

# UNEQUAL ACCESS TO IMMUNIZATION IN MIDDLE-INCOME COUNTRIES

## IMMUNIZATION AGENDA 2030: IN-DEPTH REVIEW

### EXECUTIVE SUMMARY:

Children in middle-income countries are not eligible for support by Gavi, the Vaccine Alliance, and are not receiving the immunization protection they need. Each year, 66 million children, half of all children globally, are born in these countries. Of these, 17 million children each year are not getting all the vaccines they need.

By reaching 90% coverage of vaccines targeted by the Immunization Agenda 2030 (IA2030), tens of thousands of lives could be saved annually, and children's health improved, in these countries. Further, sustainably improved coverage will avert regional epidemics or cataclysms that overwhelm health systems infrastructure and exacerbate inequities.

This brief highlights immunization performance in these countries from 2019 to 2022, visualizing IA2030 Impact Goals and Strategic Priority indicators from the IA2030 Framework for Action and [scorecard](#) [1], [2]. It also reviews four bottlenecks slowing progress and highlights major initiatives supporting middle-income countries. The analysis points to striking differences in performance between groups of countries based on their funding eligibility. These findings underscore the imperative for concerted and intensified efforts to address these critical gaps.

#### Immunization Performance in MICs: Key Findings

- Immunization systems in non-Gavi eligible middle-income countries (MICs) are not very resilient to shocks. These countries **suffered some of the worst pandemic backsliding** compared with countries in other income groups, although many have recovered thanks to government commitments.
- Non-Gavi-eligible MICs have **high and growing internal inequities**.
- Often due to lagging introductions, **coverage of vaccines against pneumococcal disease, rotavirus, and human papillomavirus (HPV) was typically lowest** in the non-Gavi-eligible MICs of all country groupings in 2022.
- In non-Gavi-eligible MICs, we can save 200,000 lives per year through introducing vaccines and increasing coverage of IA2030-recommended vaccines [3].
- Non-Gavi-eligible MICs may pay 10 times more for HPV and pneumococcal vaccines when compared to the price of these same vaccines for low-income countries.

# I. BACKGROUND: WHY FOCUS ON MIDDLE-INCOME COUNTRIES

Of the 66 million infants born each year, half are born in middle-income-countries that are not eligible for support from Gavi, the Vaccine Alliance (non-Gavi-eligible MICs) (See Table 1 for income threshold) [4], [5].<sup>1</sup> More than one in three zero-dose children, defined as children who have not received a first dose of a vaccine containing diphtheria-pertussis-tetanus (DTP), live in non-Gavi-eligible MICs.

**Defining non-Gavi-eligible MICs:** Middle-income countries (MICs) include both lower-middle- and upper-middle-income countries. Countries are eligible for support from Gavi based on their gross national income (GNI). See Table 1 for definition of country categories described in this brief (Appendix A has a list of all country categorization). In addition to the Gavi support detailed in the table, since 2023, a number of MICs have become eligible for Gavi MICs support, a catalytic source of funding to introduce new vaccines and strengthen immunization systems.<sup>2</sup> In this brief, the term "non-Gavi-eligible MIC" includes countries that are eligible for Gavi MICs support, since this source of funding did not affect country performance in 2022, the most recent reporting year.

**Table 1. Income-based eligibility for support from Gavi in 2024 among countries within the 194 WHO member states\***

Income Grouping	Income Classification (2022 GNI per capita US\$)**	Number of Countries	Level of Gavi Support
Gavi-eligible low-income countries (Gavi LICs)	≤ \$1,135	26	Gavi support - Initial self-financing
Gavi-eligible lower-middle-income countries (Gavi LMICs)	\$1,136-\$1,810	28	Gavi support - Preparatory and accelerated*** transition
Non-Gavi-eligible LMICs (non-Gavi LMICs)	\$1,811-\$4,465	26	No Gavi support****
Upper-middle-income countries (UMICs)	\$4,466-\$13,845	53	No Gavi support
High-income countries (HICs)	> \$13,845	59	No Gavi support

\*Niue and Cook Islands are not classified by the World Bank and are not eligible for Gavi support. Venezuela is categorized as upper-middle-income based on their last WB classification.

\*\*Based on World Bank's analytical classification for the FY2024 based on 2022 income data of GNI per capita in US\$.

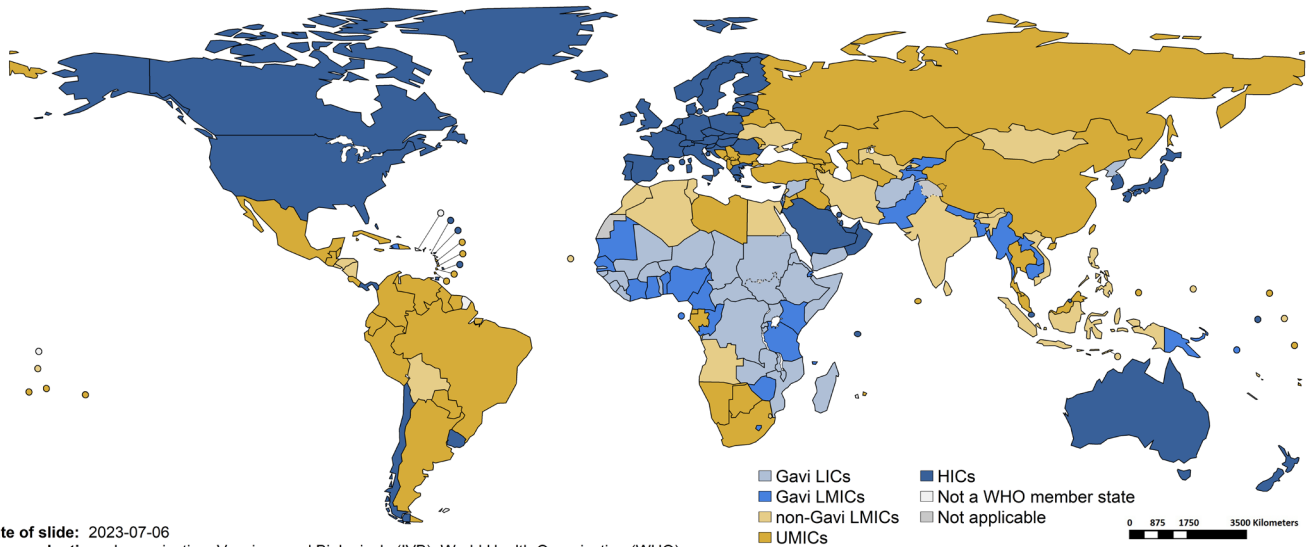
\*\*\*Countries in accelerated transition have a GNI per capita greater than USD \$1,660 but for less than 3 years.

\*\*\*\*Not eligible for Gavi support but may be eligible for catalytic, time-limited support during Gavi 5.0/5.1 through the Gavi MICs Approach.

<sup>1</sup> In 2024, 79 countries were non-Gavi-eligible MICs, with 53 upper-middle-income countries and 26 lower-middle income countries.

<sup>2</sup> Former Gavi-eligible countries and never Gavi-eligible countries with a GNI per capita of US\$4,000—or countries that are recipients of World Bank International Development Association loans—could also benefit from the Gavi MICs Approach.

**Figure 1. Overview of countries based on Gavi eligibility and income group**



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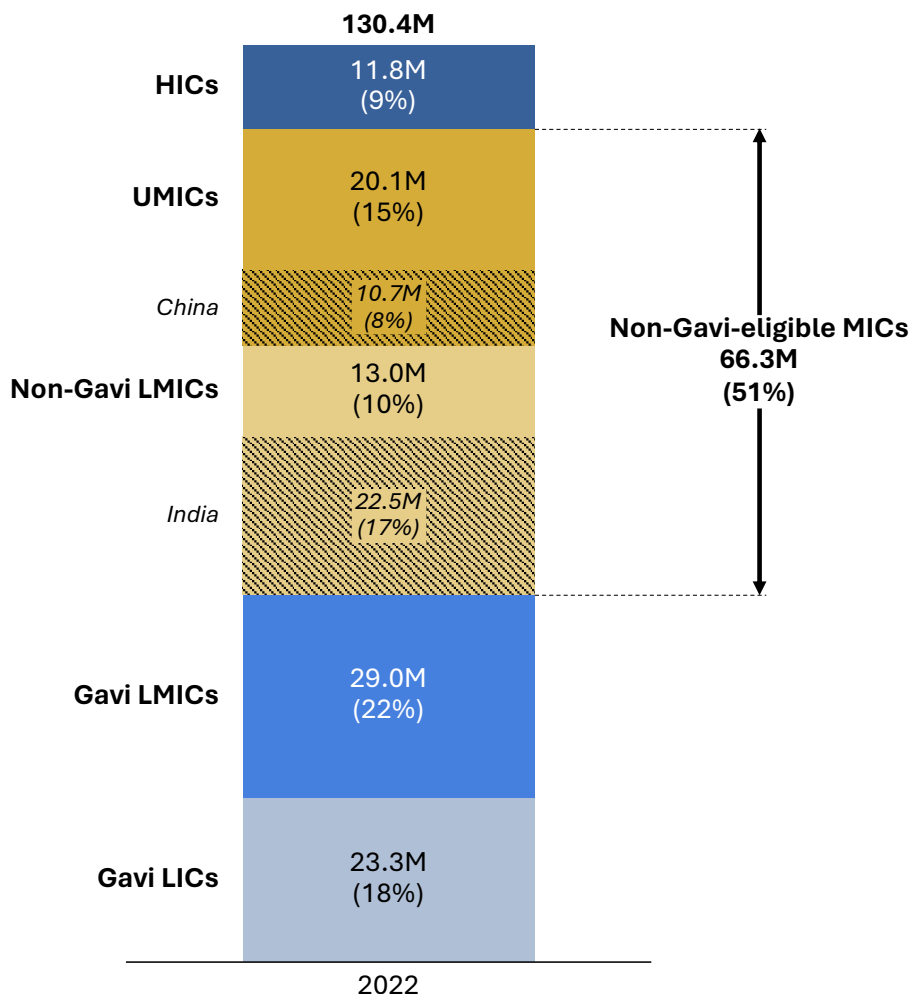
Map production: Immunization, Vaccines and Biologicals (IVB), World Health Organization (WHO)

**Disclaimer:**

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area nor of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. World Health Organization, WHO, 2023. All rights reserved



**Figure 2. Number and proportion of the global surviving infant population represented in each country group out of 130 million surviving children globally (2022)**



Data Source: UN Population Division's World Population Prospects 2022

## Strategic roadmap

Based on requests from the World Health Assembly and SAGE, WHO convened a Middle-Income Country Task Force in 2014 to understand obstacles and develop a strategy [6]. The Task Force assessed immunization performance and highlighted in a 2015 white paper that strategic efforts to support non-Gavi-eligible MICs should focus on four bottlenecks:

1. Decision-making,
2. Demand for and equitable delivery,
3. Sustainable financing, and
4. Access to sustainable and affordable supply

In 2020, the World Health Assembly endorsed the Immunization Agenda 2030 (IA2030), the 2021–2030 global strategy that envisions a world where everyone, everywhere, at every age, fully benefits from vaccines. A Working Group on MICs was established to identify risks and opportunities and ensure partner dialogue to derive solutions [7].

**This brief shows a selection of indicators from the IA2030 Framework for Action. To view all data by income group, visit the IA2030 scorecard website. For each indicator page, users can filter by World Bank income group.**

[Scorecard.ImmunizationAgenda2030.org](https://scorecard.immunizationagenda2030.org)



A screenshot of the 'IA2030 Scorecard — Global' website. The page has a dark blue header with navigation tabs: 'Overview' (selected), 'Impact Goals', 'Strategic Priorities', and 'Country Pages'. Below the header, there are language options for 'English' and 'Français'. The main heading reads 'Immunization Agenda 2030 Scorecard OVERVIEW DASHBOARD'. A 'Share this page' button is visible. The main content area is titled 'IMPACT GOAL INDICATORS — GLOBAL' and contains introductory text about the IA2030 Framework for Action and its three impact goals: Prevent Disease, Promote Equity, and Build Strong Programmes. It mentions that global progress will be measured by seven indicators and invites users to click on any indicator for more detail.

## II. IMMUNIZATION PERFORMANCE

While Gavi-eligible countries have a greater share of vaccine-preventable mortality, an analysis shows that by introducing and increasing coverage of IA2030-recommended vaccines, 200,000 lives can be saved each year in non-Gavi-eligible MICs [3]. Further, with growing internal inequity within many MICs, improving coverage will abate the risk of outbreaks that are increasingly threatening regional and global health and stability. The charts below highlight the marked disparities that must be addressed.

The breadth of protection\* for non-Gavi-eligible MICs stands at

**75%**

which means a quarter of all children born in these countries (17 million annually) remain unprotected against deadly and preventable diseases.

\*Breadth of protection is the average across a dozen WHO recommended antigens (SP 4.1 of IA2030 measure)

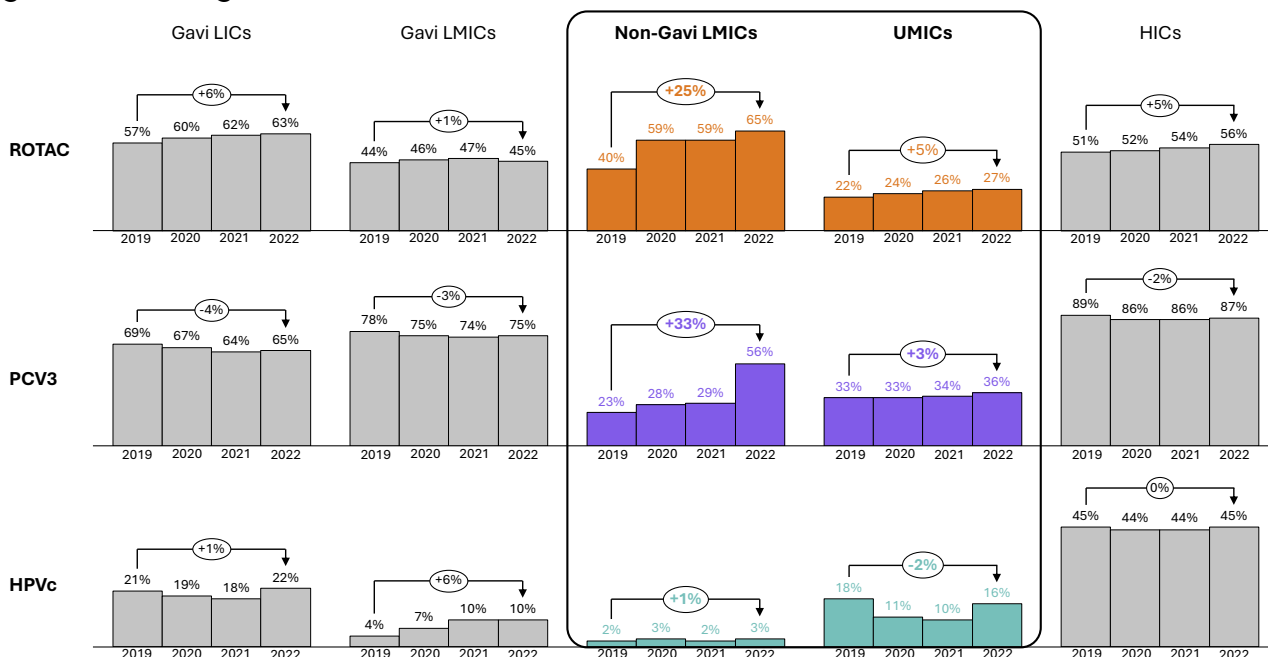
### Coverage of underutilized vaccines

Access to human papillomavirus (HPV), pneumococcal conjugate (PCV3), and rotavirus (ROTAC) vaccines remain much lower in non-Gavi-eligible MICs when compared to eligible MICs. These three immunizations are critical for averting death across the life span.

- While 81% and 93% of Gavi-eligible low- and middle-income countries, respectively, had introduced PCV, **fewer than 70% of non-Gavi-eligible MICs had introduced PCV.**
- The **rotavirus vaccine introduction gap in non-Gavi-eligible MICs is double that seen in Gavi-eligible countries.** 43% percent of UMICs and 46% of non-Gavi-eligible lower-middle-income countries (LMICs) have yet to introduce rotavirus vaccine, whereas only 21% of Gavi-eligible LMICs and 23% of low-income countries (LICs) have not introduced in 2022.
- While HPV introductions have gained momentum in UMICs, with about 70% of such countries having the vaccine in their national immunization program, coverage remains very low (see Figure 3). Meanwhile, about 40% of Gavi-eligible countries have introduced HPV, while **just 31% of non-Gavi-eligible LMICs have introduced the HPV vaccine.**

As seen in Figure 3, coverage of these three vaccines is generally lowest in non-Gavi-eligible MICs. For example, coverage of rotavirus vaccine and PCV3 in UMICs is substantially lower than coverage in LICs: 36% percentage points lower for rotavirus and 29% percentage points lower for PCV3. Coverage for rotavirus and PCV3 in non-Gavi-eligible LMICs has increased due to India's phased introductions, which reached 92% and 66% coverage in 2022 for the two vaccines, respectively. Despite increasing HPV vaccine introductions discussed above, HPV vaccine coverage across all MICs is very low relative to the 90% target and is lower than 5% in non-Gavi-eligible LMICs. Overall, we could save more than 136,000 lives every year in non-Gavi-eligible LMICs and UMICs if countries were able to introduce and attain targeted coverage for HPV, PCV, and rotavirus vaccines.

**Figure 3. Coverage for rotavirus, PCV3, and HPVc vaccines**

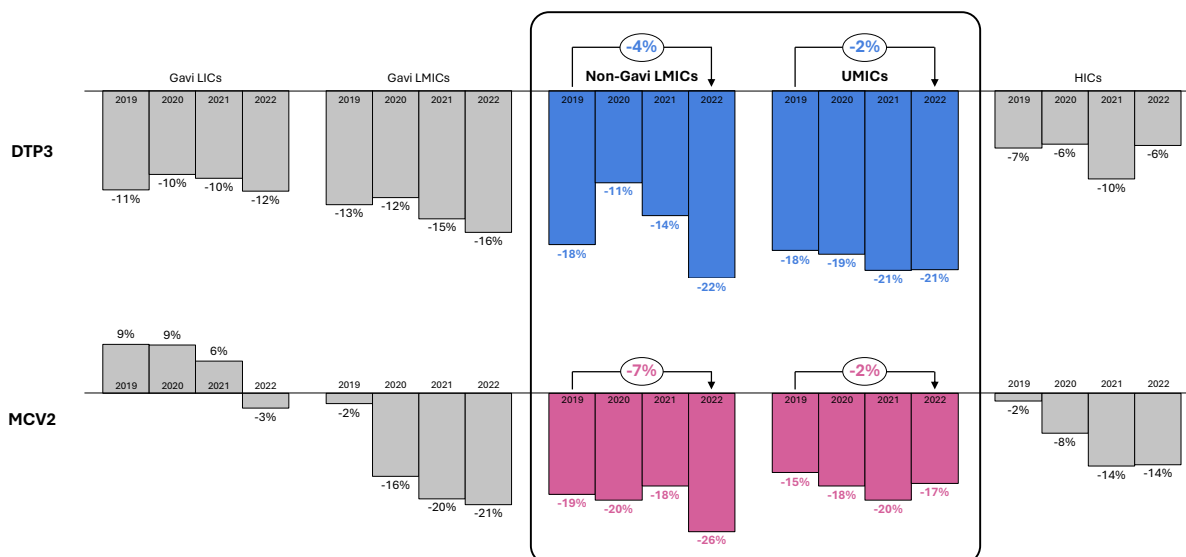


Data Source: WHO/UNICEF Estimates of National Immunization Coverage (WUENIC), WHO/UNICEF HPV Estimates

## Equity

In non-Gavi-eligible MICs, already high inequity in subnational vaccine coverage worsened during the pandemic. As seen in Figure 4, non-Gavi-eligible MICs reported administrative coverage estimates for DTP3 that was 21-22 percentage points less in lower-performing districts than the national administrative coverage estimates in 2022. For measles, second dose (MCV2), the non-Gavi-eligible MICs reported coverage estimates in the lowest performing quintile of administrative districts to be 17-26 percentage points lower than the national coverage estimates in 2022. For non-Gavi-eligible LMICs, this disparity was much worse than the gap seen in Gavi-eligible countries. These gaps are masked by improvements in national vaccination coverage, which indicate recovery from the pandemic. As such, these countries are much more vulnerable to measles and other disease outbreaks than their national coverage values would indicate.

**Figure 4. The equity gap – DTP3 and MCV2 district-level administrative coverage in the lowest-performing quintile compared to national administrative coverage estimates**

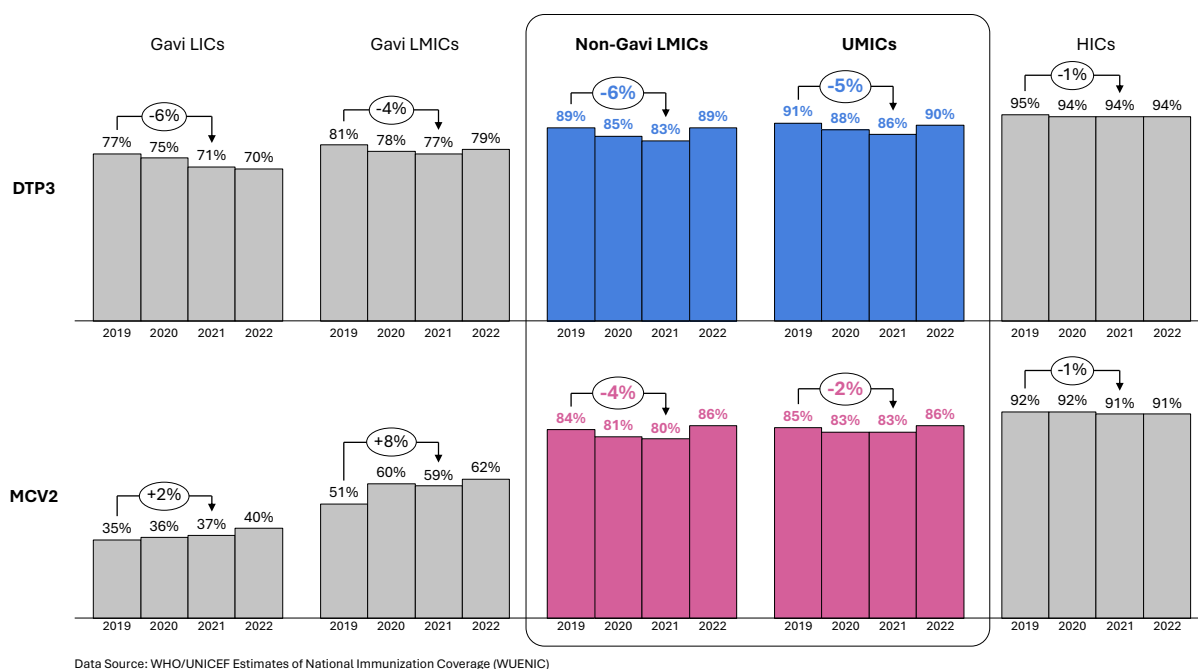


Data Source: WHO/UNICEF Estimates of National Immunization Coverage (WUENIC), WHO/UNICEF Joint Reporting Form on Immunization (JRF)

## Coverage measures of pandemic backsliding

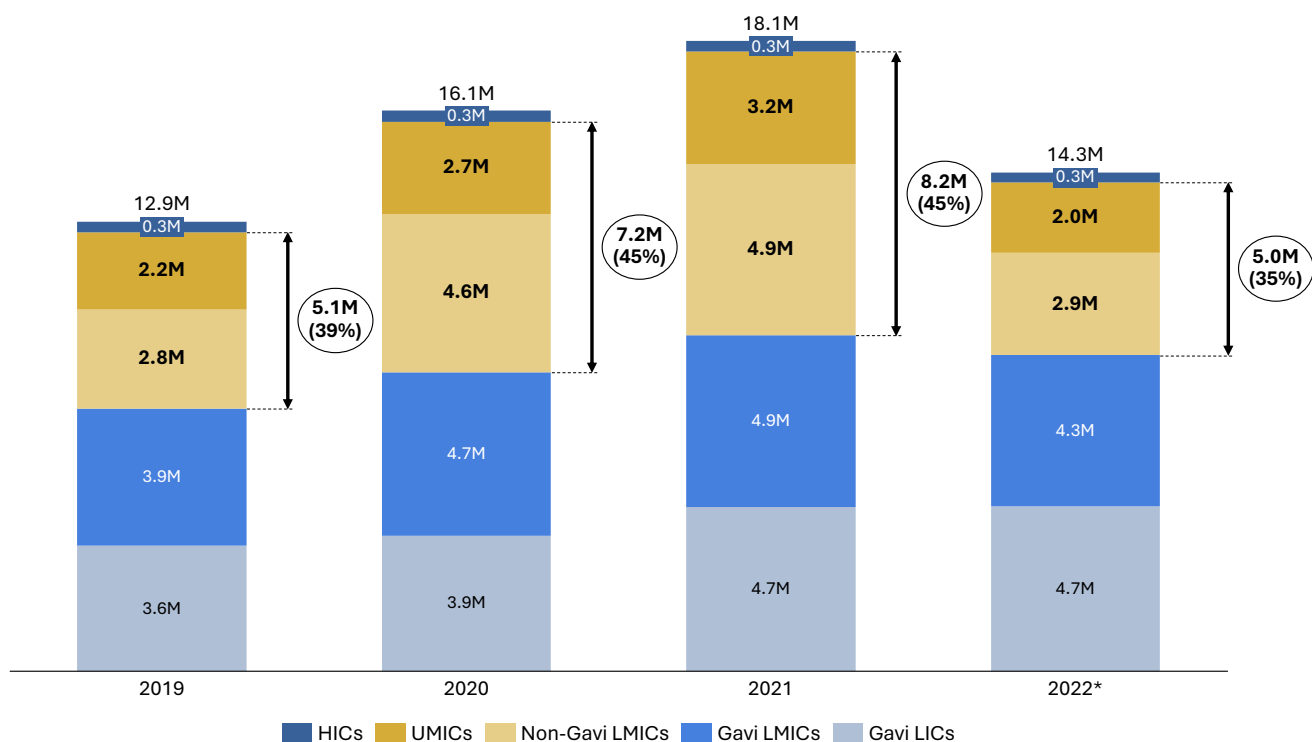
During the COVID-19 pandemic, non-Gavi-eligible MICs experienced significant backsliding in vaccine coverage when compared with other country groups. DTP3 coverage, a bellwether for immunization service reach, dropped between 2019 and 2021 in non-Gavi-eligible countries as much as or more than in Gavi-eligible countries, with non-Gavi-eligible LMICs dropping from 89% coverage in 2019 to 83% coverage in 2021 and UMICs dropping from 91% in 2019 to 86% in 2021. Coverage of MCV2 also decreased substantially by 4% in non-Gavi-eligible LMICs and by 2% in UMICs during the same time, while Gavi-eligible LMICs achieved an increase of 8% in MCV2 coverage from 2019 to 2022. Coverage of both DTP3 and MCV2 recovered in 2022 (see Figure 5). Yet pandemic-related system strains exacerbated inequity, as seen above.

**Figure 5. Vaccine coverage for DTP3 and MCV2, 2019-2022**



In 2022, nearly 5 million zero-dose children, or 35% of all such underserved children globally, were living in non-Gavi-eligible MICs (Figure 6). While the number of zero-dose children in non-Gavi-eligible MICs has decreased slightly since 2019 (from 5.1 million in 2019 to 5 million in 2022), more efforts are needed to sustainably improve the ability of immunization systems to reach children in vulnerable communities.

**Figure 6. Number of zero-dose children by income group from 2019-2022**



Data Source: WHO/UNICEF Estimates of National Immunization Coverage (WUENIC) and UNPD population estimates

\*In 2022, China (UMIC) had 107,000 zero-dose children while India (non-Gavi-eligible LMIC) had 1.1 million zero-dose children.

## Control of vaccine-preventable disease

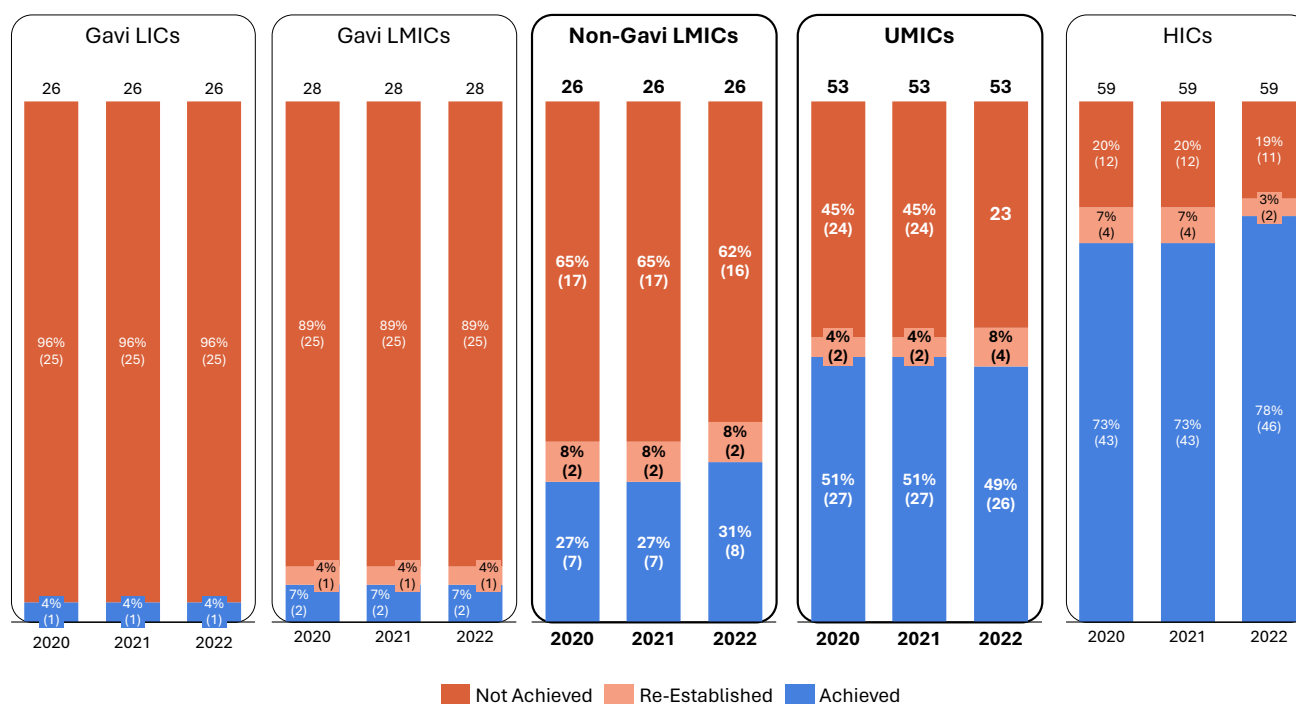
Disruptions in vaccine coverage described above will negatively affect disease control efforts and the number of lives that can be saved through immunization worldwide. Current performance measures for non-Gavi-eligible MICs in disease control efforts are concerning, particularly for measles.

### Eliminating disease

One great risk of lowered vaccine coverage is measles outbreaks and backsliding in achieving measles elimination. Progress toward achieving, maintaining, and regaining measles elimination targets has stalled. Figure 7 shows that fewer than half of non-Gavi-eligible MICs have eliminated measles transmission. Further, disease control efforts in non-Gavi-eligible MICs are trending in the wrong direction: In 2022, just one non-Gavi-eligible LMIC attained measles elimination, while two UMICs had their measles control status changed to "re-established", signaling that the disease was again transmitting endemically after being eliminated.



**Figure 7. Progress towards measles elimination, 2020-2022**



Data Source: Verification, certification, and disease-specific committee reports

Unsurprisingly, low- and middle-income countries have seen an increase in large or disruptive outbreaks of measles in recent years. Achieving and maintaining measles elimination is challenging and requires high, uniform immunization coverage, robust surveillance, and rapid outbreak response.

### III. ASSESSING BOTTLENECKS

While they are a heterogeneous group of countries, non-Gavi-eligible MICs represent a large share of un- and under-protected children because they generally face key bottlenecks in:

1. Decision-making,
2. Poor demand and underperforming services,
3. Financial sustainability, and
4. Affordable access to supplies.

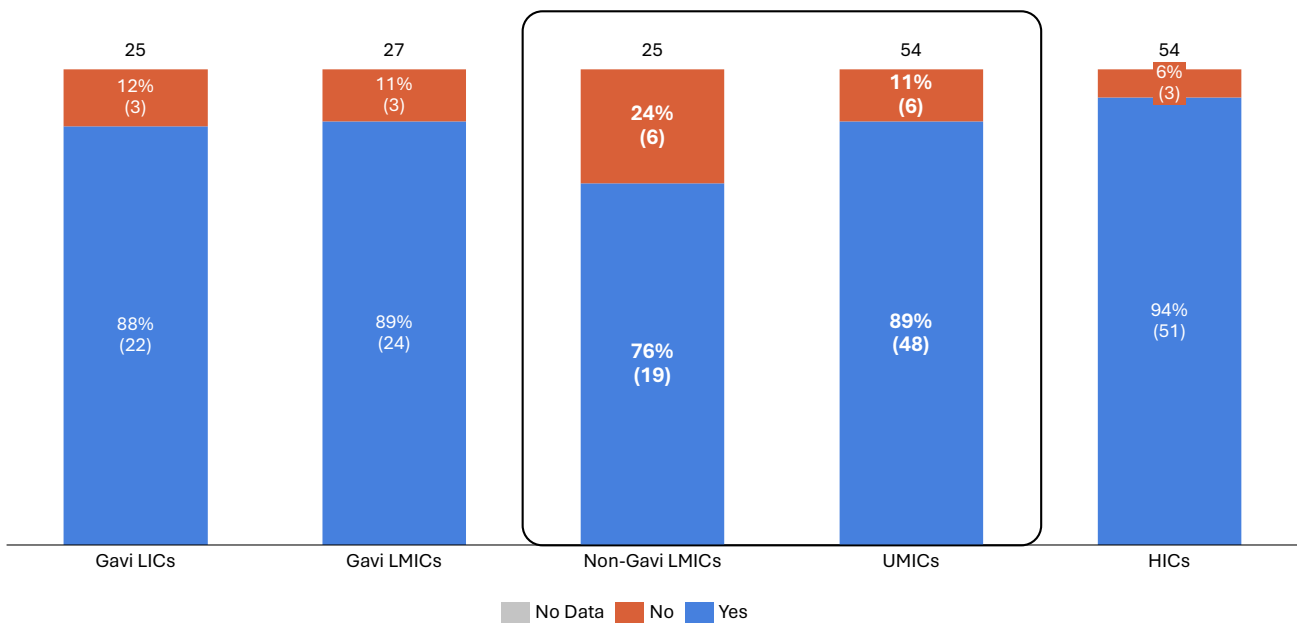
These four factors, highlighted by the SAGE Task Force on MICs in 2015, remain critically important to focus attention and efforts to bolster immunization systems in MICs. Key measures encompassed by the IA2030 Strategic Priorities show how countries were addressing bottlenecks in 2022.

## 1. Decision-making

It is important to monitor and understand country-level decision-making processes that lead to an increase in coverage or the introduction of a vaccine. Tailored support can facilitate country-owned adaptation of international recommendations and strong advocacy cases to secure sufficient domestic resources for sustainable programs. Immunization partners have agreed that National Immunization Technical Advisory Groups (NITAGs) are important structures of the decision-making process, while recognizing that NITAGs are not always sufficient for sound decision-making [3].

As shown in Figure 8, non-Gavi-eligible LMICs are less likely to have functional NITAGs than other country groups. This likely hinders their ability to efficiently make evidence-based decisions about key policies, such as new vaccine introductions. Other elements, such as regulatory requirements and procurement and distribution practices, may also serve as significant hurdles for decision-making.

**Figure 8. Proportion of countries with functional NITAGs by country group in 2022**

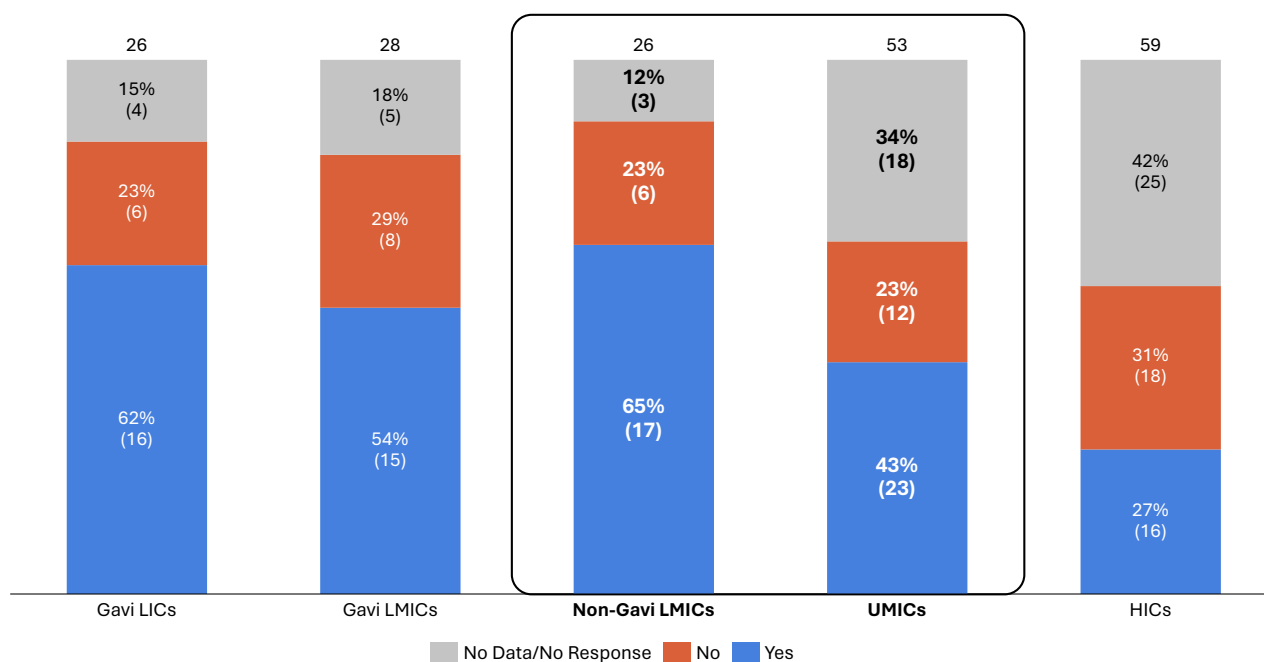


Data Source: WHO/UNICEF Joint Reporting Form on Immunization (JRF)

## 2. Demand for and equitable delivery

To achieve and maintain high uptake, the vaccine community needs to sustain confidence in vaccines and their benefits among the public as well as health providers. Higher health workforce density is positively associated with improved vaccine coverage rates. MICs in the African region have low workforce density, affecting immunization coverage and performance. Vaccine hesitancy, which refers to a delay in acceptance or refusal of vaccines despite the availability of vaccination services, has been identified as an area of concern for many years. Decision-makers seeking to address demand hesitancy often use socio-behavioural strategies [6]. Yet in 2022, fewer than half of UMICs reported having socio-behavioural strategies to address under-vaccination and strengthen demand—far less than in Gavi-eligible countries.

**Figure 9. Proportion of countries that have implemented behavioural or social strategies (i.e., demand generation strategies) to address under-vaccination in 2022**



Data Source: WHO/UNICEF Joint Reporting Form on Immunization (JRF)

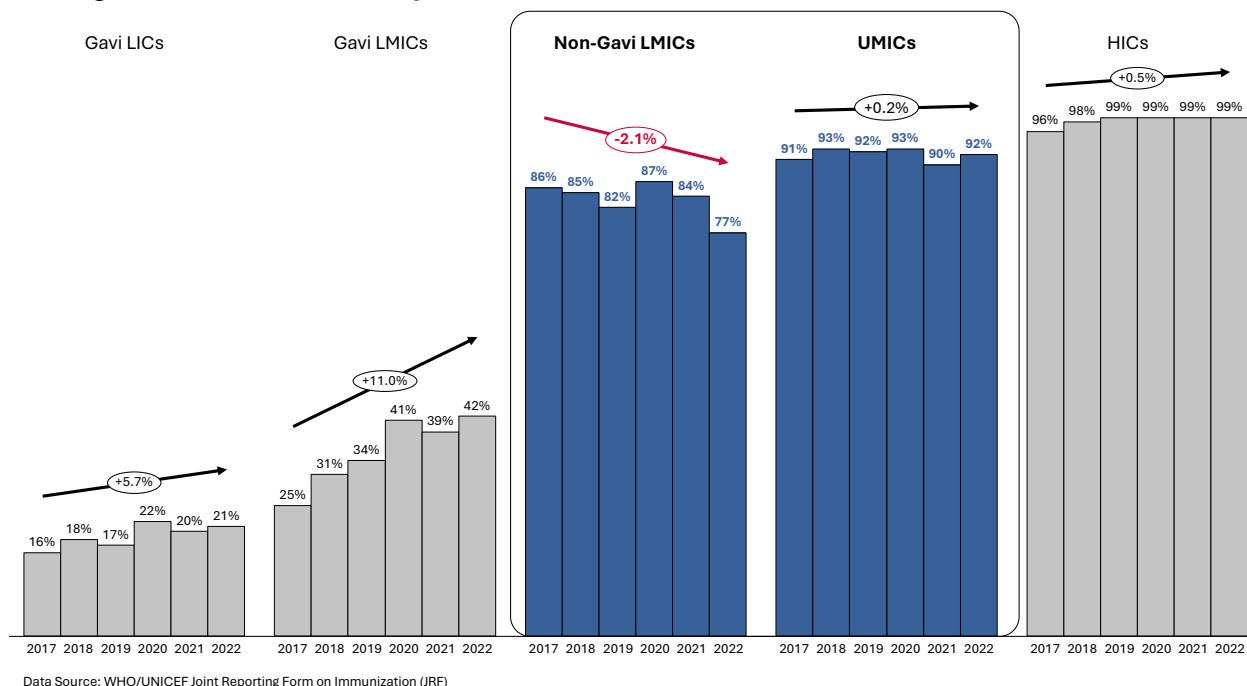
### 3. Sustainable financing

Non-Gavi-eligible MICs should rely increasingly or primarily on domestic public resources to purchase vaccines and fund services for the routine schedule. Inadequate public financing and inefficient use of available resources may limit both vaccine introduction and coverage. During the Global Vaccine Action Plan (GVAP), countries were encouraged to have standard budget line items for vaccines and immunization programs in their national or health sector budgets. [6] This monitoring approach has been revisited under IA2030 with a focus on the share of routine immunization vaccine expenditure paid with public resources. Financing immunization sustainably requires political commitment and prioritization of government budgets on health and immunization, including investments in health systems.

Data shows that non-Gavi-eligible LMICs are relying more on aid for vaccines used in routine schedules (excluding COVID-19) than before. While Figure 10 implies a decline in financial sustainability, a country-by-country analysis shows that such declines may occur when governments in non-Gavi-eligible LMICs de-prioritize immunization in their health budgets or when overall health budgets are reduced. A drop in domestic spending on vaccines used in routine immunization (e.g., excluding COVID-19 vaccines) may also be caused by temporary external support to introduce newer, higher-priced vaccines.

For governments to increase spending on immunization, the fiscal environment needs to be conducive to making additional investments. Compared to other country groups, we see that government spending on health in UMICs grew faster than GDP in pre-pandemic years (pandemic-related health spending increases do not reflect a sustainable commitment by governments), indicating favourable conditions for increasing the budget for vaccines. It is important to continue monitoring health spending growth compared to GDP in the post-pandemic era. It is a signal for opportunities to advocate for increased vaccine budgeting as needed, since overall increases in health spending should enable the strengthening of immunization services, including the introduction of new recommended vaccines.

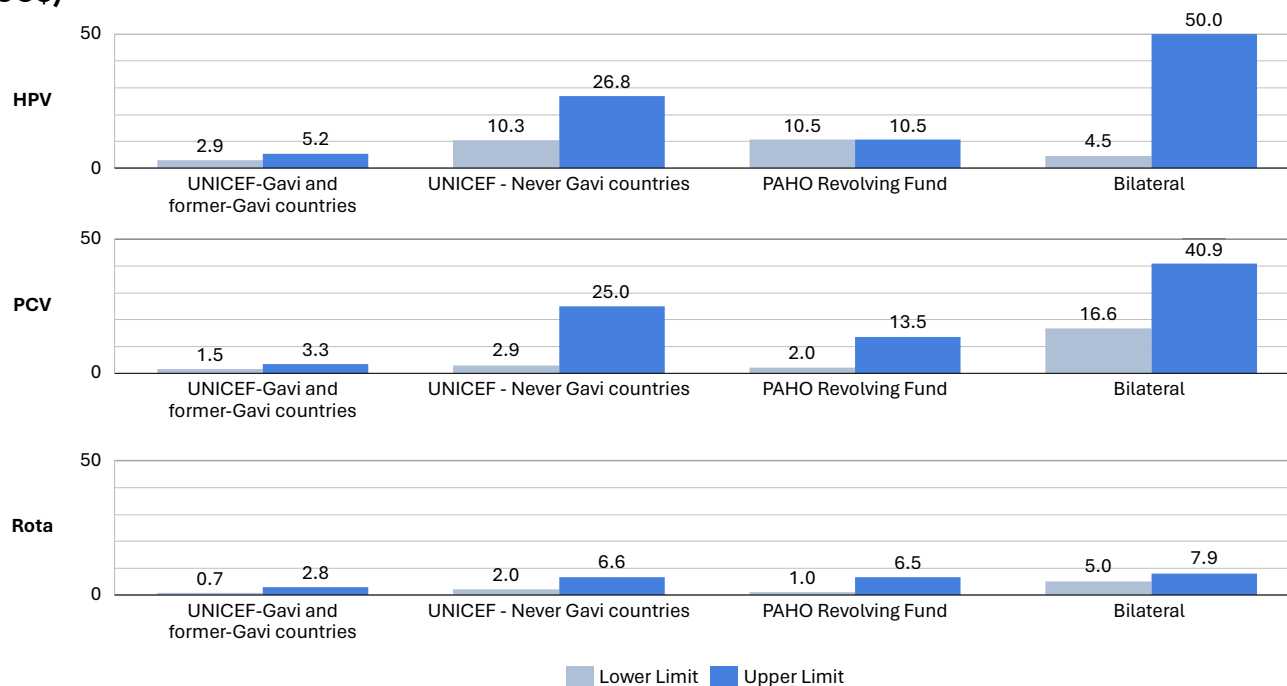
**Figure 10. Percentage of total expenditure on vaccines used in routine immunization (e.g., excluding COVID-19 vaccines) paid with domestic resources from 2017-2022**



## 4. Affordable supply

A key barrier to introducing new vaccines and even increasing coverage is the lack of an affordable and sustainable supply of vaccine products. Today, global supply can generally meet demand in quantity, with some challenges remaining for HPV and cholera vaccines. However, there is a need for more transparency and harmonization around pricing for MICs. As seen in Figure 11, the price offered to MICs ranges considerably. For instance, HPV vaccines range from US\$2.90–5.20 for Gavi-eligible and former Gavi-eligible countries up to US\$50 for bilaterally negotiated prices. An even starker contrast can be found in the bilaterally negotiated price of PCV for MICs, which can be 12 times higher (US\$41) than the upper-limit price offered for Gavi-eligible countries and former-Gavi-eligible countries (US\$3.30). Consequently, increasing coverage of HPV, PCV, and rotavirus vaccines to 90% by 2030 would require countries to increase their current vaccine budgets by 50–100% if current product choices and prices are maintained. Lower-cost products are often underutilized in non-Gavi-eligible MICs, even though they could significantly reduce government spending per dose.

**Figure 11. Price per dose per procurement channel for HPV, PCV, and rotavirus vaccines (US\$)**



Data Source: Gavi DPP, UNICEF, PAHO Revolving Fund, WHO MI4A (incomplete data set, self reported by countries), WHO Immunization Expenditure Data

Note: Bilateral procurement defined as all countries procuring directly from the supplier (outside of UNICEF SD and PAHO Revolving Fund).

## IV. EXTERNAL SUPPORT FOR MIDDLE-INCOME COUNTRIES

Since the SAGE Task Force issued a call for action to support MICs in 2015, regional and global leaders have stepped up to provide substantially more targeted support to address the four key bottlenecks. A new landscaping assessment was conducted to capture immunization support efforts between 2015–2023 in MICs. We collected responses via an online questionnaire and key informant interviews, while also reviewing gray and formal literature. The assessment captured almost 150 efforts supporting MICs in immunization, including over 100 regional and multi-country initiatives with activities in non-Gavi-eligible MICs, as defined by each country's income – in 2022.<sup>3</sup> The analysis of the efforts was framed around the four main bottlenecks.

<sup>3</sup> The 2023 assessment involved a similar methodology to the first landscaping exercise, including an online questionnaire and in-depth interviews with global and regional representatives of health agencies, technical partners, and funders. Due to limited responses from the WHO Western Pacific Region, such regional efforts may be under-represented.

In addition to Gavi's MICs Approach, the Gavi 6.0 strategy may aim to better support former and never Gavi-eligible countries and influence immunization programs. Regional and multi-country initiatives focused on Gavi-eligible and non-Gavi-eligible MICs addressed all four bottlenecks.

The current landscaping study found many more initiatives supporting country-level decision-making, when compared with a similar landscaping effort in 2015 [6]. The number of efforts focused on decision-making increased from 15 to over 100. By contrast, a smaller increase, from 20 to 60, was observed in the number of initiatives providing sustainable financing support.

Decision-making initiatives typically emphasized technical support<sup>4</sup> and learning and cooperation<sup>5</sup>, such as convening experts, engaging stakeholders, and fostering peer-to-peer learning, as in the LINKED project and UNICEF's Vaccine Procurement Practitioners Network [6]. Initiatives directed at equitable demand, such as those addressing hesitancy, projects focusing on affordable supply, and activities like improving procurement capacity or assessing market dynamics, had a high number of function and programming activities documented.<sup>6</sup> Activities addressed under the equitable demand bottleneck often emphasized increasing vaccine confidence, program integration, and supply and procurement, as in Project Last Mile [7]. Function and programming activities under the affordable supply bottleneck comprised mainly procurement and supply chain management support. UNICEF Supply Division MICs Financing Facility is allowing MICs to access advance payment for their vaccine orders and should also facilitate special contracting with suppliers. WHO Market Information for Access to Vaccines aims to foster vaccine price transparency for self-procuring countries. Fewer initiatives implemented activities aimed at improving sustainable financing.

Global and regional participants interviewed for the landscaping study highlighted diverse, cross-cutting challenges that range from domestic and international in scope:

- **Affordability:** Poor price transparency and comparability, coupled with the inability to leverage pre-pay price bundling in demand pooling, creates unfavourable market conditions for investment among MICs.
- **Human, resource, and technical capacity gaps:** Shortfalls in financial, human, and technical resources dampen the promise of action concerning investments, implementation, and monitoring. GNI-based eligibility for support and transition does not account for broader health system capacity to fully support immunization needs.
- **Pandemic-related changes in vaccine demand:** Immunization complacency and fatigue on the part of governmental stakeholders as well as populations have affected acceptance and demand, and many participants were concerned about further backsliding.
- **Outbreak threats:** MICs need more support on outbreak response and preparedness for global health risks.
- **Verticalization of programming:** This affects the sustainability of gains and investments, yet a change would require systemic transformation.

Overall, participants emphasized that MICs are a heterogeneous group of countries, and country and regional support should be tailored and country-driven to address contextual challenges.

<sup>4</sup> Technical support comprises of activities building and guiding technical capacity and implementation including tool or guideline development, capacity building workshops, or technical assistance.

<sup>5</sup> Learning and cooperation activities included efforts designed to facilitate peer-to-peer learning, convening for cross-sharing, elements of cooperation, and community engagement.

<sup>6</sup> Function and programming activities is defined as technical support and learning and cooperation.

## V. CONCLUSION

In non-Gavi-eligible MICs, 5 million children received no vaccines at all in 2022, and tens of millions of under-immunized children and adolescents lack critical protection against diseases like measles, pneumonia, rotavirus, and cervical cancer. Inequitable access to vaccines in non-Gavi-eligible MICs highlights the potential for further disease outbreaks. Such challenges will require strategic, coordinated, and country-tailored approaches to redress. Nearly a decade ago, SAGE highlighted four bottlenecks which today remain consistently present across many non-Gavi-eligible MICs: decision-making, financial sustainability, poor demand and underperforming services, and affordable access to supplies. One bright spot today is more government spending on health in UMICs, which could lead to greater resourcing for vaccines. Increasing the use of lower-cost products could also considerably improve the cost-effectiveness of national vaccine programs.

Despite the persistence of bottlenecks, a landscaping analysis found diverse sources of technical guidance, learning activities, programming support, and strategic monitoring and information available for MICs. It also found a substantial increase in support for country-led vaccine decision-making across non-Gavi-eligible MICs. Further coordination between initiatives may improve efficiencies and help close continued resourcing gaps. Performance disparities between country groups also show a need to better account for equity and vulnerability measures in aid allocations for strengthening institutions. In addition, countries should continue efforts toward integrating immunization with primary health care. In summary, concerted action is urgently needed to address the persistent challenges facing non-Gavi-eligible MICs to bolster health systems and safeguarding the well-being of millions of under-protected children worldwide.

Future IA2030 analyses related to middle-income countries will dive into more detail on each of the bottlenecks as well as explore country-level data to reflect the large differences within country groups and variations in challenges.

## About this brief:

**Unequal Access to Immunization in Middle-Income Countries. Immunization Agenda 2030: In-Depth Review** was developed by the Immunization Agenda 2030 (IA2030) Working Group on Middle-Income Countries, co-led by Nathalie Vande Maele (WHO) and Blandine Bourgoin (Clinton Health Access Initiative), with support from Shahira Malm (UNICEF), Cosima Lenz, and the IA2030 Scorecard team, including Rose Weeks, Christine Liang, and Carolyn Inae Kim.

The IA2030 Scorecard visualizes the monitoring and evaluation indicators of the [IA2030 Framework for Action](#) endorsed in 2020 by the World Health Assembly with the support of countries and partners. The scorecard is a collaborative effort coordinated by USAID MOMENTUM Country and Global Leadership, in partnership with representatives from the IA2030 Monitoring & Evaluation Working Group and IA2030 Communication and Advocacy Working Group, including specialists from the World Health Organization, U.S. Centers for Disease Control and Prevention, UNICEF, International Vaccine Access Center (IVAC), and UN Foundation.

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## Appendix A

Income Classification (FY2024 using 2022 income data) and Gavi Eligibility (2024) for 194 WHO Member States

Country ISO3	Country Name	Income Classification (2022 GNI per capita US\$)	Gavi Eligibility (2024)	MIC Brief Income Classification
AFG	Afghanistan	Low income	Eligible	LICs
AGO	Angola	Lower middle income	Not eligible	non-Gavi LMIC
ALB	Albania	Upper middle income	Not eligible	UMICs
AND	Andorra	High income	Not eligible	HICs
ARE	United Arab Emirates	High income	Not eligible	HICs
ARG	Argentina	Upper middle income	Not eligible	UMICs
ARM	Armenia	Upper middle income	Not eligible	UMICs
ATG	Antigua and Barbuda	High income	Not eligible	HICs
AUS	Australia	High income	Not eligible	HICs
AUT	Austria	High income	Not eligible	HICs
AZE	Azerbaijan	Upper middle income	Not eligible	UMICs
BDI	Burundi	Low income	Eligible	LICs
BEL	Belgium	High income	Not eligible	HICs
BEN	Benin	Lower middle income	Eligible	Gavi LMICs
BFA	Burkina Faso	Low income	Eligible	LICs
BGD	Bangladesh	Lower middle income	Eligible	Gavi LMICs
BGR	Bulgaria	Upper middle income	Not eligible	UMICs
BHR	Bahrain	High income	Not eligible	HICs
BHS	Bahamas	High income	Not eligible	HICs
BIH	Bosnia and Herzegovina	Upper middle income	Not eligible	UMICs
BLR	Belarus	Upper middle income	Not eligible	UMICs
BLZ	Belize	Upper middle income	Not eligible	UMICs
BOL	Bolivia (Plurinational State of)	Lower middle income	Not eligible	non-Gavi LMICs
BRA	Brazil	Upper middle income	Not eligible	UMICs
BRB	Barbados	High income	Not eligible	HICs
BRN	Brunei Darussalam	High income	Not eligible	HICs
BTN	Bhutan	Lower middle income	Not eligible	non-Gavi LMICs
BWA	Botswana	Upper middle income	Not eligible	UMICs
CAF	Central African Republic	Low income	Eligible	LICs
CAN	Canada	High income	Not eligible	HICs
CHE	Switzerland	High income	Not eligible	HICs
CHL	Chile	High income	Not eligible	HICs
CHN	China	Upper middle income	Not eligible	UMICs
CIV	Côte d'Ivoire	Lower middle income	Eligible	Gavi LMICs
CMR	Cameroon	Lower middle income	Eligible	Gavi LMICs
COD	Democratic Republic of the Congo	Low income	Eligible	LICs
COG	Congo	Lower middle income	Eligible	Gavi LMICs
COK	Cook Islands	Uncategorized	Not eligible	Uncategorized

Country ISO3	Country Name	Income Classification (2022 GNI per capita US\$)	Gavi Eligibility (2024)	MIC Brief Income Classification
COL	Colombia	Upper middle income	Not eligible	UMICs
COM	Comoros	Lower middle income	Eligible	Gavi LMICs
CPV	Cabo Verde	Lower middle income	Not eligible	non-Gavi LMICs
CRI	Costa Rica	Upper middle income	Not eligible	UMICs
CUB	Cuba	Upper middle income	Not eligible	UMICs
CYP	Cyprus	High income	Not eligible	HICs
CZE	Czechia	High income	Not eligible	HICs
DEU	Germany	High income	Not eligible	HICs
DJI	Djibouti	Lower middle income	Eligible	Gavi LMICs
DMA	Dominica	Upper middle income	Not eligible	UMICs
DNK	Denmark	High income	Not eligible	HICs
DOM	Dominican Republic	Upper middle income	Not eligible	UMICs
DZA	Algeria	Lower middle income	Not eligible	non-Gavi LMICs
ECU	Ecuador	Upper middle income	Not eligible	UMICs
EGY	Egypt	Lower middle income	Not eligible	non-Gavi LMICs
ERI	Eritrea	Low income	Eligible	LICs
ESP	Spain	High income	Not eligible	HICs
EST	Estonia	High income	Not eligible	HICs
ETH	Ethiopia	Low income	Eligible	LICs
FIN	Finland	High income	Not eligible	HICs
FJI	Fiji	Upper middle income	Not eligible	UMICs
FRA	France	High income	Not eligible	HICs
FSM	Micronesia (Federated States of)	Lower middle income	Not eligible	non-Gavi LMICs
GAB	Gabon	Upper middle income	Not eligible	UMICs
GBR	United Kingdom of Great Britain and Northern Ireland	High income	Not eligible	HICs
GEO	Georgia	Upper middle income	Not eligible	UMICs
GHA	Ghana	Lower middle income	Eligible	Gavi LMICs
GIN	Guinea	Lower middle income	Eligible	Gavi LMICs
GMB	Gambia	Low income	Eligible	LICs
GNB	Guinea-Bissau	Low income	Eligible	LICs
GNQ	Equatorial Guinea	Upper middle income	Not eligible	UMICs
GRC	Greece	High income	Not eligible	HICs
GRD	Grenada	Upper middle income	Not eligible	UMICs
GTM	Guatemala	Upper middle income	Not eligible	UMICs
GUY	Guyana	High income	Not eligible	HICs
HND	Honduras	Lower middle income	Not eligible	non-Gavi LMICs
HRV	Croatia	High income	Not eligible	HICs
HTI	Haiti	Lower middle income	Eligible	Gavi LMICs
HUN	Hungary	High income	Not eligible	HICs
IDN	Indonesia	Upper middle income	Not eligible	UMICs
IND	India	Lower middle income	Not eligible	non-Gavi LMICs
IRL	Ireland	High income	Not eligible	HICs

Country ISO3	Country Name	Income Classification (2022 GNI per capita US\$)	Gavi Eligibility (2024)	MIC Brief Income Classification
IRN	Iran (Islamic Republic of)	Lower middle income	Not eligible	non-Gavi LMICs
IRQ	Iraq	Upper middle income	Not eligible	UMICs
ISL	Iceland	High income	Not eligible	HICs
ITA	Italy	High income	Not eligible	HICs
JAM	Jamaica	Upper middle income	Not eligible	UMICs
JOR	Jordan	Lower middle income	Not eligible	non-Gavi LMICs
JPN	Japan	High income	Not eligible	HICs
KAZ	Kazakhstan	Upper middle income	Not eligible	UMICs
KEN	Kenya	Lower middle income	Eligible	Gavi LMICs
KGZ	Kyrgyzstan	Lower middle income	Eligible	Gavi LMICs
KHM	Cambodia	Lower middle income	Eligible	Gavi LMICs
KIR	Kiribati	Lower middle income	Not eligible	non-Gavi LMICs
KNA	Saint Kitts and Nevis	High income	Not eligible	HICs
KOR	Republic of Korea	High income	Not eligible	HICs
KWT	Kuwait	High income	Not eligible	HICs
LAO	Lao People's Democratic Republic	Lower middle income	Eligible	Gavi LMICs
LBN	Lebanon	Lower middle income	Not eligible	non-Gavi LMICs
LBR	Liberia	Low income	Eligible	LICs
LBY	Libya	Upper middle income	Not eligible	UMICs
LCA	Saint Lucia	Upper middle income	Not eligible	UMICs
LKA	Sri Lanka	Lower middle income	Not eligible	non-Gavi LMICs
LSO	Lesotho	Lower middle income	Eligible	Gavi LMICs
LTU	Lithuania	High income	Not eligible	HICs
LUX	Luxembourg	High income	Not eligible	HICs
LVA	Latvia	High income	Not eligible	HICs
MAR	Morocco	Lower middle income	Not eligible	non-Gavi LMICs
MCO	Monaco	High income	Not eligible	HICs
MDA	Republic of Moldova	Upper middle income	Not eligible	UMICs
MDG	Madagascar	Low income	Eligible	LICs
MDV	Maldives	Upper middle income	Not eligible	UMICs
MEX	Mexico	Upper middle income	Not eligible	UMICs
MHL	Marshall Islands	Upper middle income	Not eligible	UMICs
MKD	North Macedonia	Upper middle income	Not eligible	UMICs
MLI	Mali	Low income	Eligible	LICs
MLT	Malta	High income	Not eligible	HICs
MMR	Myanmar	Lower middle income	Eligible	Gavi LMICs
MNE	Montenegro	Upper middle income	Not eligible	UMICs
MNG	Mongolia	Lower middle income	Not eligible	non-Gavi LMICs
MOZ	Mozambique	Low income	Eligible	LICs
MRT	Mauritania	Lower middle income	Eligible	Gavi LMICs
MUS	Mauritius	Upper middle income	Not eligible	UMICs
MWI	Malawi	Low income	Eligible	LICs
MYS	Malaysia	Upper middle income	Not eligible	UMICs
NAM	Namibia	Upper middle income	Not eligible	UMICs

Country ISO3	Country Name	Income Classification (2022 GNI per capita US\$)	Gavi Eligibility (2024)	MIC Brief Income Classification
NER	Niger	Low income	Eligible	LICs
NGA	Nigeria	Lower middle income	Eligible	Gavi LMICs
NIC	Nicaragua	Lower middle income	Not eligible	non-Gavi LMICs
NIU	Niue	Uncategorized	Not eligible	Uncategorized
NLD	Netherlands (Kingdom of the)	High income	Not eligible	HICs
NOR	Norway	High income	Not eligible	HICs
NPL	Nepal	Lower middle income	Eligible	Gavi LMICs
NRU	Nauru	High income	Not eligible	HICs
NZL	New Zealand	High income	Not eligible	HICs
OMN	Oman	High income	Not eligible	HICs
PAK	Pakistan	Lower middle income	Eligible	Gavi LMICs
PAN	Panama	High income	Not eligible	HICs
PER	Peru	Upper middle income	Not eligible	UMICs
PHL	Philippines	Lower middle income	Not eligible	non-Gavi LMICs
PLW	Palau	Upper middle income	Not eligible	UMICs
PNG	Papua New Guinea	Lower middle income	Eligible	Gavi LMICs
POL	Poland	High income	Not eligible	HICs
PRK	Democratic People's Republic of Korea	Low income	Eligible	LICs
PRT	Portugal	High income	Not eligible	HICs
PRY	Paraguay	Upper middle income	Not eligible	UMICs
QAT	Qatar	High income	Not eligible	HICs
ROU	Romania	High income	Not eligible	HICs
RUS	Russian Federation	Upper middle income	Not eligible	UMICs
RWA	Rwanda	Low income	Eligible	LICs
SAU	Saudi Arabia	High income	Not eligible	HICs
SDN	Sudan	Low income	Eligible	LICs
SEN	Senegal	Lower middle income	Eligible	Gavi LMICs
SGP	Singapore	High income	Not eligible	HICs
SLB	Solomon Islands	Lower middle income	Eligible	Gavi LMICs
SLE	Sierra Leone	Low income	Eligible	LICs
SLV	El Salvador	Upper middle income	Not eligible	UMICs
SMR	San Marino	High income	Not eligible	HICs
SOM	Somalia	Low income	Eligible	LICs
SRB	Serbia	Upper middle income	Not eligible	UMICs
SSD	South Sudan	Low income	Eligible	LICs
STP	Sao Tome and Principe	Lower middle income	Eligible	Gavi LMICs
SUR	Suriname	Upper middle income	Not eligible	UMICs
SVK	Slovakia	High income	Not eligible	HICs
SVN	Slovenia	High income	Not eligible	HICs
SWE	Sweden	High income	Not eligible	HICs
SWZ	Eswatini	Lower middle income	Not eligible	non-Gavi LMICs
SYC	Seychelles	High income	Not eligible	HICs
SYR	Syrian Arab Republic	Low income	Eligible	LICs
TCD	Chad	Low income	Eligible	LICs

Country ISO3	Country Name	Income Classification (2022 GNI per capita US\$)	Gavi Eligibility (2024)	MIC Brief Income Classification
TGO	Togo	Low income	Eligible	LICs
THA	Thailand	Upper middle income	Not eligible	UMICs
TJK	Tajikistan	Lower middle income	Eligible	Gavi LMICs
TKM	Turkmenistan	Upper middle income	Not eligible	UMICs
TLS	Timor-Leste	Lower middle income	Not eligible	non-Gavi LMICs
TON	Tonga	Upper middle income	Not eligible	UMICs
TTO	Trinidad and Tobago	High income	Not eligible	HICs
TUN	Tunisia	Lower middle income	Not eligible	non-Gavi LMICs
TUR	Türkiye	Upper middle income	Not eligible	UMICs
TUV	Tuvalu	Upper middle income	Not eligible	UMICs
TZA	United Republic of Tanzania	Lower middle income	Eligible	Gavi LMICs
UGA	Uganda	Low income	Eligible	LICs
UKR	Ukraine	Lower middle income	Not eligible	non-Gavi LMICs
URY	Uruguay	High income	Not eligible	HICs
USA	United States of America	High income	Not eligible	HICs
UZB	Uzbekistan	Lower middle income	Not eligible	non-Gavi LMICs
VCT	Saint Vincent and the Grenadines	Upper middle income	Not eligible	UMICs
VEN	Venezuela (Bolivarian Republic of)	Upper middle income	Not eligible	UMICs
VNM	Viet Nam	Lower middle income	Not eligible	non-Gavi LMICs
VUT	Vanuatu	Lower middle income	Not eligible	non-Gavi LMICs
WSM	Samoa	Lower middle income	Not eligible	non-Gavi LMICs
YEM	Yemen	Low income	Eligible	LICs
ZAF	South Africa	Upper middle income	Not eligible	UMICs
ZMB	Zambia	Lower middle income	Eligible	Gavi LMICs
ZWE	Zimbabwe	Lower middle income	Eligible	Gavi LMICs

*Draft Summary for Consultation*

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