## Annex B: Gavi Human Papillomavirus Measurement Framework

The Gavi HPV Measurement Framework was developed to provide a comprehensive way to monitor progress of Gavi Secretariat and Alliance partners against the goals of the revitalisation of the Gavi HPV program that was approved by the Gavi Board in December 2022.

The HPV Measurement Framework includes two sets of indicators, both of which are outlined in this Annex:

- 1) The primary set of indicators for reporting on progress of the HPV program to the PPC and Board, known as the HPV Scorecard. HPV Scorecard indicators are noted in pink in the below diagram.
- 2) An expanded set of operational HPV indicators and operational forecasts for detailed tracking purposes and to inform the narrative of the Scorecard. The operational indicators are noted in grey in the below diagram.

The indicators included in the HPV Measurement Framework are largely aligned with existing Gavi measures including in the Gavi 5.0 Measurement Framework and Gavi Balanced Scorecard.

Impact	Cervical cancer deaths averted						
Outcomes	Routine and MAC launches  Girls fully immunized  HPVC coverage in Gavi57						
	Program performance	Measuring Gavi processes	Tracking implementation progress				
Outputs	Number of HPV country applications approved by IRC  % HPV VIG and Ops funding disbursed  Number of HPV priority countries with TCA disbursed  Countries supporting HPV with HSS	% Gavi-approved HPV vaccine doses delivered  Timeliness of new HPV vaccine launches  Engagement with MICs to introduce HPV  % HSS funding disbursed for HPV  Number of HPV switch grants disbursed  Amount of FS allocated in support of HPV  % TCA funding disbursed for HPV  Research agreements signed under HPV SFA	Utilization rate of TCA funding  HPV1 coverage improvement  Number of routine intros with one-dose  Informed switches to one-dose				

## **HPV Scorecard**

The HPV Scorecard includes indicators on HPV program impact and outcomes as well as several high-level process indicators. Indicators have been selected via consultations with business owners across the Secretariat with input from the global HPV sub-team.

Targets for the HPV Scorecard indicators have been established with a clear vision of success based on what the Gavi Board approved for the HPV revitalisation in December 2022. Targets will be used for accountability of the Gavi HPV program, and as such they have been carefully defined based on the use cases, the expectations that have been communicated with the Board, and consultation with Gavi focal points<sup>1</sup> on what will be required to achieve these targets in accordance with the resources allotted to the HPV revitalisation.

The impact and outcome indicators have cumulative targets set for 2025, while the output indicators currently have milestones established for 2023 (see below figure). For the output indicators, annual milestones are more useful for monitoring operational progress of this must-win priority, and a meaningful 2025 value for these is not yet well understood particularly as country planning and priorities shift per contextual factors. Additional consultations with Gavi Secretariat teams and Alliance HPV sub-team are ongoing and 2025 targets for these indicators will be revisited for the October 2023 PPC.

This Annex presents the data currently available for indicators included in the HPV Scorecard. It is important to note that several of these indicators are dependent on HPV immunisation program coverage data that is updated on an annual basis by the WHO (released every calendar year in July); as such, these will not be updated until the October 2023 PPC. For those output indicators that focus on updated HPV funding mechanisms, we will report on 2023 mid-year values for the October 2023 PPC.

	2021	2022	Target (2025)
Cervical cancer deaths averted (cumulative)*	316k	TBD	1.4m
New HPV launches <sup>1</sup> (cumulative 2021-25)	3R, 3M	5R, 3M	27R, 28M
HPVC coverage in Gavi57*	9%	TBD	+17pp
Girls fully immunized (cumulative)*	14.7m <sup>2</sup>	TBD	86m
	2021	2022	Milestone (2023)
HPV applications approved by IRC (cumulative 2021-25) <sup>3</sup>	2	4	5
% HPV VIG/Ops disbursed (cumulative 2021-25) <sup>4</sup> Number of HPV priority countries with TCA disbursed Number of countries supporting HPV with HSS <sup>6</sup>	6%	8%	51%
	NA	NA	225
	NA	NA	6-8
	New HPV launches <sup>1</sup> (cumulative 2021-25) HPVC coverage in Gavi57* Girls fully immunized (cumulative)*  HPV applications approved by IRC (cumulative 2021-25) <sup>3</sup> % HPV VIG/Ops disbursed (cumulative 2021-25) <sup>4</sup> Number of HPV priority countries with TCA disbursed	Cervical cancer deaths averted (cumulative)*  New HPV launches ¹ (cumulative 2021-25)  HPVC coverage in Gavi57*  Girls fully immunized (cumulative)*  14.7m²  2021  HPV applications approved by IRC (cumulative 2021-25)³  HPV VIG/Ops disbursed (cumulative 2021-25)⁴  Number of HPV priority countries with TCA disbursed  NA	Cervical cancer deaths averted (cumulative)*  New HPV launches ¹ (cumulative 2021-25)  HPVC coverage in Gavi57*  Girls fully immunized (cumulative)*  14.7m²  TBD  2021  2022  HPV applications approved by IRC (cumulative 2021-25)³  HPV VIG/Ops disbursed (cumulative 2021-25)⁴  HPV VIG/Ops disbursed (cumulative 2021-25)⁴  Number of HPV priority countries with TCA disbursed  NA  NA

NA, not applicable. TBD, 2022 actuals to be determined with WHO HPV coverage estimates in July 2023.

## **HPV Operational Indicators**

<sup>&</sup>lt;sup>1</sup> R routine, M multi-age cohort (MAC)

<sup>&</sup>lt;sup>2</sup> The number of girls fully immunized with Gavi support through 2021 was reported in the October 2022 PPC paper as 9.8m; an updated figure will be included in the 2022 APR.

Excludes applications that may be approved through alternative review mechanisms.
 Cumulative disbursed for VIG/Ops vs Gavi 5.0/5.1 forecast. Future disbursements may change due to updates to 5.0/5.1 forecast. In December 2022 the Board approved an additional US\$10m for VIG+Ops+switch, hence the lower cumulative disbursements against 5.0/5.1 totals in 2021 and 2022.

5 3 applications, 4 for routine introduction & MAC, 3 for MAC, 12 for coverage improvement. Includes activities that are funded through either TCA ceilings or the TCA reserve

<sup>6</sup> New or reprogrammed HSS funding for HPV per the December 2022 Board decision on the HPV relaunch. Note that three countries drew on HSS explicitly for HPV in 2022 (Kenya,

<sup>🔵</sup> On track 🔚 Moderate delays / challenges 🛑 Significant delays / challenges 🛑 No update

<sup>&</sup>lt;sup>1</sup> Relevant Gavi teams include VP, CPD, HSIS, MEL, Finance, PEF, PST, and FD&R.

The expanded set of operational HPV indicators for tracking purposes are more operational in nature than the primary indicators included in the HPV Scorecard. These operational indicators are intended to 1) measure Gavi processes and 2) track implementation progress.

The operational indicators are intended to provide more granular information on HPV implementation processes/outputs. In addition to being used by the Alliance's HPV sub-team to monitor and course-correct the program throughout the year, these indicators will also be used to interpret the Scorecard indicators in future SPP papers. The operational indicators were selected to inform our understanding of progress towards HPV program implementation and operationalisation in the Gavi Secretariat and across the Alliance. These indicators and their definitions may be revised for the October PPC based on evolution of the program and operationalisation of the measurement framework.

Progress on these indicators will also be shared with and reviewed by the HPV subteam against operational forecasts. Gavi has operational forecasts which are driven by assumptions that can change over time based on emerging information and therefore are regularly updated. As part of the routine monitoring of the HPV program, for the operational indicators we will monitor actual achievement against what was forecasted, as well as different versions of operational forecasts. The information from these operational metrics will be pulled in to support the narrative on the HPV Scorecard reporting and made available to stakeholders in the Alliance HPV sub-team through existing channels including the monthly virtual and bi-annual in person meetings. It is important to note that Gavi Secretariat is working with core and extended partners to clarify roles and responsibilities and review and address any resourcing needs for the members of the global HPV subteam to take part in this process in addition to the existing country-level accountabilities related to specific TCA and those set up through HAPPI.

Expanded set of operational indicators for tracking purposes				
Results chain		Indicator	Indicator definition	Use case
Indicators	for measuring	Gavi processes		
Outcome	Accelerated adoption of permissive one-dose schedule	Switch grant disbursement	Number of HPV switch grants with funding disbursed.	Track adoption and acceleration of one-dose schedule (strategic shift 1)
Output	Countries supported to introduce and scale up HPV vaccine	Disbursement for TCA	% of TCA funding disbursed that is targeted for HPV routine introductions, MACs, or coverage improvement.  Calculated as the	Track enhanced technical assistance through the Partners' Engagement Framework

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			actuals for HPV- specific TCA funding disbursed, cumulative out of the 5.0 forecast, divided by the forecasted amount for the 5.0 period. Using the latest available 5.0 forecast each time.	(PEF) (strategic shift 3)
Output	Countries supported to scale up HPV vaccine	Disbursement for HSS	% of HSS funding disbursed that is targeted for HPV routine introductions or coverage improvement.  Calculated as the	Optimise use of and increase support within HSS investments to strengthen HPV programme (strategic shift
			actuals for HPV- specific HSS funding disbursed, divided by the specific HSS funding approved as part of the HPV relaunch.	2)
Output	Countries supported to introduce and scale up HPV vaccine	FS allocation	Amount of FS allocated in support of HPV activities.	Track enhanced technical assistance through the Partners' Engagement Framework (PEF) (strategic shift 3)
Output	Countries supported to introduce and scale up HPV vaccine	Strategic Focus Area (SFA) research activities	Number of countries for which agreements have been signed for operational research agenda activities under HPV SFA.	Learning agenda SFA for integration of HPV in routine delivery mechanisms and PHC (strategic shift 4)
Output	Countries supported to introduce HPV vaccine	Percentage of eligible MICs countries engaged with to introduce HPV vaccine	Percentage of MICs eligible countries Gavi has engaged with to introduce HPV.  Calculated as the number of countries	Track engagement through the MICs approach for new HPV introductions

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			that Gavi has engaged with regarding country-specific support for new nationwide HPV vaccine introductions, divided by the number of former- and never-Gavi countries that have not yet introduced HPV vaccine.	and program sustainability
Output	Countries supported to introduce HPV vaccine	Timeliness of HPV vaccine launches	Timeliness of new HPV vaccine launches, both routine and MAC.	Accelerating quality introductions (TOC objective 1)
			Calculated as the median time in days between the target vaccine launch date approved by the IRC and the actual launch date, among Gavisupported HPV routine and MAC launches that occur in a	
	0		calendar year.	
Output	Countries supported to introduce HPV vaccine	Vaccine supply	Percentage of Gavi- approved HPV vaccine doses delivered.	Ensuring vaccine supply in Gavi-eligible countries
			Calculated as the number of Gaviapproved (both Gavifunded and cofinanced) HPV doses per country recorded as delivered between 1st January of the calendar year and recording date inclusive, divided by the number of Gaviapproved (both Gavifunded and cofinanced) HPV doses for the relevant	

			country approved by the HLRP or IRC for the relevant calendar year.	
Indicators	for tracking im	plementation p	rogress	
Outcome	Accelerated adoption of permissive one-dose schedule	Schedule switches	Number of countries currently vaccinating on a two-dose schedule with Gavi support that have (1) made informed decision about switch to one dose and (2) completed switch to one-dose.	Track adoption and acceleration of one-dose schedule (strategic shift 1)
			Informed decision about switch to one dose based on NITAG or MoH recommendation to demonstrate use of evidence to support decision.	
Outcome	Accelerated adoption of permissive one-dose schedule	Routine introduction with one dose	Number of routine HPV introductions with Gavi support on one- dose schedule. This includes both current Gavi countries and MICs approach- eligible countries (former and never Gavi MICs).	Track adoption and acceleration of one-dose schedule (strategic shift 1)
Outcome	HPV vaccines introduced and scaled up	Coverage improvement	Average increase in HPV1 program coverage in current year compared to previous year, among Gavi-supported countries with program coverage below 40% that introduced HPV vaccine 3 or more years ago.	Rapid coverage recovery (TOC objective 2)
Output	Countries supported to introduce and	Utilisation of TCA	Utilisation rate of TCA funding, calculated as the sum of the amounts of funding	Track enhanced technical assistance

scale	up HPV	that have been utilised	through the
vacc	ine	by partners in support	Partners'
		of HPV activities,	Engagement
		divided by the total	Framework
		funding disbursed for	(PEF) (strategic
		the year.	shift 3)