recommended this not to be included but later revised this recommendation due to a pre-existing agreement being in place. The IPG also initially recommended that the SII COVOVAX vaccine not to be included.
[117] https://www.gavi.org/sites/default/files/covid/covax/DCVMN-Annual-Meeting-Gavi-CEO-Presentation-COVAX-Facility-and-AMC-Nov-2020.pdf
[118] https://www.astrazeneca.com/media-centre/press-releases/2020/astrazeneca-takes-next-steps-towards-broad-and-equitable-access-to-oxford-universitys-covid-19-vaccine.html#.
[119] https://www.astrazeneca.com/media-centre/press-releases/2020/astrazeneca-takes-next-steps-towards-broad-and-equitable-access-to-oxford-universitys-covid-19-vaccine.html#.
[120] https://www.theguardian.com/global-development/2021/feb/14/we-took-a-huge-risk-the-indian-firm-making-more-covid-jabs-than-anyone.
[121] https://www.gavi.org/sites/default/files/covid/covax/Thematic-Briefing-COVAX-13012022.pdf.
[122] https://www.gavi.org/sites/default/files/covid/covax/Thematic-Briefing-COVAX-13012022.pdf.
[123] Data for allocation rounds 1-7, admin adjustments 1-6, and dose sharing up to Oct 2021.
[124] Loft, P (2022) Covax and global access to Covid-19 vaccines. House of Commons, UK.
[125] Data for allocation rounds 1-7, admin adjustments 1-6, and dose sharing up to Oct 2021, taken from GCDOC252. Data for allocation rounds 7-13 taken from COVAX (2021) JAT-IMF Briefing on Equity of COVAX Allocations to Date, 15 December 2021. Data for allocation round 14 taken from COVXA (2022) Decision of the Independent Allocation of Vaccines Group on the allocation of COVAX Facility secured vaccines: 27 January 2022. Accessed at: https://www.who.int/publications/m/item/decision-of-the-independent-allocation-of-vaccines-group-on-the-allocation-of-covax-facility-secured-vaccines-27-january-2022.
[126] Data for allocation rounds 1-7, admin adjustments 1-6, and dose sharing up to Oct 2021, taken from COVAX (2021) IAVG Meeting presentation: COVAX Allocation Round 8/9 NEW Vaccine Allocation Decision.
[127] Data for allocation rounds 1-7, admin adjustments 1-6, and dose sharing up to Oct 2021, taken from COVAX (2021) IAVG Meeting presentation: COVAX Allocation Round 8/9 NEW Vaccine Allocation Decision.
[128] Data for allocation rounds 1-7, admin adjustments 1-6, and dose sharing up to Oct 2021, taken from COVAX (2021) IAVG Meeting presentation: COVAX Allocation Round 8/9 NEW Vaccine Allocation Decision.
[129] https://www.who.int/publications/i/item/WHO-2019-nCoV-NDVP-country_plans-2021.1.
[130] Yoo, K. et al. (2022). COVAX and equitable access to Covid-19 vaccines. *Bulletin of the World Health Organization*, 100(05), pp.315-328. Accessed at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9047429/pdf/BLT.21.287516.pdf
[131] Data sourced from spreadsheet shared with the evaluation team by Gavi titled 'Vaccines Cumulative Data_2022-07-01'. Countries are ordered left to right in decreasing order of COVAX coverage. Allocations are net of reallocations and refusals. Data does not exactly match earlier Secretariat analysis, as presented in the JAT-IMF Briefing on Equity of COVAX Allocations to Date, 14 December 2021, the reasons for which are unclear.
[132] Data sourced from spreadsheet shared with the evaluation team by Gavi titled 'Vaccines Cumulative Data_2022-07-01'. Countries are ordered left to right in decreasing order of COVAX coverage. Allocations are net of reallocations and refusals. Data does not exactly match earlier Secretariat analysis, as presented in the JAT-IMF Briefing on Equity of COVAX Allocations to Date, 14 December 2021, the reasons for which are unclear.
[133] Testimonials highlighted frustration with delays and the lost opportunity to vaccinate people when demand was highest.
[134] 'Political will from across stakeholder groups to create such a mechanism, with solidarity between countries to jointly tackle the pandemic using this mechanism' (From Annex 2—Key 1 assumptions for the COVAX AMC & Facility baseline, EA/ED report January 2022) & Finding 5: 'Assumptions underlying the vision of COVAX as a channel for global joint procurement were revealed to be too optimistic & Finding 34: The COVAX facility ultimately lacked the market power to meet many of the AMC's original objectives in the early years of the COVID-19 pandemic.
[135] Moon *et al.* (2021, September 20) *BMJ*.
[136] Finding 5: Assumptions underlying the vision of COVAX as a channel for global joint procurement were revealed to be too optimistic.
[137] Finding 50: Dose allocation in 2021 and for Phase 1 was not conducted as anticipated, with no two rounds conducted in the same way and involving several different processes. The approach evolved as a pragmatic response to a challenging operating environment.
[138] Finding 13: Over the course of 2020 and 2021, despite a very difficult operating environment, Gavi and partners successfully launched and implemented the COVAX Facility and AMC. The scope of innovation and the speed at which the initiative was implemented created a heavy burden for the Office of the COVAX Facility and had implications for management capacity, efficiency and effectiveness.
[139] e.g. membership information and application, I&L, NFCS, etc.
[140] Finding 21: While a strong management team was created, it was under resourced for the demands placed upon it and the scope and scale of its responsibilities & Finding 9: COVAX design decisions reflected the disproportionate influence of donor countries.
[141] Finding 57: Amid substantial concern in early to mid-2021 from countries, donors and partners on the lack of vaccine delivery support in the near and medium term, Gavi mobilized and approved $775 million to support vaccine delivery in June 2021.
[142] Finding 11: COVAX leadership was slow to engage low and middle-income countries and civil society, resulting in public criticism of COVAX & Finding 12: There was a reluctance to engage civil society in the early design discussions on the COVAX Facility, as it was thought that this would delay decision making.