

Annex A: COVAX Reporting Framework

Section A: Update on Gavi's COVAX Facility and COVAX AMC Monitoring, Evaluation and Learning (MEL) strategy

The Gavi Secretariat presented its proposed MEL approach to the Gavi Board in December 2020. Since then, we have further refined this approach and begun implementing key aspects of the strategy. The approach is intended to be holistic in nature, spanning from inputs through to impact across the COVAX Facility and COVAX AMC, and complementary to work being led by other COVAX partners and the wider global health community. It is intended to support both accountability and learning perspectives and will need to evolve and adapt over time to reflect the changing nature and needs of COVAX. It has close linkages to the Secretariat's and broader COVAX Risk Management and Assurance work.

The table below provides some of the key highlights and updates on progress against the core elements of Gavi's COVAX Facility and COVAX AMC MEL Strategy since the June 2021 Gavi Board.

MEL strategy component	Key activity	Highlights / update (December 2021)
Cross-cutting	COVAX Theory of Change	Revision and further improvements to the core COVAX Facility and COVAX AMC Theory of Change is included within the scope of work for the COVAX Facility and COVAX AMC evaluability and evaluation design phase.
		Updates will be made to reflect the COVAX Facility 2022 strategy.
Monitoring	COVAX Reporting Framework	Reporting against COVAX Reporting Framework made available for PPC and Board
		The COVAX Reporting Framework will be updated to align with the COVAX Facility and AMC vision for 2022 (see summary below)
	Complementary monitoring to COVAX Reporting Framework	COVAX Facility, Gavi Secretariat teams and core COVAX partners continue to monitor aspects of the Facility and AMC to a much greater extent beyond the metrics currently captured in the topline Reporting Framework.
		One key example is through the Country Readiness and Delivery (CRD) Implementation Monitoring Review, which triangulates data from a number of sources to inform a weekly review of progress or challenges across key delivery areas. Examples include vaccination uptake, absorption and expiry, costing and financing and vaccine safety.



	Core country monitoring and	COVAX continues to utilize the WHO-UNICEF
	reporting on COVID-19 / COVAX	Joint Reporting Form COVID-19 module (monthly reporting) launched in March 2021 to gather core reporting from COVAX participants. Unfortunately, reporting completeness continues to be an issue, with many COVAX participants identifying strains on teams in countries as a key challenge.
		Monitoring and reporting templates are being finalised for reporting on utilisation of COVID-19 Vaccine Delivery Support (CDS) – recipients will be expected to report back on a six monthly basis to Gavi.
Evaluation	COVAX Facility and COVAX AMC Evaluation Design, Evaluability and Baseline Study	The RfP was launched in April 2021. ITAD (www.itad.com) was selected for the first phase of this study – the evaluation design and evaluability phase. ITAD begun in August and delivered its inception report in September. ITAD is expected to submit the finalized evaluation design and evaluability report in December 2021.
		The baseline study is expected to begin in January 2022, once the scope, design and key evaluation questions have been agreed upon.
	Multi-Stage Evaluation of COVAX Facility and COVAX AMC	Subject to discussions with Evaluation Advisory Committee and to be informed by Evaluation Design, Evaluability and Baseline Study. Tentative expectation is to have a multi-stage, mixed methods evaluation that spans design and process through results, outcomes and impact. Timeline will be mapped to COVAX Facility and COVAX AMC key milestones and governance cycles (such as the COVAX AMC mid-term review).
Learning	COVAX design, results, impact, challenges, lessons learnt from COVAX for 5.0 & future pandemics	Will be incorporated into the Gavi-commissioned independent multi-stage evaluation of the COVAX Facility and COVAX AMC
	Learning syntheses on a rolling basis (more rapid in nature and to	Doing on a rolling prioritisation basis. Examples include:
	inform course-correction and continuous improvement)	 Documentation and synthesis of early COVAX decisions, rationale, assumptions and risks
		First allocation rounds synthesis
		 Humanitarian buffer processes and implementation learning
		COVID-19 Delivery Support
		 Lessons learned from Pfizer TaskTeam and roll-out
		A synthesis of key lessons learned and recurrent themes across all these learning



	efforts will be produced at the end of 2021/early 2022.
COVAX early introductions	While other COVAX partners and stakeholders are taking the lead on this, we are continuing to support learnings on early introductions through provision of data, facilitating experience sharing (including presentations from implementing participants) and performing syntheses of experiences shared through learning networks.

Section B: Overview of the COVAX Reporting Framework

The COVAX Reporting Framework contains topline performance metrics spanning from inputs through to impact, mapped to the COVAX Core Theory of Change. As noted above, the Theory of Change is currently being re-reviewed and updated, incorporating feedback from core partners to better capture specific nuances and to more appropriately reflect COVAX Facility and COVAX AMC aspects. The TOC is a tool that will be updated as COVAX evolves.

It is important to note that the Framework aims to strike an appropriate balance between metrics that measure aspects of COVAX that Gavi has accountability for, while retaining a high-level end-to-end perspective of COVAX Facility and COVAX AMC goals and objectives. It incorporates both metrics that measure performance directly attributable to COVAX Facility and COVAX AMC as well as performance metrics where COVAX plays a more contributory role.

While the Gavi Secretariat has taken the lead on developing the COVAX Reporting Framework, a number of consultations with core COVAX partners as well as feedback on key metrics shared by other stakeholders have fed into the current set of metrics and targets.

In terms of other aspects to note while reading the COVAX Reporting Framework:

- Indicator definitions: An appendix containing COVAX Reporting Framework indicator definition sheets is available on Board Effect.
- **Targets:** Given the evolving nature of the COVID-19 pandemic and the linked discussions on the future role and goals of COVAX, this version of the Reporting Framework only contains proposed targets through till end 2021. The COVAX Reporting Framework will be updated in due course to reflect agreed future COVAX vision, goals and targets, and may be improved over time following feedback from the Evaluation Design, Evaluability and Baseline Study, for example. Not all metrics have targets proposed. We used three principles to establish targets: 1) Ensure consistency with targets already in public domain / sensitized with key stakeholders; 2) Targets should exist where appropriate and meaningful; and 3) Monitoring directionality is sometimes sufficient or most appropriate.
- **Outcome metrics:** The methodology, including the extent of data triangulation used for calculating both persons vaccinated and coverage for COVID-19 and supported by COVAX, is subject to further refinements, particularly as COVID-19 programmes evolve. The methodology is co-developed with Alliance partners.



- Impact: We have already engaged with several impact modelling groups over the course of 2021 (such as Imperial, IHME and Harvard) to provide inputs for the COVAX AMC Investment Opportunity and COVAX strategy for 2022 discussions at the PPC and Board. The Secretariat is assessing the extent to which impact models can be used for monitoring performance given the level of uncertainties associated with the evolution of the pandemic and the significant influence different epidemiological, social and policy parameters have on modelled outputs. At minimum, we will share outputs for contextual purposes going forward. We are engaging with modelers to support the generation of historical estimates of COVID-19 impact, projection of future impacts of COVID-19 vaccination as well as various other ad-hoc strategic analyses (such as quantifying the potential gains or losses in deaths averted that may be expected due to different strategies). There are also active discussions within IA2030 and the Vaccine Impact Modeling Consortium about global modeling of COVID-19 vaccination impact. We are also continuing to liaise with different groups about quantifying the economic impacts of COVID-19 vaccines.
- Reporting on actuals for December 2021 Gavi Board: The data compiled and presented for this report submitted to the Gavi Board was collected at the end of October 2021. As such, this report does not represent a final report on achievements or progress made in 2021.
- Updating the COVAX Reporting Framework for 2022: As referenced above, the COVAX Reporting Framework will be updated for 2022, to align with the evolution of Gavi's, the COVAX Facility and COVAX AMC vision and goals. Some metrics in the current version will be retired, as they were time-limited to measure progress or aspects of the Facility and AMC's work specific to 2021 and initial roll-out (for example, metrics related to initial NDVP assessments and progress on confirmation of participants). It is expected that new themes of importance to the COVAX Facility and AMC model in 2022, such as the proposed introduction of the Pandemic Preparedness Pool, will be integrated in the updated version. This updated framework will be shared with the PPC and Board when they meet in 2022, along with an explanation of changes made and updated indicator definition sheets.

Section C: The COVAX Reporting Framework

Acronyms:

AMC:	COVAX Advance Market Commitment
SFPs:	Self-financing Participants
CP:	Committed Purchase (self-financing participant)
OP:	Optional Purchase (self-financing participant)
HB:	Humanitarian Buffer
NDVP:	National Deployment and Vaccination Plan (for COVID-19)

Key Developments since June report to Gavi Board

Based on data compiled 28 October - 15 November 2021

NB: This report does not represent a final report on the progress and / or achievements made in 2021

- > Continued expansion of vaccine portfolio (with associated increases in volume of contracted doses)
 - Now up to 10 different vaccine candidates with signed APAs, 7 of which with WHO E-Ubver 3.7bn doses contracted
- Humanitarian buffer now operationalized
 - Second HB application approved and more under review, with first doses delivered in midovember

Cost-sharing ramping up

 12 participants have signed confirmation agreements to receive additional doses via cost share, mobilizing an additional >\$774M for the COVAXAMC (up from zero in June 2021 report)

> Surge in donations

- Nearly 200m donated doses delivered to date up from <1m in June 2021 report
- > Although delivery still impacted by supply constraints,fold increase in doses delivered since June 2021 report
 - Doses delivered to 144 COVAX participants, with pace and volumes of deliveries on the rise
- > COVID-19 Delivery Support approvals and disbursements accelerating
 - 96 applications approved (bridge funding and CDS early access), with >\$142m disbursed to AMC participants

Growth in COVAX supported coverage

 3.8% of AMC participant population have received at least a first dose supported by COVAX (approximately 7 times as many compared to June 2021 report)

COVAX Input Metrics

Rapid development of safe, suitable and efficacious covid-19 vaccines

1.0 Number of eligible COVID-19 vaccine candidates listed by the WHO for emergency use / prequalified with signed COVAX advance purchase agreements (APAs)	7 vaccine candidates with EUL against target of 10 candidates by end 2021 10 vaccine candidates with signed APAs	 There are currently 7 candidates that have been granted Emergency Use Listing (EUL) or prequalification by WHO: Pfizer/BioNTech, AstraZeneca/University of Oxford, SII-AstraZeneca, Janssen, Moderna, Sinopharm and Sinovac COVAX has signed APAs with all seven candidates (an increase from five in the June 2021 report) COVAX is continuing to engage with most manufacturers with candidates in late-stage development and those with emergency approvals from other regulatory authorities to continue building out its portfolio. Note that COVAX has signed APAs with three other candidates for which a decision on WHO EUL is anticipated in the coming months: (i) Novavax for the NVX-CoV2373 candidate, (ii) SII for the NVX-CoV2373 candidate, and (iii) Clover for the SCB-2019 candidate
Pooled demand and vaccine financing	secured	
2.0 Number of economies confirmed as COVAX participants	193 confirmed SFPs and AMC-eligible COVAX participants 89 confirmed AMCs of 92 AMC-eligible	 Eritrea has yet to join the COVAX AMC; Marshall Islands opted out of COVAX AMC (needs sufficiently met through other means). Since June, United Republic of Tanzania has joined as an AMC participant, and Burundi is currently in the process of joining. As of 29 October, there are 101 confirmed self-financing participants and 89 confirmed COVAX AMC participants
2.1 Number of approved Humanitarian Buffer (HB) requests	2 approved Humanitarian Buffer requests	 As of mid-November, eight requests for HB doses have been received. Two requests have been approved by the IASC Decision Group, one request was found not viable, one request was withdrawn by the applicant, while four requests are still under review. Approved requests: one request by a humanitarian agency to vaccinate populations of concern in Thailand and one request by the Government of Iran to vaccinate displaced people from Afghanistan in Iran. The first set of doses approved under the humanitarian buffer were delivered in mid-November.

COVAX Input Metrics

Pooled demand and vaccine financing secured (cont.)		
3.0 Number of AMC92 economies that have signed confirmation agreements to purchase additional doses via cost- sharing	12 AMC92 participants have signed confirmation agreements to purchase additional doses via cost-sharing	 There has been notable progress since the last report to the Gavi Board in June 2021 (cost-sharing had not yet been operationalized) 38 AMC92 economies have signed framework agreements to hear about cost share supply offerings as they are available 12 AMC92 economies have signed a binding confirmation agreement to purchase cost share doses Vaccines exercised in cost-sharing, so far, include Moderna, Sinovac and Sinopharm 134M doses of cost share have been purchased and the first cost share doses were delivered in October 2021
4.0 Total resources mobilised for the COVID-19 Advance Market Commitment (COVAX AMC) innovative financing mechanism	\$10.9bn USD Raised against target of \$9.3bn USD by end 2021	 Figure reported represents pledges from direct donor contributions, IFFIm, foundations, corporations and organisations as well as the European Commission grant \$10.1bn USD has been raised for vaccines with \$0.8bn earmarked for COVID-19 delivery, totaling \$10.9bn USD An additional \$1.3bn USD has been mobilised since the last report to the Gavi Board in June 2021 Total resources mobilised through cost-sharing by end October 2021: \$774 million USD in vaccine costs (excluding ancillaries)

COVAX Process Metrics

Secure vaccine supply

COVAX REPORTING FRAMEWORK DATA COMPILED: 28 OCT – 15 NOV 2021

5.0 Number of doses contracted with signed APAs through COVAX	4.055 billion doses contracted against target of 2 billion doses by end 2021	 Committed doses: 2.045 billion doses; Optional doses: 2.010 billion doses Increase of 1.555 billion doses contracted since June 2021 report These volumes are based on APAs signed with the following ten manufacturers: AstraZeneca, Clover, Janssen, Moderna, Novavax, Pfizer/BioNTech, SII- AstraZeneca, SII-Novavax, Sinopharm, Sinovac. These volumes are to be delivered through 2021 and 2022 and include approximately 2bn doses in options that are yet to be exercised. Note that doses contracted with Clover, Novavax, SII-Novavax are included but are subject to these candidates being granted WHO EUL.
5.1 Number of doses shared (donated) through COVAX	470 million doses shared with further negotiations underway	 This represents a significant increase compared to the previous report to Gavi Board in June 2021 (<1 million shared doses) Additionally, USG is supporting the procurement and donation of 500M Pfizer doses of which 80m is included in the above figure. Out of the 500M, 200M has already been made available for allocation and 70m has been delivered Nearly 200m donated doses delivered to date which includes 28M (40%) out of the 70M delivered of Pfizer USG facilitated doses Expected to reach 360m donated doses delivered by end of the year, of which an estimated 335m are for AMC participants By the end of October 2021, over 35% of doses delivered by COVAX were donated doses
6.0 Weighted average price per dose for COVAX-supported doses	\$5.13 USD per dose on average for COVAX-supported doses	 The WAP value has increased from \$3.54 (June 2021 WAP). This is mainly driven by the changing composition of vaccines that were delivered: Pfizer deliveries increase from 14,504,490 doses (Jan - July) to 35,503,650 (Jan - Sep). This includes 60% of USG subsidized/facilitated doses delivered to AMC as this is how much is covered by AMC funds. Deliveries of 39,184,800 doses of Sinovac and Sinopharm This is calculated only based on APA quantities shipped (178,224,250 doses of Pfizer, AZ, SII, Sinovac & Sinopharm) between Jan and Sept 2021, while donated quantities (Moderna, AZ, J&J, 40% of USG subsidized Pfizer doses to AMC and 100% of USG subsidized Pfizer doses to committed SFP) are not included. This WAP value is for deliveries to all participants (AMC and SFP) Doses that were shipped to AMC92 economies between January and September represented 61% of the total value paid for and 66% of the total APA volumes.

COVAX Process Metrics

Allocate, perform readiness preparation and deploy COVID-19 vaccines

7.0 Rolling average proportion of participants equitably allocated COVAX- supported doses	99% against target of >80%	 While the allocation mechanism cannot ensure equitable outcomes, this metric measures how well the allocation algorithm is performing at ensuring all participants keep pace from an allocated supply perspective per established equity logic rules. The reported percent represents the proportion of participants within an accepted range (~one pallet size) of their expected allocated volume of doses for allocation rounds 1 - 9 (NB: excluded round 4 due to exceptional nature) The closer the value is to 100%, the more equitable allocation achieved
8.0 Number of COVAX-supported doses delivered to economies / humanitarian buffer recipients with confirmed receipt	486 million doses delivered 391m / 950m to AMC 95m / 950m to SFP 1.6m / up to 100m for HB	 Progress continues to be most heavily impacted by supply constraints. However, pace is picking up (nearly a 6-fold increase since June 2021 report) The first 1.6m doses related to an approved request under the humanitarian buffer were delivered in mid-November Approximately 1bn doses have been allocated to date with 901m doses for AMC participants, excluding cost-shared doses 391m doses have been delivered to 86 AMC participants 95m doses have been delivered to 58 SFP participants By early November 2021, doses had been delivered to 144 COVAX participants*
9.0 Median time from confirmation as COVAX participant to first receipt of COVAX-supported doses	Median of 145 days from confirmation as COVAX participant to receipt of first COVAX-supported doses Median of 89 days for AMC participants	 144 participants received doses between Jan and end-Oct 2021 117 (85%) participants received their first shipment of COVAX doses in March or April 2021, however, there are notable outliers. For example, India was the first COVAX participant to receive doses on the 19th of January. This was just 39 days after the same product had been first used in a high-income country. The range of days consisted of a minimum of 30 to a maximum of 363 days. Median of 89 days for AMC participants and 195 days for SFP participants (driven by a considerable number of optional purchase SFPs impacting the median value). At present, there are 18 active COVAX participants still awaiting receipt of
Actuals related to delivery increase daily. As such, Board convenes in December 2021	these numbers will be outdated by the time the	COVAX doses. This has dropped from 35 since the June 2021 report.

COVAX Process & Output Metrics

Allocate, perform readiness preparation and deploy COVID-19 vaccines

10.0 COVAX AMC participant readiness for introduction of COVID-19 vaccine: Number of COVAX AMC participants who had their NDVPs assessed as ready by Regional Review Committees	90 COVAX AMC participant NDVPs reviewed and approved	 100% of COVAX AMC participant submitted NDVPs were approved and deemed ready by Regional Review Committees Only Burundi and Eritrea have not submitted their NDVPs, although Burundi is expected to submit its NDVP soon. DPRK has submitted their NDVP but are yet to accept COVAX doses.
10.1 COVAX AMC participant readiness for scale-up of COVID-19 vaccines: Number of occasions where doses are re-allocated due to non-completion of post-allocation checks	28 occasions across nine allocation rounds to date	 22 reallocations have taken place since the last update in June 2021 These reallocations happened across 5 allocation rounds with the majority of reallocations related to AMCs 10 reallocations were due to lack of UCC capacity, 10 were due to absorptive capacity issues, 1 was due to non-completion of regulatory approval, and 1 was due to product-specific readiness
Vaccine introduction and roll-out		
11.0 Percentage of COVAX participants that administer COVAX-supported doses as part of their COVID-19 programme	75% of 193 confirmed SFP and AMC- eligible participants administer COVAX- supported doses against target of 100% by June 2021 94% of 153 COVAX participants* who have received an allocation administer COVAX-supported doses as part of their COVID-19 programme	 144 COVAX participants are administering COVAX-supported doses as part of their COVID-19 programme: 86 AMCs and 58 SFPs This is up from 138 participants at the end of September 2021 As of 27 October, 7 COVAX participants are solely reliant on COVAX for their COVID-19 vaccine doses *This denominator (153) excludes the 27 participants represented by the EC for allocation purposes, as well as participants who have left the facility, are non-active AMCs, or did not receive an allocation due to opt-outs, voluntary delays or unmet financial commitments.

COVAX Output Metrics

Vaccine introduction and roll-out (cont.)

(CDS)

12.0 Number of COVID-19 Vaccine Delivery Support (CDS) requests approved	82 CDS Early Access applications approved 14 Bridge Funding applications approved	 A total of 57 CDS early access applications were received by Gavi, with 56 approved. A further 26 applications received and approved by UNICEF. CDS Applications have been received across all regions. The following 9 AMC participants did not submit CDS Early Access applications: Burundi and Eritrea (not confirmed AMC participants), DPRK, Kiribati, Marshall Islands (not active AMC), Micronesia, Morocco, Samoa and Solomon Islands. The Bridge Funding window, which was closed at the end of June, received 14 applications, all of which were approved. CDS Needs Based Funding Window was launched in Mid-October 2021, with the first round of applications expected 8th November 2021.
13.0 Total resources (\$USD) disbursed to COVAX AMC participants through COVID-19 Vaccine Delivery support	\$142.2m USD disbursed through CDS to participants	 A total of \$107.5m USD has been disbursed by Gavi out of a total of \$205.8m requested for CDS early access grants. 100% of the requested \$19.2m requested via UNICEF has been disbursed. Gavi is targeting to have all funds linked to CDS early access grants disbursed by the end of the year, latest.

 The Bridge funding window, which is now closed, approved a total of \$15.5m USD through reprogramming or via the IRC. All these funds will be back-filled by Gavi.

NB: We are exploring the inclusion of a composite metric measuring outputs of COVID-19 Vaccine Delivery Support

COVAX Outcome Metrics

Vaccine delivery and target populations vaccinated

NB: Methodology for COVAX specific estimates is still under refinement by the Alliance. Data used for metrics 14.0 through to 15.1 were compiled 27 October 2021 – 01 November 2021, with the exception of disaggregated data on health workforce vaccination, which date from 10 October 2021.

14.0 Persons vaccinated with COVID-19 vaccines	3.8 billion individuals have received at least a first dose	 Vaccinated through COVAX and non-COVAX doses Approximately 4-fold increase since previous report to Board in June 2021 AMC: 1.2 billion individuals have received at least a first dose Among 64 AMCs reporting, 68% of HCWs have been fully immunised SFP: 2.6 billion individuals have received at least a first dose Among 53 AMCs reporting, 35% of HCWs have been fully immunised 2.8 billion individuals are fully vaccinated
14.1 Persons vaccinated with COVID-19 vaccines supported by COVAX	195 million individuals have received at least a first dose supported by COVAX	 More than 6-fold increase since previous report to Board in June 2021 AMC: 150 million individuals have received at least a first dose supported by COVAX (almost 2x as many compared to previous report) SFP: 45 million individuals have received at least a first dose supported by COVAX 121 million individuals are fully vaccinated through COVAX-supported doses
15.0 COVID-19 vaccination coverage	48.6% of the world's population have received at least a first dose	 Vaccinated through COVAX and non-COVAX doses Approximately a 4-fold increase since previous report to Board in June 2021 AMC: 29.3% of population have received at least a first dose Among 64 AMCs reporting, 68% of HCWs have been fully immunised SFP: 69.9% of population have received at least a first dose Among 53 AMCs reporting, 35% of HCWs have been fully immunised 36.7% of the world's population are fully vaccinated
15.1 COVID-19 vaccination coverage supported by COVAX	2.7% of the total population of COVAX participants have received at least a first dose supported by COVAX against a target of 20%* by end 2021	 More than 6-fold increase since last report to Board in June 2021 AMC92: 3.8% of population have received at least a first dose supported by COVAX (approximately 7x as many compared to previous report) AMC91 (excluding India): 5.5% of population have received at least a first dose supported by COVAX SFP: 1.4% of population have received at least a first dose supported by COVAX SFP: 1.4% of population have received at least a first dose supported by COVAX COVAX SFP: 1.4% of population of COVAX participants are fully vaccinated through COVAX-supported doses * Target is at least 20% or to reach coverage level requested by participants if less than 20%

COVAX Impact Metrics

Reduced morbidity and mortality due COVID19

16.0 Cumulative number of reported COVID-19 cases	178.2 million COVID-19 reported cases in 193 confirmed SFPs and AMC- eligible COVAX participants	 SFP: 120.4 million cumulative reported cases AMC: 57.8 million cumulative reported cases 17 million additional reported cases since end of Oct 2021 Note: cumulative between 13 Dec 2019 and 29 Oct 2021
17.0 Cumulative number of reported COVID-19 deaths	3.9 million COVID-19 reported deaths in 193 confirmed SFPs and AMC- eligible COVAX participants	 SFP: 2.9 million cumulative reported deaths AMC: 1 million cumulative reported deaths 270k additional reported deaths since end of Oct 2021 Note: cumulative between 13 Dec 2019 and 29 Oct 2021

Impact metrics (work in progress)	
Number of COVID-19 deaths averted	We have already engaged with several impact modelling groups over the course of 2021 (such as Imperial, IHME and Harvard) to provide inputs for the COVAX AMC Investment Opportunity and COVAX strategy for 2022 discussions at the PPC and Board.
	Given the level of uncertainties associated with the evolution of the pandemic and the significant influence different epidemiological, social and policy parameters have on modelled outputs, we are still assessing the extent to which impact models can be used for monitoring performance.
Metrics related to social and economic impacts, such as GDP losses	At minimum, we will share outputs for contextual purposes going forward. We are engaging with modelers to support the generation of historical estimates of COVID-19 impact, projection of future impacts of COVID-19 vaccination as well as various other ad-hoc strategic analyses (such as quantifying the potential gains or losses in deaths averted that may be expected due to different strategies). There are also active discussions within IA2030 and the Vaccine Impact Modeling Consortium about global modeling of COVID-19 vaccination impact. We are also continuing to liaise with different groups about quantifying the economic impacts of COVID-19 vaccines.