Annex A: Technical report on Gavi 5.0/5.1 indicators

This is a technical report providing definitions of and progress against Mission and Strategy Goal indicators in the Gavi 5.0/5.1 measurement framework. The technical report is populated based on available data and updated bi-annually. The newly available data for 2022 included in this report relates to Mission Goals M2, M3, M4, M5, and M6, and Strategy Goals 1, 2, and 3.2.

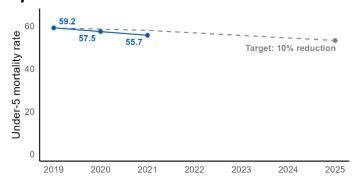
Note on target trajectories:

In the below graphs, the dotted lines represent the projected annual trajectory that was forecast when we set 2025 targets with the PPC/Board in May/June 2021; our assumption was that coverage would return to 2019 coverage levels in 2021, with the exception of India which would take until 2022. This was noted in a footnote in the PPC paper on the 5.0 Measurement Framework at the time (PPC-2021-Mtg-2-Doc 04):

 To account for COVID-19-related disruptions and recovery, it is assumed that vaccine coverage returns to 2019 levels by 2021, with the exception of India, which we assume returns to 2019 levels in 2022 and sub-national three doses of pneumococcal conjugate vaccine (PCV3) scale up takes an additional year.

Gavi 5.0 Mission Indicators

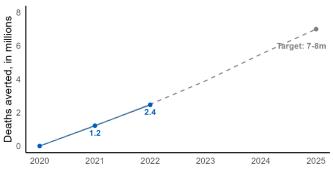
M.1: Under-five mortality rate – *Updated April 2023*



By increasing access to immunisation and enabling equal access to new and underused vaccines, Gavi support is contributing to the reduction in under-five deaths from vaccine-preventable diseases. Gavi countries saw an under-five mortality rate of 55.7 deaths per 1,000 live births in 2021. At the portfolio level we are on track to reach the 10% reduction target by 2025 – in 2021, Gavi countries have achieved a 6% reduction from baseline.

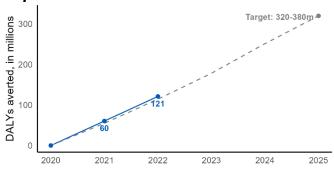
This indicator will be updated in April 2024.

M.2: Number of future deaths averted with Gavi support – *Updated Sept 2023*



This indicator estimates the impact of Gavi-supported vaccinations in terms of averting future deaths from vaccine-preventable diseases. More than 2.4 m future deaths have been averted by Gavi-supported vaccinations in 5.0 through 2022. The cumulative number of deaths averted from 2000 through 2022 is more than 17.3 m.

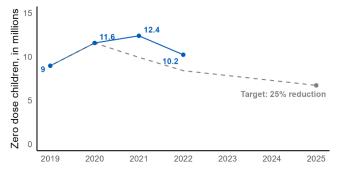
M.3: Number of future disability-adjusted life years (DALYs) averted – *Updated Sept 2023*



Disability-adjusted life years (DALYs) measure the number of healthy life years lost due to disability or premature death. Reduction in overall disease burden from vaccine-preventable diseases is one of the ultimate impact measures of Gavi support.

More than 121 m future disabilityadjusted life years (DALYs) have been averted by Gavi-supported vaccinations in 5.0 through 2022.

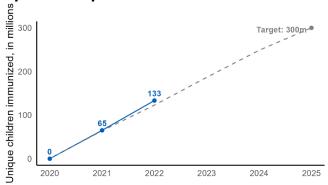
M.4: Reduction in number of zero-dose children - Updated Sept 2023



The indicator serves as an equity measure, giving an indication of the reach of routine immunisation services to missed communities, with an emphasis on regularly reaching children who are being missed by routine immunisation.

In 2022, there were 10.2 m zero-dose children in Gavi57 countries, representing a 14% increase since 2019, and down from 12.4 m in 2021. Reaching the Gavi 5.0 target by 2025 will require a 34% reduction from 2022.

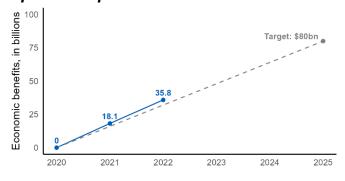
M.5: Unique children immunised through routine immunisation with Gavi – *Updated Sept 2023*



This indicator tracks the number of children immunised with the last recommended dose of at least one vaccine delivered through routine systems with Gavi support.

Countries immunised more than 68 million unique children through routine immunisation with Gavi support in 2022, reaching more than 133m children in this strategic period. As of 2022, Gavi-supported countries have immunised more than 1 billion unique children with Gavi support since 2000.

M.6: Economic benefits generated through Gavi-supported immunisations – *Updated Sept 2023*

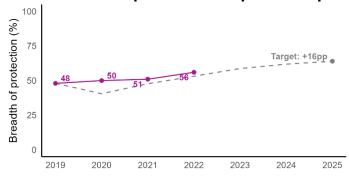


Gavi-supported vaccines have impact beyond health benefits to include the direct and indirect economic benefits of averting illness, death, and longterm disability.

More than US\$ 35.8 billion of economic benefits have been generated through Gavi-supported immunisations in 5.0 through 2022. The cumulative amount of economic benefits from 2000 through 2022 is more than US\$ 220.5 billion.

Strategy Goal 1: Introduce and scale up vaccines

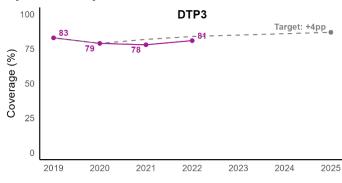
S1.1: Breadth of protection – *Updated Sept 2023*

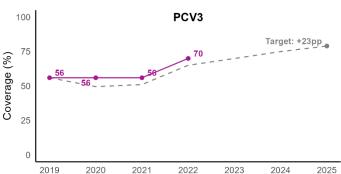


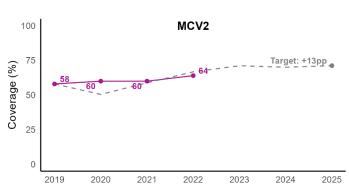
Summary measure of prioritised vaccine introductions, rate of scale up of newly introduced vaccines, and vaccine coverage; this measures the extent to which countries have introduced and scaled up Gavisupported vaccines.

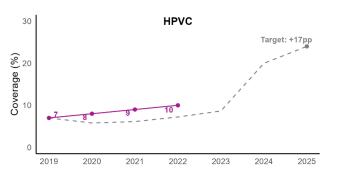
Gavi57 saw breadth of protection increase by 5pp in 2022 to 56%, against an implied target of 64% by 2025 (+16pp from 2019). For the first time in 2022, breadth of protection in Gavi-supported countries was higher than in the rest of the world.

S1.2: Vaccine coverage (SDG indicator 3.b.1): DTP3, MCV2, PCV3, HPVC – Updated Sept 2023









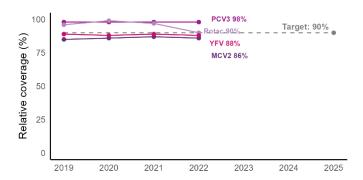
Measures access to four vaccines across the life course, including the newly available or underutilised vaccines, at the national level. Across the four vaccines in SDG 3.b.1, PCV3 and HPVC were trending slightly higher in 2022 than originally projected when Gavi 5.0 targets were set, whereas DTP3 and MCV2 coverage were off track but improving.

Increases in HPVC and MCV2 coverage are primarily driven by recent introductions, while the increase in PCV3 coverage is primarily driven by India.

DTP3 coverage in Gavi57 increased by +3 pp in 2022 and now sits -2 pp below 2019 levels. 23 countries increased (40%) and 15 maintained (26%) coverage compared to 2021. Among Gavi57 countries, PCV3 coverage was flat at 56% in 2019-2021 and has increased to 70% in 2022, slightly ahead of original projections.

MCV2 coverage among Gavi57 also increased slightly from 2019 to 2021, from 58% to 60% respectively, before further improving to 64% in 2022, slightly behind original projections. At the portfolio level, HPVC coverage has increased modestly among Gavi57 countries, from 7% in 2019 to 9% in 2021 and 10% in 2022, slightly ahead of original projections.

S1.3: Rate of scale-up of new vaccines: PCV3, Rotac, MCV2, YF – *Updated Sept 2023*

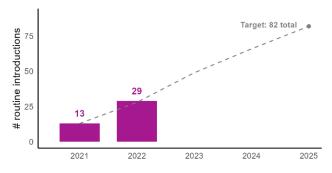


This metric evaluates whether new introductions are achieving high coverage within a reasonable timeframe as measured by WUENIC data.

In 2022, coverage of the new vaccines relative to the benchmark vaccines in 2021 was as follows: PCV3 98%, Rotac 90%, YFV 89%, MCV2 86%.

Coverage of MCV2 and YFV were both under the target of 90% relative coverage with a decline in 2022. PCV3 and Rotac both exceed the benchmark, although Rotac declined with supply disruptions in 2022.

S1.4: Vaccine introductions – *Updated April 2023*



This indicator allows us to monitor incremental change in numbers of countries introducing under-used vaccines into the routine immunisation schedule, with Gavi support.

In 2022, 16 new routine introductions took place against a target of 15. The cumulative total for introductions 2021-22 is 29, which is on track against the total target of 82 routine introductions by 2025.

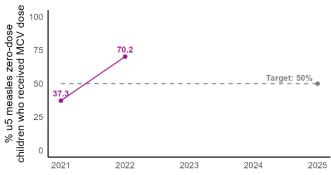
This indicator will be updated in April 2024.

S1.5: Country prioritisation of vaccines

This indicator will evaluate the extent to which countries use robust evidence to inform prioritisation of their vaccine programmes.

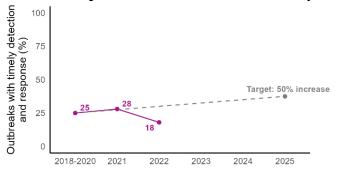
Indicator has been in abeyance given the pause on rolling out the VIS 2018 vaccines during the COVID-19 pandemic. This indicator will be reported on for the first time in April 2024.

S1.6: Measles campaign reach – *Updated Sept 2023*



Measures the reach and quality of Gavi-supported MCV campaigns. In 2022, 70.2% of under-5 children previously unvaccinated against measles received an MCV dose in a Gavi-supported preventive MCV campaign, an increase from 37.3% in 2021.

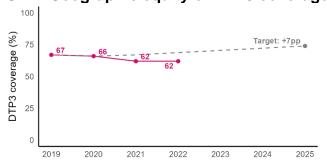
S1.7: Timely outbreak detection and response - Updated Sept 2023



This indicator monitors timeliness of responses to vaccine-preventable disease outbreaks for diseases for which there are established outbreak global response mechanisms (measles, yellow fever, meningococcus, cholera and Ebola). In 2022, the proportion of globally supported outbreak responses which met the timely detection and response criteria was 18%, a significant decline from 28% in 2021.

Strategy Goal 2: Strengthen health systems and equity in immunisation

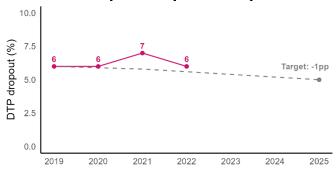
S2.1: Geographic equity of DTP3 coverage - Updated Sept 2023



By focusing on performance among the lowest coverage districts, this indicator measures how well Gavisupported countries are able to increase coverage in areas with the limited access to immunisation services.

Geographic equity of DTP3 coverage remained at 62% in 2022, down from 67% in 2019, demonstrating that the most vulnerable districts have not yet recovered.

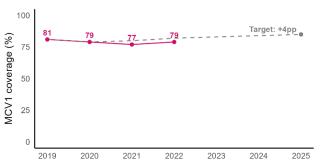
S2.2: DTP dropout - Updated Sept 2023



This indicator is defined as the dropout rate between first and third doses of DTP-containing vaccine.

DTP drop-out increased overall in Gavi57 countries from 6% in 2019 to 7% in 2021, before declining back to 6% in 2022. Countries recovered to 2019 levels in 2022 but no progress was made towards the target of a 1pp reduction by 2025.

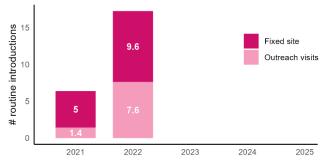
S2.3: MCV1 coverage – Updated Sept 2023



This indicator aims to measure access to the first dose of measles-containing vaccines through routine immunisation.

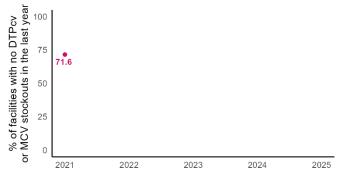
At portfolio level, MCV1 coverage patterns in 2022 were similar to those of DTP3. MCV1 coverage in Gavi57 countries decreased by 4 pp between 2019 and 2021, falling from 81% to 77%, before increasing by 2 pp to 79% in 2022.

S2.4: Number of immunisation sessions – *Updated Sept 2023*



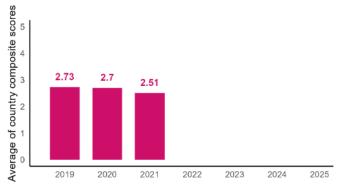
Increasing immunisation sessions is a key desired output of HSS investments, and an intermediate result in the causal pathway to increasing vaccine coverage. In 2022, Gavi-supported countries reported 17.2 million immunisation sessions were conducted, with 9.6 million taking place in fixed site facilities and 7.6 million in outreach facilities. Twenty-eight Gavisupported countries reported data on this indicator in 2022, up from 26 in 2021. This is a new indicator that was recently added to the WHO/UNICEF electronic Joint Reporting Form (eJRF), and so time trends are likely reflecting reporting completeness.

S2.5: Stock availability at facility level – Data last updated Sept 2022



This indicator measures the capacity of countries to forecast and distribute vaccines to health facilities making them available when needed to reach zero dose children. In 2021, average full stock availability of DTP- and measles-containing vaccines across Gavi57 was 71.6%. However, in 2022, this data was not collected through the eJRF, as some WHO regions expressed the lack of reliable country systems to capture this indicator. Therefore, WHO collected information from countries to ascertain presence of a system to measure vaccine availability at the service delivery level. Based on the analysis, it has been recommended in the future to collect this data from at least a subset of countries.

S2.6: EPI management capacity - Data last updated Sept 2022



Strengthened institutional capacity for programme management and monitoring is on the critical pathway to programmatic and financial sustainability. Following an external review of the Alliance approach to build country EPI management capacity, the refinement of leadership, management and coordination (LMC) strategy was paused due to COVID-19 pandemicrelated reprioritisation, to avoid burdening country EPI teams. Ongoing LMC support continued, with additional surge management support if requested. Testing and piloting new approaches was initially paused but has resumed in 2023. Reporting for this indicator to begin 2024.

S2.7: Countries implementing tailored plans to overcome demand barriers – *Updated Sept 2023*

Demand-related barriers can include social and behavioural determinants; and environmental or practical factors that prevent individuals from seeking and supporting vaccination. Vaccine demand can be particularly challenging in high-risk communities (i.e. vulnerable to un-/under-immunisation; falling below coverage targets; high drop-out rates; high numbers of never vaccinated).

Among the 48 Gavi57 countries reporting in 2022, 33 (69%) implemented one or more strategies to address under-vaccination, whereas 15 countries did not implement any strategies and 9 did not report on this indicator. The most common strategies: behaviourally informed interventions, health care worker training and interventions to improve the service experience. Among nine countries that recently completed surveys on the Behavioural and social drivers (BeSD) of vaccine uptake, a key barrier to demand was the cost to caregivers of taking children to be vaccinated (e.g. transportation, lost wages). In partnership with the Bill & Melinda Gates Foundation, Gavi plans to support countries in scaling up BeSD surveys and tracking key demand indicators.

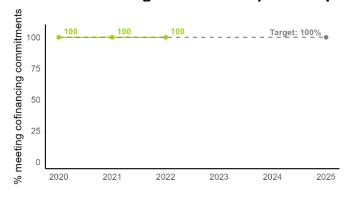
Note: In 2021, 49 Gavi57 countries reported having implemented behavioural or social strategies to address under-vaccination. This indicator has been significantly changed since 2021 so these values are not comparable.

S2.8: Percent of countries addressing gender-related barriers – *Updated Sept* 2023

In 2022, of the nine health system strengthening (HSS) and/or Equity Accelerator Fund (EAF) applications which were reviewed and approved by the Independent Review Committee (IRC) from Afghanistan, India, Pakistan, South Sudan, Djibouti, Cambodia, Burkina Faso, Comoros, Solomon Islands, six countries (67%) included in their applications interventions to address gender-related barriers to immunisation.

Strategy Goal 3: Improve sustainability of immunisation programs

S3.1: Co-financing fulfilment – Updated April 2023

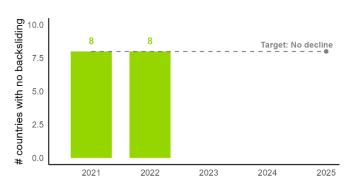


The fulfilment of co-financing commitments is a measure of country commitment to financing vaccines. Co-financing serves as a mechanism to support countries on a path toward greater sustainability.

In 2022, most Gavi-eligible countries have been

able to maintain or increase domestic r esources for co-financing of Gavisupported vaccines. Excluding countries whose co-financing obligation was exceptionally waived, 100% of countries fully met their 2022 co-financing obligation. Indicator will be updated in April 2024.

S3.2: Preventing backsliding in Gavi-transitioned countries – *Updated Sept 2023*



This indicator measures the sustainability of immunisation systems in former-Gavi countries, as demonstrated through the capacity to maintain or increase DTP3 coverage following transition from Gavi support – reflecting Gavi's new approach to engaging with middle-income countries.

As of 2022, 8 former-Gavi MICseligible countries maintained or increased DTP3 coverage in 2021 or 2022 compared to 2019, while 9 countries did not maintain or increase DTP3 coverage.

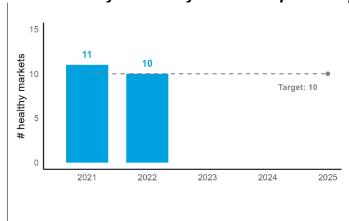
S3.3: Vaccine introductions in former- and never-Gavi eligible countries

New vaccine introductions are a core driver of Gavi's achievement through the MICs

Approach. This indicator measures the number of new vaccine introductions (PCV,
rotavirus, HPV) in former- and never-Gavi countries eligible under the MICs Approach.

The MICs approach was approved by the Gavi Board in June 2022, and no
introductions occurred in former- and never-Gavi MICs in 2022. As such, this indicator
will be reported on for the first time in April 2024.

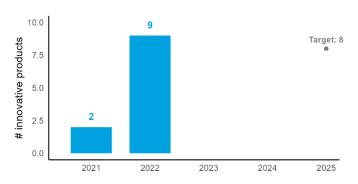
Strategy Goal 4: Ensure healthy markets for vaccines and related products S4.1: Healthy market dynamics – *Updated April 2023*



Number of markets exhibiting sufficient levels of healthy market dynamics to ensure sustainable market dynamics for vaccines and immunisation-related products at affordable prices.

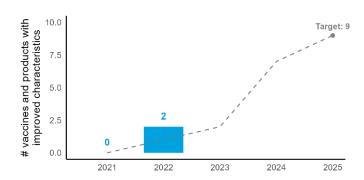
10 markets were assessed as exhibiting acceptable levels of healthy market dynamics, compared to 11 in 2021 and against a target of 10. The market that regressed in 2022 was Rotavirus (RV). Indicator will be updated in April 2024.

S4.2: Incentivise innovations – *Updated April 2023*



Number of innovative products within the pipeline of commercial-scale manufacturers to ensure the availability of quality and suitable vaccines products for countries. The Vaccine Innovations Prioritisation Strategy sees continued success with unprecedented progress. In 2022, five MAP pipeline candidates made progress in R&D and two products received approval for CTC labelling. The 2022 progress brought the overall achievement to 9, meeting the 2025 target well in advance of schedule. Indicator will be updated in April 2024.

S4.3: Scale-up innovations - Updated April 2023



Number of vaccines and immunisation-related products with improved characteristics procured by Gavi, which gives an indication of whether countries are adopting products with improved characteristics for use. Two new products with improved characteristics were procured in 2022: a liquid rotavirus vaccine, improving the ease of delivery for healthcare workers, and new presentation for a yellow fever vaccine, changing from ampoule to vial containers, improving its cold chain footprint. Indicator will be updated in April 2024.