# IMPLEMENTING THE IMMUNIZATION AGENDA 2030:

## A Framework for Action through Coordinated Planning, Monitoring & Evaluation, Ownership & Accountability, and Communications & Advocacy

**Background information updated for discussion at the second Member State Consultation (8 April 2021)**

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IA2030

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## 1. Introduction

1.1. In August 2020, the Seventy-Third World Health Assembly endorsed **the Immunization Agenda 2030: A Global Strategy to Leave No One Behind (IA2030)** in decision decision WHA(9) https://apps.who.int/gb/ebwha/pdf_files/WHA73/A73(9)-en.pdf. IA2030 defines what needs to happen to achieve the IA2030 vision of *a world where everyone, everywhere, at every age fully benefits from vaccines for good health and well-being*.

1.2. IA2030 is a **global strategy** created for the global community and requiring broad ownership by all immunization and non-immunization stakeholders, including those involved in health system strengthening and disease-specific initiatives. While WHO was asked to lead the development of IA2030, all stakeholders co-created, co-developed and now co-own it. IA2030 has been designed to respond to the interests of **each and every country**, regardless of income level or geography. Recognizing that the most important actions for success must be taken by individual Member States, IA2030 aims to reinforce country ownership for planning and implementing effective and comprehensive vaccination programmes.

1.3. IA2030 will become operational through four critical elements:

- regional and national strategies (**operational planning**);
- a mechanism to ensure **ownership and accountability** (O&A);
- a **monitoring and evaluation** (M&E) framework to guide implementation;
- and **communication and advocacy** (C&A), to ensure that immunization remains high on the health agendas and to rally support for IA2030.

1.4. At this pivotal moment for immunization, implementation of IA2030 will initially focus on a **comprehensive response to the COVID-19 pandemic** and a repair to the damage it has caused. An urgent priority is the rapid and equitable scale-up of COVID-19 vaccines in all countries. For the many countries without adult immunization programmes, this presents a major challenge. In addition, the current focus on COVID-19 draws resources away from existing vaccination activities, requiring countries to address the disruption to their immunization and other essential primary health care services.

1.5. These challenges set the immediate priorities for IA2030 implementation. IA2030 will support urgent collective action to catch up on missed vaccinations and rebuild essential services. IA2030's commitment to eliminating equity gaps, particularly reducing the numbers of "zero-dose" communities (those not receiving any essential vaccines), will be more important than ever as countries wrestle with the dual challenges of introducing COVID-19 vaccination and maintaining and strengthening existing immunization programmes. Children in remote rural settings, urban slums and conflict-affected communities must not be left behind as the world recovers from COVID-19.

1.6. Rebuilding of immunization programmes in this way will also make a major contribution to the strengthening of primary health care systems. Effective childhood and adult immunization programmes, including COVID-19, will lie at the heart of resilient and sustainable primary health care systems that will be central to future global health security.

## Purpose

1.7. The purpose of this **Framework for Action** is to describe how each of the four critical elements will be integrated to ensure successful implementation of the IA2030 strategy to achieve the IA2030 vision.

1.8. The document first summarizes a set of overarching considerations, and then addresses the following aspects:

- How each of the four critical elements work together as a **"Framework for Action"** (Section 2).
- How they will be **translated into implementation** at country, regional and global levels (Section 3).
- Additional considerations given the current context of **COVID-19** (Section 4).
- How a **Learning Agenda** will help inform the path ahead (Section 5).

An **Annex** provides a more detailed description of the M&E component.

1.9. First prepared in November 2020, this document has been updated to reflect feedback from consultations to date with **WHO Member States** and the **WHO Executive Board,** as well as input from other stakeholders. A final version will be available on the IA2030 website[1] in advance of the 74th World Health Assembly (May 2021).

1.10. As a **living document**, this guidance will be updated based on early implementation experience, new priorities and challenges, and likely needs during the next decade. In particular, IA2030 indicators will require critical review and adaptation in light of the evolving COVID-19 pandemic and its effect on immunization programmes. The IA2030 Learning Agenda provides an initial framework for updating this document.

## IA2030 Co-development

1.11. During 2019, the IA2030 strategy and vision core document was co-developed with Member States and partners committed to improving immunization outcomes. This co-development approach continued in 2020 and 2021, and has underpinned the development of the operational elements described in this paper.

1.12. Implementation planning for IA2030 draws on the lessons learned from the Global Vaccine Action Plan (GVAP)[2]. In addition, each of the four operational elements has been shaped by broad stakeholder inputs:

- Development of the **Ownership & Accountability** model and **operational planning** guidance has been led by the core team of IA2030 partners[3]. Extensive consultations were held in July and August 2020 with a diverse range of stakeholders, including senior government officials, national immunization programme managers, and representatives from National

[1] For more information, visit www.immunizationagenda2030.org

[2] https://www.who.int/publications/i/item/the-global-vaccine-action-plan-2011-2020-review-and-lessons-learned-strategic-advisory-group-of-experts-on-immunization

[3] IA2030 Core Team has been co-led by WHO and UNICEF, with members from the Wellcome Trust, Bill & Melinda Gates Foundation, the Gavi Secretariat, US Centers for Disease Control and Prevention, and the Gavi Civil Society Organisation (CSO) Constituency.

Immunization Technical Advisory Groups (NITAGs), academia, non-health sectors, civil society organizations (CSOs), and development partners from low-, middle- and high-income countries.

- The **Monitoring & Evaluation** approach has been developed by a taskforce with representatives from countries and regions, in collaboration with core IA2030 partners, the seven IA2030 strategic priority Working Groups, and in consultation with a "sounding board" that included additional representatives from countries, WHO Regional Offices, the WHO Strategic Advisory Group of Experts (SAGE), academia and CSOs. At its October 2020 meeting, SAGE reviewed draft O&A and M&E models. This document incorporates revisions recommended by SAGE, as well as additional input from development partners.
- A **Communications and Advocacy (C&A)** strategy was co-created with input from immunization partners, communications and advocacy experts, and CSOs at the country, regional and global level. Input was gathered through national and regional surveys, interviews, focus group discussions and from the extensive O&A national consultations. The co-created strategy is now being operationalized through a collaborative effort to bring to life the proposed launch activities, a messaging framework and structures to ensure continuous engagement throughout the decade.

### Guiding principles

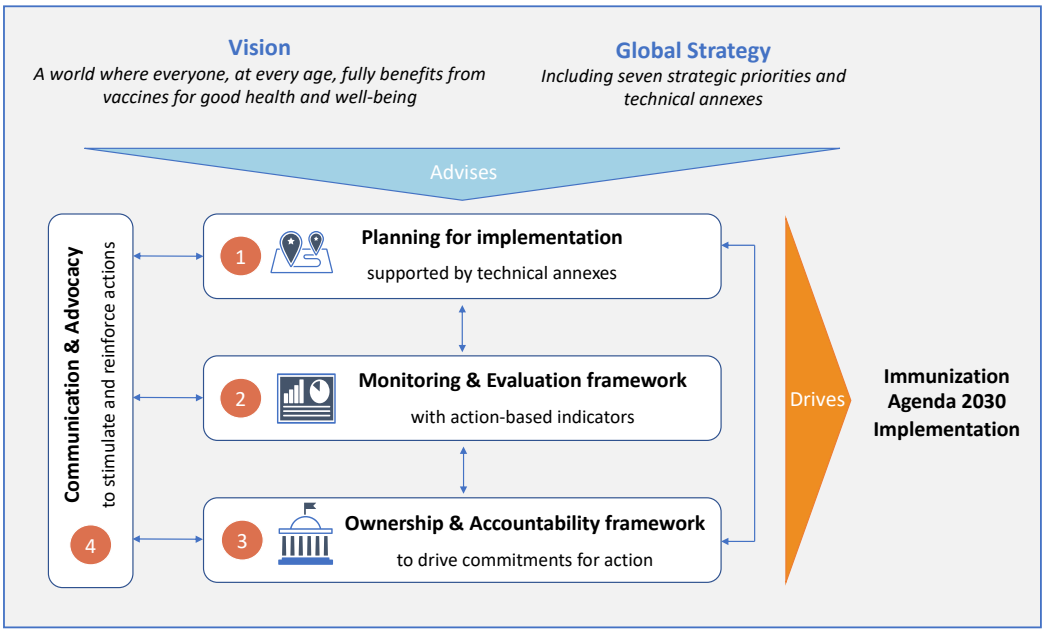
1.13. The Framework for Action draws on the following principles:

- **Instilling broad ownership to achieve the IA2030 vision** among all immunization and non-immunization stakeholders, including those involved in health system strengthening and disease-specific initiatives. Country ownership is key to achieving the IA2030 vision because the most important actions will be the responsibility of individual countries.
- **Leveraging and strengthening existing mechanisms** for coordination, accountability, planning, M&E and advocacy at country, regional and global levels.
- **Promoting continuous quality improvement cycles** using timely, reliable and fit-for-purpose data.
- **Building and strengthening** stakeholder accountability and technical alignment to address country needs.
- **Aligning and harmonizing** with existing regional and national plans and global strategies, including the Sustainable Development Goals (SDGs), Universal Health Coverage (UHC) and Gavi 5.0.

## 2. IA2030 Framework for Action

2.1. Four key operational elements are integrated to ***empower and drive actions*** to advance the implementation of IA2030 (**Figure 1**).

**Figure 1: IA2030 Framework for Action with four operational elements to drive implementation**




2.2. Each of these elements is critical for continuous quality improvement of immunization programmes and other progress required to achieve the IA2030 vision:

1. **Coordinated Operational Planning** with prioritized actions for implementation by countries, regions and partners, and supported by guidance provided in technical annexes for each of the seven IA2030 strategic priorities.
2. **Monitoring & Evaluation (M&E)** with action-based indicators to monitor and evaluate progress toward IA2030 goals and strategic priority objectives, to inform corrective actions when needed.
3. **Ownership & Accountability (O&A)** with structures and platforms to ensure commitments by stakeholders are captured, technical support is facilitated and aligned, and progress is tracked.
4. **Communication and Advocacy (C&A)**, a cross-cutting enabler that will drive coordinated messaging and action at key moments to deliver on accountability objectives throughout the decade.

## Coordinated Operational Planning

2.3. Coordinated operational planning by Member States, regional bodies, development partners and civil society is the means to translate the vision of IA2030 into concrete, near-term actions. Taking into account national context and expertise, Member States will incorporate prioritized aspects of IA2030 into their national strategies and plans as they are updated. Initial priorities will include scaling up of COVID-19 vaccination and recovery of immunization and other essential health services to at least pre-COVID-19 levels.

2.4. IA2030 operational planning is fully coordinated with existing mechanisms (such as RITAGs and NITAGs) used by regions and Member States as they set regional and national immunization priorities, and develop implementation plans to achieve health-related SDG targets. It will also take into account timebound initiatives (e.g. COVAX), complement Gavi's 2021-2025 strategy, and seek integration of disease-specific initiatives. While planning processes will vary across countries and

regions, they will incorporate similar key steps to ensure that immunization needs are fully understood, gaps are covered, prioritization is locally relevant and realistic and meaningful targets are set, and sufficient resources are committed.

2.5. Key planning steps include assembling relevant stakeholders from within and beyond immunization and health to review evidence and lessons learned, to understand root causes and to identify improvement needs. Planning processes should refer to best practice and draw on up-to-date technical guidance (such as that provided in the IA2030 technical annexes). To support country planning, WHO is releasing updated guidance on developing **national immunization strategies**. It will also be important for CSOs and development partners to align their contributions to achieving IA2030 goals and targets.

2.6. IA2030 operational planning will also reinforce alignment and integration across initiatives to control, eliminate and eradicate specific diseases, such as those for polio and measles and rubella. In defining its new endgame strategy, the Global Polio Eradication Initiative (GPEI)[4] articulates its commitments to IA2030 and demonstrates how the integration of polio eradication and essential immunization activities will contribute to IA2030 strategic priorities. Similarly, the Measles & Rubella Initiative's new ten-year strategic framework[5] explicitly identifies contributions to each IA2030 strategic priority, facilitating integration into national and regional planning processes.

## Monitoring & Evaluation

The IA2030 **Monitoring & Evaluation (M&E) Framework** has action-based indicators intended to empower implementation of monitoring, evaluation and action (ME&A) cycles, including effective feedback loops at country, regional and global levels.

2.7. ME&A cycles, facilitated through regular independent technical review at country, regional and global levels, encourage immunization programme stakeholders to continuously ask the questions:

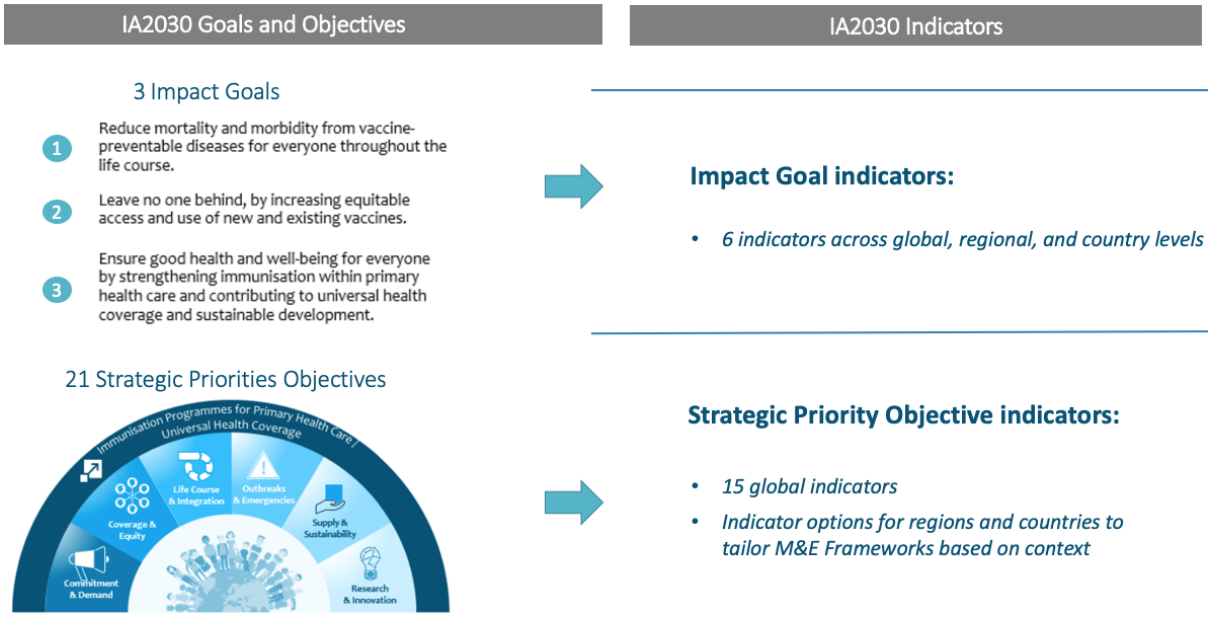
- *How are we doing?* **(Monitor)**
- *How can we do it better**?*** **(Evaluate)**
- *Who is responsible, for doing what, to make improvements?* **(Act)**

2.8. The M&E Framework includes **tailored indicators** to enable the use of data for action to continuously improve immunization programmes at all levels. It provides indicators to monitor progress towards the three IA2030 impact goals and the 21 objectives within its seven strategic priority areas (**Figure 2**).

[4] Polio strategy not yet available.

[5] Available at: https://measlesrubellainitiative.org/learn/the-solution/the-strategy/

**Figure 2: IA2030 Goals, Objectives, and Indicators**




## Impact Goal Indicators

2.9. There are six proposed impact goal indicators (**Table 1**). They are outcome and impact measures common across all levels (country, regional and global) and designed to track progress toward the three IA2030 impact goals. Progress made in achieving the impact goal indicators will be assessed against predetermined targets. A detailed description of each impact goal indicator, including target-setting methods and key uses of the indicator for monitoring, evaluation and action, is provided in **Annex 1**.

**Table 1: Proposed IA2030 Impact Goal Indicators and Targets**

| Impact Goal | | Indicator | 2030 Target |
|---|---|---|---|
| 1 Prevent Disease | Save lives | 1.1 No. of VPD deaths averted | **50 million VPD deaths averted globally during 2021-30[1]** |
| | Control, eliminate & eradicate VPDs | 1.2 No. and % of countries achieving endorsed regional or global VPD control, elimination and eradication targets | **All countries achieve the endorsed regional or global VPD control, eradication, and elimination targets[2]** |
| | Reduce VPD outbreaks | 1.3 No. of large VPD outbreaks | **50% reduction in the rolling 3-year mean no. of large VPD outbreaks** |
| 2 Promote Equity | Leave no one behind | 2.1 No. of zero dose children | **50% reduction in the no. of zero dose children at country, regional, and global levels** |
| 3 Build strong immunization programmes | Deliver across the life course | 3.1 Vaccination coverage across the life course (DTP3, MCV2, HPVc, PCV3)[3] | **90% global coverage for DTP3, MCV2, HPVc, and PCV3** |
| | Contribute to PHC/UHC | 3.2 UHC Index of Service Coverage | **Improve UHC Index of Service Coverage at country, regional, and global levels** |

1. Measured relative to zero coverage levels (absence of vaccination)
2. Eradication (polio), elimination of transmission (measles, rubella), elimination as a public health problem (HPV, MNT, hepatitis B), control (Japanese encephalitis)
3. COVID-19 vaccination coverage will potentially be included when final SAGE COVID-19 vaccine recommendations are available

**Strategic Priority Objective Indicators**

2.10. Strategic priority objective indicators are designed to track performance towards the 21 IA2030 strategic priority objectives. They will also help to identify potential root causes of success and failure so that actions to improve programme performance can be recommended and implemented. These indicators are a combination of input, process, output and outcome measures, reflecting the need for performance monitoring at country, regional and global levels. Global targets have not been set for strategic priority objective indicators due to wide country and regional variations. Regions and countries are encouraged to assess the baseline for each indicator and to set targets for these indicators that reflect local context.

- **Country strategic priority objective indicators**[2] are intended to be used by country bodies to assess progress, recommend actions for immunization performance improvement, and to inform prioritization and allocation of resources and policy development at facility, sub-national and national levels. To supplement global and regional indicators, WHO and UNICEF Country and Regional Offices are encouraged to support Member States to select additional strategic priority objective indicators for M&E of national health or immunization plans and strategies that are tailored to local needs and context.
- **Regional strategic priority objective indicators**[2] are intended for use by regional bodies to assess progress, recommend actions for performance improvement and to inform tailored technical support to countries.[6] To supplement global indicators, WHO and UNICEF Regional Offices are encouraged to select additional strategic priority objective indicators that are tailored to regional needs and context.
- **Global strategic priority objective indicators (n=15)** are intended to assess progress and be used to recommend actions for performance improvement at the global level and to highlight critical performance gaps that need to be further evaluated and tackled at regional and country levels (**Table 2**). A detailed description of each indicator is provided in **Annex 1**.

**Table 2: Proposed IA2030 Global Strategic Priority Objective Indicators (n=15)**

| SP 1: Immunization Programmes for PHC/UHC | SP 2: Commitment & Demand | SP 4: Life course & Integration | SP 6: Supply & Sustainability |
|---|---|---|---|
| **1.1** Proportion of countries with evidence of adopted mechanism for monitoring, evaluation and action at national and subnational levels | **2.1** Proportion of countries with legislation in place that is supportive of immunization as a public good | **4.1** Breadth of protection (mean coverage for all WHO-recommended vaccine antigens, by country) | **6.1** Level of health of the vaccine market, disaggregated by vaccine antigens and country typology** |
| **1.2** Density of physicians, nurses and midwives per 10,000 population | **2.2** Proportion of countries that have implemented behavioural or social strategies (i.e., demand generation strategies) to address under-vaccination | | **6.2** Proportion of countries whose domestic government and donor expenditure on primary health care increased or remained stable |
| **1.3** Proportion of countries with on-time reporting from 90% of districts for suspected cases of all priority VPDs included in nationwide surveillance | | | **6.3** Proportion of countries whose share of national immunization schedule vaccine expenditure funded by domestic government resources increased |
| **1.4** Proportion of time with full availability of DTPcv and MCV at service delivery level (mean across countries) | **SP 3: Coverage & Equity** | **SP 5: Outbreaks & Emergencies** | **SP 7: Research & Innovation** |
| **1.6** Proportion of countries with at least 1 documented individual serious AEFI case safety report per million total population | **3.2** DTP3, MCV1, and MCV2 coverage in the 20% of districts with lowest coverage (mean across countries) | **5.1** Proportion of polio, measles, meningococcus, yellow fever, cholera, and Ebola outbreaks* with timely detection and response | **7.1** Proportion of countries with an immunization research agenda<br>**7.2** Progress towards global research and development targets*** |

** includes only outbreaks with an outbreak response vaccination campaign*
*** following attributes will be measured: supply meeting demand; individual supplier risk; buffer capacity; long term competition*
**** Targets will be set no later than 2022 and endorsed by SAGE*

[6] Guidance for selection of regional and country strategic priority objective indicators is provided in Annex 1.

2.11. Through monitoring and analysis of IA2030 indicator progress, independent technical review bodies can recommend areas for further in-depth evaluation to be conducted by national and regional bodies and IA2030 Working Groups, as described in the next section. Evaluation of policies, strategies, and interventions within each strategic priority will be encouraged at country, regional, and global levels as integral to ME&A cycles. Diverse evaluation methods will be needed to assess policies, strategies, and interventions across different contexts. Evaluation efforts conducted by Working Groups would be informed through Consultative Engagement with countries, regions, partners, and civil society, as well as feedback from independent technical review groups (e.g., SAGE, RITAGs) and the global-level IA2030 partnership.

## Ownership & Accountability

2.12. Achieving the vision laid out in the ten-year IA2030 strategy will depend on numerous and varied stakeholders, each taking on agreed responsibilities to achieve the stated goals (**ownership**). Ensuring these contributions are understood, executed and monitored, a process for checking responsibilities across stakeholders (**accountability**) will help countries and partners remain on track.

2.13. As such, the O&A model for IA2030 makes visible the commitments made by different stakeholders and ensures accountability by regular monitoring. Supported by the IA2030 M&E Framework, partners at all levels will have the data to review progress and performance against milestones so that they can take corrective actions when required.

2.14. As highlighted by the UN's Independent Accountability Panel's 2020 Report[7], an effective accountability framework relies on four interconnected pillars, prompting the following questions:

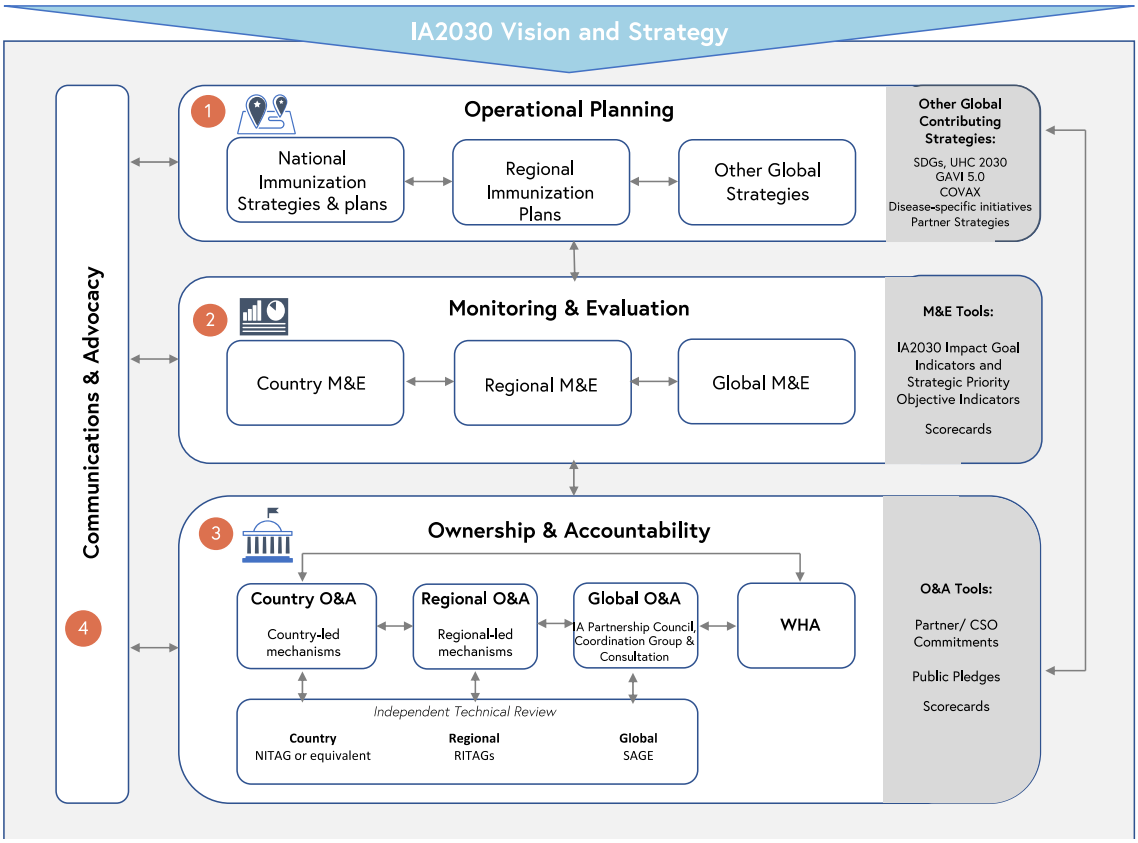
- **Commit:** Have we committed to specific goals, defined responsibilities and required resources?
- **Justify:** Have our decisions and actions to strengthen the achievement of goals and rights been justified by evidence, rights and rule of law?
- **Implement:** Will we monitor and review data, including through independent review, enact remedies, and take necessary action?
- **Progress:** Will we continuously make effective, efficient and equitable progress toward agreed rights and goals?

2.15. This "good practice" framework guides the design of an O&A approach, integrating the necessary structures, tools and information flow (**Figure 3**).

2.16. In creating the approach to O&A, Member States and development partners have called for more systematic and coordinated use of existing structures across country, regional and global levels. In addition, the shared contributions of development partners (including the private sector) and CSOs should be tailored to specific country and regional contexts, with increased visibility and consolidation of vaccine-preventable disease-specific initiatives.

[7] UN Secretary-General's Independent Accountability Panel (IAP) for Every Woman Every Child. 2020 Report. Geneva: World Health Organization; 2020

**Figure 3: IA2030 Information flow, supported by four operational elements**

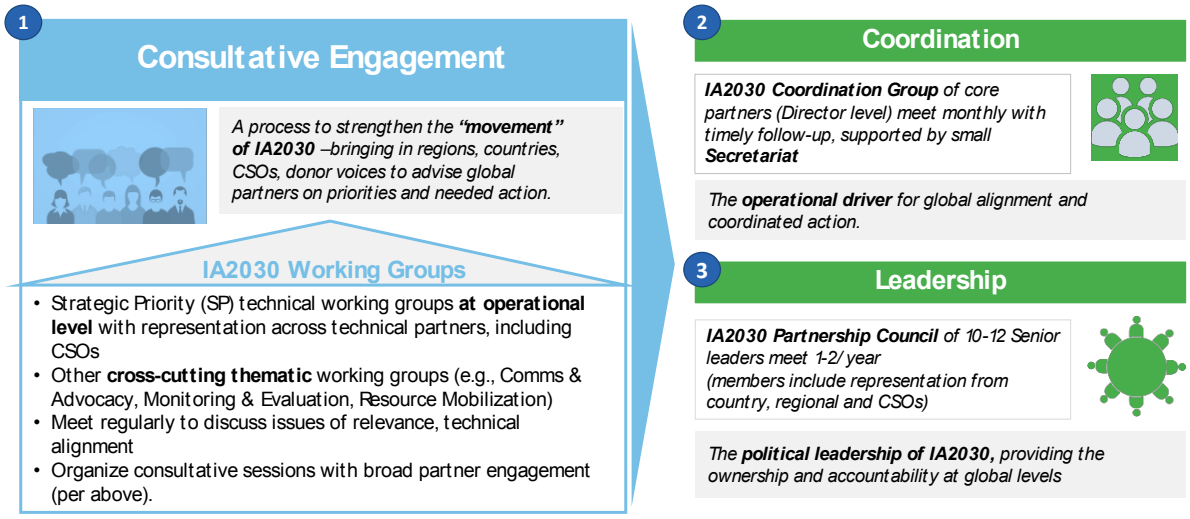



## A global level partnership model

2.17. The **global level partnership model** for IA2030 provides an overarching 'umbrella' forum for immunization intended to represent the interests of all countries, give voice to civil society stakeholders, and cover all vaccine-preventable diseases. It will do so by combining consultative engagement process through working groups, operational alignment through a Coordination Group, and political leadership through a Partnership Council. It will use newly designed tools to bring greater visibility and evidence to inform decisions across partners to drive corrective actions at country, regional and global levels to achieve the IA2030 vision.

2.18. As such, the model comprises three interrelated pillars as depicted below (**Figure 4**), each playing an important role to form the basis of the IA2030 global partnership. Working together, the components address a critical gap in the overall O&A structures aligned to the decade's new vision and strategy. The three components are presented below and will be further detailed in an O&A Annex to this Framework, currently in development.

**Figure 4: The three components to IA2030 global level O&A model**




2.19. The following principles will guide the functioning of the global level O&A model:

- **Offers stakeholders something different**: To avoid duplication, the model will maintain a focus on immunization, while also ensuring close engagement with broader health agendas, such as UHC and maternal, neonatal and child health.
- **Gives voice to all countries, regions and communities**: The approach will ensure that all stakeholder groups can engage meaningfully in global-level deliberations.
- **Leverages country and regional structures**: The model will use a variety of existing fora for reviewing development partner, CSO and Member State progress against pledges and targets, as captured in scorecards.
- **Addresses fragmentation:** The approach aims to build consensus and create incentives for partners to work more effectively across disease-specific initatives.
- **Focuses on priorities**: Dialogue at global levels and resulting actions will target priority countries and priority topics as identified through evidence-based data, consultative processes, and thematic working groups.
- **Keeps a technical focus**: To build on the valuable collaborations used for the development of IA2030 strategic priorities, IA2030 Working Groups will meet routinely to facilitate technical alignment in strategic priority areas, shaping global coordination and actions.
- **Term-limited:** In recognition of the complex and ever-evolving global health landscape, with its myriad of initiatives and numerous partner mechanisms, the model will have a limited term of three years, followed by a full review by the partnership to assess its value and determine its future.

### Working Groups and Consultative Engagement

2.20. **Working Groups** were initially organized around the IA2030 strategic priorities to support the collaborative development of the IA2030 vision and strategy (2019) and technical annexes (2020). Working Groups will continue to play an important convening role during 2021-2023 to support focused discussions and technical alignment across thematic or cross-cutting areas of focus, including support for global M&E and C&A. They may complement, extend, incorporate, or be

incorporated by existing mechanisms at global or regional levels such as those established for COVAX facility, Gavi 5.0 and/or disease control initiatives. Working Groups will shape regular discussions at the operational level, identify areas that require attention by regional or global actors, and feed into the global-level structures, including the Coordination Group and the IA2030 Partnership Council (IAPC) as described below.

2.21. **Consultative engagement** with countries, regions, CSOs and other partners on IA2030 implementation topics will be organized to provide real-time exchange on immunization programme successes and challenges, and to offer peer-to-peer learning and knowledge sharing across sectors and countries. On a rotating basis, and based on topics proposed by countries and regions, Working Groups (or partnership constituencies or communities of practice) will be supported to host open, multilingual "virtual events" with structured format and facilitation to amplify participant contributions. These consultative engagement "touch points" will help identify and elevate issues for consideration by the Coordination Group and IAPC. As such, they contribute to the "movement" of IA2030, bringing in critical voices and perspectives from regions, countries and CSOs in a predictable and structured way and feeding into debates at the global level.

## Coordination

2.22. The **IA2030 Coordination Group** The IA2030 Coordination Group will comprise Program Directors from leading immunization agencies and partners. In oversight roles at global levels, these individuals will consider input received through IA2030 Working Groups and consultative engagement, helping drive solutions to address operational bottlenecks and technical alignment. The Coordination Group will also advise on the preparation of formal IA2030 reports (e.g. for WHA, SAGE) and set the agenda for IAPC meetings. Its membership will comprise approximately 7-8 immunization leaders from the following IA2030 core partners:

- WHO (co-Chair)
- UNICEF (co-Chair)
- Bill & Melinda Gates Foundation
- Wellcome Trust
- Gavi Secretariat
- US Centers for Disease Control and Prevention
- Gavi CSO Constituency

2.23. Meeting on a monthly basis, core partners maintain a regular (and more informal) dialogue in support of IA2030 implementation. A small 'virtual' IA2030 **Secretariat team**, will be created with dedicated staff from partner organizations to provide logistics and technical support to the IA2030 Coordination Group and associated structures.

## Leadership

2.24. The **IA2030 Partnership Council (IAPC)** comprises senior leaders from immunization partners operating at the global level as well as representatives from countries, regions and civil society. The IAPC reinforces, complements and builds upon existing structures at national and regional levels, and focuses global partner attention on priority technical areas, implementation bottlenecks, progress against global immunization targets and partner commitments. It has been created as an accountability mechanism (or governance structure) to jump-start the IA2030 decade with three key objectives:

- Monitor and review progress against **IA2030 targets** and **global partner support**
- **Advocate for, invest in and align** identified key actions to enhance progress

- Mobilize **political leadership** and drive **global partner action**

2.25. The IAPC will comprise approximately 10-12 individuals, including:

- WHO – Deputy Director General
- UNICEF – Deputy Executive Director, Programmes
- Gavi Secretariat – Deputy CEO
- Bill & Melinda Gates Foundation – Director, Global Delivery Programs
- World Bank – Global Director, Health, Nutrition and Population
- US Centers for Disease Control and Prevention – Director, Center for Global Health
- 2 regional staff members (1 from WHO; 1 from UNICEF)
- Gavi Civil Society Organization (CSO) Constituency
- 1 member from the African Union (AU)

One of two Chairs of the IAPC would alternate between WHO and UNICEF each year, with the other selected by the other IAPC members for the initial term of three years.

### Public Pledging

2.26. Domestic financing will remain the most important contribution overall in immunization. Development partners and CSOs will specify (pledge) their intended and additional contributions, aligned to their technical roles and the IA2030 strategic priorities. This will ensure greater transparency and facilitate monitoring of their contributions, and promote accountability for the achievement of IA2030 goals. This process is currently being developed, and is intended to complement and align with existing pledging mechanisms such as Gavi, GPEI and others.

2.27. Pledging can take various forms. Some partners could commit financial support, human resources or logistical support (e.g. the management of the IA2030 Secretariat). Others could commit to take the technical lead on specific IA2030 strategic priority areas at the global, regional or country level, or to take on key roles in regional communication and advocacy.

2.28. At the global level, development partners and CSOs will pledge multiyear commitments in advance of the first IAPC meeting. The pledges will be collected and made available on the IA2030 website. Each year the IAPC will review progress against these pledges, with updates expected every 3-5 years. At the regional and country level, the frequency of pledging will be adjusted to regional and Member State planning cycles and will take place within existing coordination mechanisms.

### Tailored Scorecards

2.29. Scorecards will be used to track progress as reported through IA2030 impact goal and strategic priority indicator results and pledged commitments for technical resources, advocacy resources, and financial resources. IA2030 scorecards will be used for two distinct objectives:

- To measure progress towards IA2030 impact goal and global strategic priorities and to see contributions made towards these from country, regional and global levels.

- To measure progress against publicly pledged commitments by development partners and CSOs at the global, regional and country levels.

2.30. The scorecards will be tailored for use by countries, regions and global-level actors. They will be used to inform decision-making and focus attention on priorities, highlight progress, encourage learning across Member States, support resource mobilization efforts, planning and collaboration and drive corrective action. The tailored approach will support greater accountability of countries, development partners and CSOs.

2.31. WHO will facilitate the development of global scorecards annually, compiling data from IA2030 M&E Framework indicators and other sources (e.g. pledges from partners). Scorecards will be reviewed at the global level by the IA2030 Partnership Council and independent technical review bodies. Scorecard templates will be provided to regions and countries to facilitate tailored monitoring, evaluation and action cycles.

## Communications & Advocacy as a cross-cutting enabler

2.32. **Communications and Advocacy (C&A)** will be essential to underpin coordinated operational planning, Monitoring & Evaluation, and Ownership & Accountability, driving political commitment, country ownership and awareness of IA2030.

2.33. The key objectives guiding the development of the C&A strategy are to:

- Ensure **immunization remains high on the global health agenda** and is integrated with broader themes such as the Sustainable Development Goals, Universal Health Coverage, nutrition and gender.
- Ensure **strong ownership** of IA2030 by Member States to drive prioritization and progress on immunization.
- Reinforce **accountability for progress** on immunization goals, and to recognize and celebrate success.

2.34. The **launch of IA2030**, planned for April 2021, will focus global attention on the importance of vaccines and signal the beginning of the new immunization decade to Member States and the wider global health and development community. The launch aims to galvanize Member State and wider partner commitments to immunization, amplify CSO support and raise broader awareness of this new strategy with key target audiences. In addition, public-facing activities will call on health champions and community leaders to share key messaging on the importance of immunization. This will build off other initiatives such as World Immunization Week, Gavi 5.0 and the ongoing COVID-19 response effort. To support the launch and bring to life the IA2030 vision, C&A partners have developed a messaging framework and activity plans for tailoring to different stakeholders' and audiences' interests and areas of focus.

2.35. The C&A strategy will develop an approach that is acceptable, both technically and culturally, in **different regional and Member State contexts** and helps to create a broad social movement for immunization. Language and concepts that are broadly accessible will be used so as to engage with all sectors of the community.

2.36. Key messages include the importance of immunization to global health security, its potential to provide the foundation for resilient and sustainable primary health care systems delivering universal health coverage, the importance of access and equity (including reaching zero-dose children), and the role of innovation to enhance the reach and impact of immunization programmes.

2.37. A key to success for IA2030 will be ensuring ongoing partner participation and a sustained commitment to the shared vision. Therefore, central to C&A operationalization will be the creation of structures and activities to maintain momentum beyond the launch. A key aim will be to mobilize stakeholders regularly around important milestones and crucial moments, creating a drumbeat of activities throughout the decade. This will ensure that immunization remains high on global and regional health agendas, and help to generate a groundswell of support or social movement for

immunization. C&A will collaborate closely with IA2030 Working Groups to align on priorities, identify engagement opportunities, coordinate action and strengthen accountability for IA2030 targets, and celebrate progress.

2.38. Flexible, adaptable initiatives, tailored to a range of audiences, will also help regions and Member States to contextualize data and evidence, and advance messages across a variety of platforms. The C&A strategy will align with the work of other communication initiatives to promote confidence in, and demand for, vaccines.

# 3. IA2030 Implementation by level

3.1. The IA2030 Framework for Action will be taken forward at country, regional and global levels, supported by the following key tools, structures and processes.

## Country-level implementation

3.2. Member States are ultimately responsible for implementing and financing IA2030 through concrete, national plans and budgets, including those focused on COVID-19 vaccine implementation and recovery of essential health services during the initial years of IA2030. Country commitments are critical to achieve and sustain national immunization targets and goals contributing to the shared IA2030 vision.

3.3. Member States will prioritize elements of IA2030 according to their national and regional contexts. For example, many are likely to prioritize concrete, national plans focused on COVID-19 vaccine implementation and recovery of essential health services initially. Some countries with high coverage and well-resourced programmes may focus primarily on rebutting efforts to undermine confidence in vaccines on social media platforms. Other countries may also prioritize access to affordable, quality-assured vaccine supplies or strategies to target children being missed by integrated health services. Introductions of recommended vaccines not yet included in immunization programmes may be a primary priority for other countries. Each country working to address its respective priorities within IA2030 will contribute to achieving shared global impact.

3.4. Member State implementation of IA2030 through their respective national strategies and plans (**Table 3**) will build upon:

- **Technical input from experts:** Tailored country support, coordinated through WHO and UNICEF regional offices, and leveraging national and regional technical advisory groups (e.g. NITAGs, RITAGs) will build upon guidance from SAGE to help ministries of health prioritize. Technical annexes for each IA2030 Strategic Priority will help Member States to identify actions to address programmatic priorities.

- **Updated national immunization strategies and operational plans.** Member States will progressively update national strategies and operational plans reflecting their emerging priorities in the context of COVID-19 response and recovery and longer-term IA2030 goals.

- **Monitoring, evaluation and action (ME&A) cycles:** Member States will be encouraged to implement ME&A cycles (including effective feedback loops) at all levels to: (1) measure and review IA2030 impact goal and strategic priority objective indicator data on a regular basis; (2) assess national/subnational and partner/CSO progress using tailored indicator scorecards or dashboards, identify potential root causes of success and failure, and identify areas for

improvement; and (3) recommend, plan, implement and review actions to improve programme performance. These cycles will need to take into account the impact of COVID-19, such as when estimating baseline immunization coverage.

- **Strengthened, tangible contributions of different in-country stakeholders:** Some countries may establish formal national accountability frameworks or build on independent health observatories that monitor progress on UHC. Other countries may build on existing and strengthened mechanisms such as inter-agency or health sector coordinating committees (ICCs, HSCCs), NITAGs or the Gavi Alliance Joint Appraisal process. Whether through new or existing platforms, partners will need renewed focus on holding each other accountable. This increased accountability for contributions across in-country partners will support more effective and coordinated implementation of national priorities. CSOs play a growing role, for example connecting national strategies to communities, to strengthen confidence in immunization and to identify marginalized populations with low immunization rates. Countries are encouraged to include CSOs in accountability mechanisms.

**Table 3: Country Implementation of IA2030**

| **Country Implementation of IA2030** | | |
|---|---|---|
| Commitment | *To achieve and sustain national and regional immunization goals & targets* | |
| Differentiated IA2030 Priorities | According to country context (e.g.. coverage & equity, hesitancy, integration of services, outbreaks, quality assured vaccine supply, sustainability) | |
| Advocacy & Communications | National communication and advocacy platforms | |
| **Coordinated Operational Planning** | **Monitoring & Evaluation** | **Ownership & Accountability** |
| **Tools & Structures** | | |
| • National Health Strategy<br>• National Immunization Strategy<br>• Prioritized operational plans informed by experts (e.g., NITAGs, RITAGs, SAGE) | • IA2030 IG indicators, Global and Regional SP Objective indicators, and additional SP Objective indicators selected by countries tailored to needs and context<br>• Scorecards or dashboards to measure national/subnational & partner/CSO progress<br>• Monitoring frameworks (e.g., National Health Observatory; WHO-UNICEF JRF) | • WHA representation<br>• Regional Committee representation<br>• NITAGs<br>• ICCs/ HSCCs<br>• Civil Society platforms |
| **Processes** | | |
| • Coordination through country structures with inclusion of CSOs (e.g. Stakeholder engagement groups, Gavi Joint Appraisal process, Health Sector Coordinating Committee) | Monitoring, Evaluation cycles (including effective feedback loops) at all levels:<br>• Monitor: measure and review IA2030 indicator data on a regular basis<br>• Evaluate: assess progress using tailored indicator scorecards and identify potential root causes of success and failure<br>• Act: recommend actions for implementation, resource allocation and policy development | • Processes to increase accountability of government, partners & CSOs (e.g., Joint Appraisal in Gavi countries, National Accountability Frameworks)<br>• Routine opportunities for consultative engagement organized by Working Groups |

## Regional collaboration and support

3.5. Member States, development partners and civil society will work together to advance coordinated IA2030 implementation through regional technical and political fora. The initial priority in many regions is likely to be COVID-19 vaccine implementation, and recovery of immunization and essential services to pre-COVID-19 baseline. Regions will need to tailor regional operational plans to emerging priorities arising after COVID-19 recovery is underway, and drive results to ensure that country programmes meet longer-term regional goals and targets aligned to IA2030. Communication and advocacy focal points will contribute to generating and maintaining support for immunization and IA2030's goals. Views from across regions will be amplified through the consultative engagement process to inform and help hold accountable global level coordination and leadership processes.

3.6. Regional cooperation and support (**Table 4**) will be implemented by:

- **Tailoring IA2030 strategic priorities to regional priorities.** Regional public health experts (e.g. RITAGs facilitated by development partners) will recommend key technical areas for focus across Member States and means to strengthen integration of immunization, including disease-specific initiatives, within UHC/PHC. Regional priorities will be reflected in strategies, operational plans and M&E frameworks, contributing to global impact goals. They will include considerations of changes in approaches necessary where progress has plateaud and in light of targets endorsed by regional and global bodies. Regional structures such as RITAGs will assist Member States, development partners and CSOs to regularly monitor progress and systematically identify emerging priorities.

- **Member States determining regional priorities.** Member states will review and decide on the recommendations from various regional structures (e.g. RITAGs) through Regional Committees, including responses to pandemic and epidemic-prone diseases with the potential for region-wide impact.

- **Monitoring, evaluation and action (ME&A) cycles:** Regions will also implement their ME&A cycles to: (1) measure and review IA2030 indicator data from countries on a regular basis; (2) assess regional/national and partner/CSO progress using tailored indicator scorecards, identify potential root causes of success and failure, and identify areas for improvement; and (3) recommend actions for improvement of regional performance and identify technical support needed for countries to plan and implement actions to improve programme performance. These cycles will need to take into account the impact of COVID-19, such as when estimating baseline immunization coverage.

- **Development partner coordination.** Regional priorities will be reflected in regional operational plans with key focus areas for support across Member States. Initial plans are likely to include a stock-taking timepoint as countries emerge from the COVID-19 pandemic, allowing for regions to reset priorities. Development partners will pledge their commitments (e.g. support for specific technical functions) for IA2030, contributing to coordinated support to Member States and promoting greater accountability. Strengthened Regional Interagency Coordinating Committees (RICCs) can align development partner strategies to regional IA2030 priorities. Regional working groups (RWGs) coordinating development partner operational support to countries can be strengthened, with expanded remits and more systematic inclusion of CSOs.

- **CSO commitments.** CSOs will increase the transparency of commitments, roles and contributions to immunization. They will reflect their commitments in pledges.

- **Shared commitments through regional political and economic mechanisms.** Member States will guide the process of seeking commitments and monitoring progress through mechanisms at regional (e.g. African Union, European Union, Association of South-East Asian Nations) or sub-regional (e.g. Southern African Development Community) levels. Political commitments will complement technical commitments and mobilize the support of wider ownership and accountability by partners beyond immunization and health.

**Table 4: Regional Implementation of IA2030**

| Regional Implementation of IA2030 | | |
|---|---|---|
| Commitment | *To achieve and sustain national and regional immunization goals & targets* | |
| Differentiated IA2030 Priorities | According to country context (e.g., coverage & equity, hesitancy, integration of services, outbreaks, quality assured vaccine supply, sustainability) | |
| Advocacy & Communications | National communication and advocacy platforms | |
| **Coordinated Operational Planning** | **Monitoring & Evaluation** | **Ownership & Accountability** |
| **Tools & Structures** | | |
| • Regional IA2030 Plans<br>• 3-5 year regional operational plans<br>• Regional Working Groups (e.g., strengthening of existing Gavi groups to include CSOs and coordinate support to non-Gavi countries)<br>• Regional Interagency Coordinating Committees | • IA2030 Impact Goal indicators, Global and Regional SP Objective indicators, and additional SP Objective indicators selected by regions tailored to needs and context<br>• Scorecards with country and regional progress<br>• Scorecards for partner/CSO progress<br>• WHO-UNICEF Joint Reporting Form<br>• WHO Immunization Information System | • RITAGs<br>• Regional Committees<br>• Regional Working Groups<br>• Other Regionally tailored structures (e.g., Regional Cooperation Organizations, Regional Accountability Councils) |
| **Processes** | | |
| • RITAGs facilitated by development partners recommend key technical areas for focus across Member States<br>• Coordination with UHC and PHC<br>• Coordination with disease-specific initiatives | • Monitor: compile country data to report on indicators<br>• Evaluate: assess regional/national & partner/CSO progress using tailored indicator scorecards and identify potential root causes of success and failure<br>• Act: Recommend actions for regional perfomance improvement and identify technical support needed for countries | • Multi-year pledges from Partners/CSOs<br>• Routine opportunities for consultative engagement organized by Working Groups |

## Global commitments

3.7. As presented above in Section 2 on O&A, Member States, development partners and civil society will work together at the global level to ensure the highest level of financial, technical and political commitment to IA2030. They will also coordinate responses in priority areas with a global reach, such as advocacy, vaccine supply, innovation and technical guidance. Initial commitments will prioritize COVID-19 vaccine implementation (e.g. through COVAX and Gavi), as well as supporting efforts to re-establish routine immunization and essential services to pre-COVID-19 baseline levels through 2022 and 2023.

3.8. In addition, global partners and CSOs will be encouraged to implement **regular ME&A cycles** to: (1) monitor IA2030 indicator data from countries and regions on a regular basis; (2) evaluate progress to achieve Impact Goals and Strategic Priority Objectives, including independent technical review by SAGE, and (3) identify actions for performance improvement at the global level, and performance gaps to address at regional and country levels. Independent review by SAGE will include: a) assessing regional/national and partner/CSO progress using tailored indicator scorecards, and b) recommending actions for performance improvement, and areas for further evaluation by working groups and disease-specific initiatives to identify root causes of success and failure. ME&A cycles will need to take into account the impact of COVID-19 when estimating baseline progress.

**Table 5: Global Commitments to IA2030**

| Global Implementation of IA2030 | | |
|---|---|---|
| Commitment | *To sustain the highest level of technical and financial commitment to IA2030* | |
| Differentiated IA2030 Priorities | According to global function (e.g., coordination, vaccine supply, normative guidance, research & innovation, financing) | |
| Advocacy and communication | Global Communication and Advocacy Focal Points | |
| **Coordinated Operational Planning** | **Monitoring & Evaluation** | **Ownership & Accountability** |
| **Tools & Structures** | | |
| • IA Partnership Council (IAPC)<br>• IA2030 Working Groups<br>• Disease-specific strategies and road maps (e.g., GPEI, MRI)<br>• Other Global and Contributing Strategies (e.g., SDGs, UHC 2030, Gavi 5.0, COVAX, partner strategies) | • IA2030 IG indicators and Global SP Objective indicators<br>• WHO-UNICEF JRF<br>• WHO Immunization Information System<br>• Scorecards with country and regional progress<br>• Scorecards for partner/CSO progress | • IA Partnership Council (IAPC)<br>• Coordination Group<br>• WHO Strategic Advisory Group of Experts<br>• World Health Assembly |
| **Processes** | | |
| Operational plans by topics or SP as need arises | • Monitor: country and regional data on IG and SP indicators; compile partner/CSO data to report on progress<br>• Evaluate: assess progress using scorecards and identify potential root causes of success and failure<br>• Act: for performance improvement at global level | • Multi-year pledges from Partners/CSOs<br>• Routine opportunities for consultative engagement organized by Working Groups |

# 4. IA2030 in the context of COVID-19

4.1. The COVID-19 pandemic has starkly illustrated the strengths and fragilities of immunization programmes. It has re-emphasized the value of immunization and the need for a flexible and sustainable approach to build country, regional and global immunization capacity.

4.2. COVID-19 vaccines, some based on innovative new technological platforms, were developed, evaluated and licensed at unprecedented speed. Valuable lessons can be learned from this experience to accelerate vaccine research and development (R&D) for other infectious diseases for which vaccines are not yet available.

4.3. As discussed in previous sections, IA2030 was developed to anticipate pandemics and regional outbreaks while maintaining a focus on progressive improvement in immunization programmes over a decade. In addition to embedding COVID-19 vaccine implementation and recovery throughout planning processes, the IA2030 Strategy's **technical annexes**[8] provide guidance that can be applied to COVID-19 responses, such as:

- **Outbreaks & Emergencies (SP5):** Guidance on the immediate responses needed, including aspects of surveillance, maintaining immunization and other primary health care services, and engaging communities.
- **Vaccine Supply & Sustainability (SP6):** Guidance on the innovative incentives needed to engage manufacturers to develop products for an emerging pathogen.
- **Commitment and Demand (SP2):** Guidance on how to maintain political commitment beyond COVID-19 vaccines, and how to maintain trust and demand for vaccines at all ages.

[8] Available on the IA2030 website: http://www.immunizationagenda2030.org

- **Coverage and Equity (SP2):** Guidance on how to reach all intended target groups for vaccination, including vulnerable communities and those in conflict-affected settings.

- **Research & Innovation (SP7):** Guidance on implementation and operational research supporting immunization services in the context of emerging challenges.

Guidance is also provided on re-building services and ongoing prevention:

- **Immunization within PHC/UHC (SP1):** Guidance on vaccine safety monitoring, supply chain and logistics, and availability of a skilled health workforce as well as recovery through an integrated PHC approach.
- **Life Course & Integration (SP4):** Guidance on implementation of vaccination strategies for older age groups, including adults, with COVID-19 vaccine introduction providing an opportunity to establish and strengthen vaccine platforms for older age groups.

4.4. In particular, COVID-19 is impacting approaches to regional and country planning, given that the future course of the pandemic is uncertain. Priority is on near-term, two- or three-year plans for implementing COVID-19 vaccines and re-building of essential services. As the course of recovery becomes more clear, regions and countries will update plans, in consultation with technical experts and regional organizations.

4.5. COVID-19 is also likely to impact the development of M&E Frameworks by countries and regions. For example, baseline data and targets are likely to need adjustment, and additional indicators might be needed as more is learned about the impact of COVID-19 on services and how quickly services recover.

4.6. More positively, the COVID-19 vaccine deployment and response efforts currently underway across the globe are valuable opportunities to further strengthen the economic case for equitable immunization programmes and to stress the importance of multilateral coordination to global recovery.

## 5. Learning Agenda for the path ahead

5.1. IA2030 is a living and evolving strategy for the COVID-19 years and the decade ahead. Member States, development partners and CSOs will need to build from the initial operationalization outlined in this document to address emerging challenges and contextual changes. Mechanisms will need to be created (for example with support from the IA Partnership Council) to capture learning and associated recommendations.

5.2. In particular, the IA2030 M&E Framework should remain fit for purpose for the new decade. Thus, the Framework should be reviewed and updated at least once every three years in response to changing needs and improvements in M&E methods to ensure it delivers the data required to improve programme performance. Similarly, the IA2030 technical annexes will also require regular updates over the decade. This need for flexibility is highlighted by the uncertainty associated with recovery from the COVID-19 pandemic and the implementation of COVID-19 vaccines.

5.3. An initial set of core questions and topics have been identified for the IA2030 Learning Agenda and are provided below for each operational element.

**Ownership & Accountability**

- The implications of changing political and financial commitments to immunization, and IA2030 more broadly, in the context of COVID-19 and implementation of COVID-19 vaccines.
- The most efficient means to engage diverse CSOs to strengthen community-level ownership and accountability for immunization.
- The added value of strengthened fora (e.g. Regional Working Groups) or new mechanisms (e.g. IA2030 Partnership Council) and tools designed to secure and sustain stronger ownership and improve accountability (e.g. public pledges and tailored scorecards).
- A review of O&A mechanisms after three years (2023) to identify the need for course corrections.

## Operational Planning

- Reviews of how country and regional plans shift during the course of the COVID-19 pandemic and as its influence begins to recede.
- Planning and review processes that extend beyond the traditional WHO/UN mechanisms and engage diverse development partners and CSOs.
- Opportunities for more efficient, timely and reliable data collection and use through digital innovations.

## Monitoring & Evaluation

- Review potential means to strengthening capacity at country, regional and global levels to implement ME&A cycles with effective feedback loops.
- Identify means to strengthening both the quality and the use of data for M&E Framework indicators
- Further development of Impact Goal and Strategic Priority Objective indicators and identification of additional indicators needed to identify and track severe gaps in health system performance (see Annex 1).
- Consider linkages with existing monitoring processes and use other data sources to IA2030 ME&A cycles, including use of the WHO Immunization Information System (WIISE). Efforts should should be made to identify owners and actions for all IA2030 indicators and to decrease the data-reporting burden for countries.

## Communication & Advocacy

- Responsiveness to changing attitudes around immunization and adaptation of strategies as appropriate.
- Ways to solicit and secure greater community-driven commitment to immunization through CSOs and the subsequent translation into increased national and regional commitments.
- Means to respond to misinformation about vaccines disseminated through changing social media platforms and other ways mis- and dis-information are spread.

# List of Acronyms

| | |
|---|---|
| **AEFI** | Adverse Events Following Immunization |
| **AFP** | Acute Flaccid Paralysis |
| **AQE** | Adequacy, Quality, Efficiency |
| **BeSD** | Behavioural and Social Drivers |
| **BMGF** | Bill and Melinda Gates Foundation |
| **BCG** | Bacillus Calmette–Guérin |
| **C&A** | Communications and Advocacy |
| **CCI** | Cold Chain Inventory |
| **CCI** | Composite Coverage Index |
| **CCPM** | Cohort Component Projection Model |
| **CDC** | Centers for Disease Control and Prevention |
| **CEA** | Coverage and Equity Analysis |
| **CSO** | Civil Society Organization |
| **DHIS2** | District Health Information Software 2 |
| **DTP** | Diphtheria, Tetanus, Pertussis |
| **DTPcv-1** | DTP-containing vaccine-1 |
| **EIR** | Electronic Immunization Register |
| **EOC** | Emergency Operations Centre |
| **EPI** | Expanded Programme for Immunization |
| **EVMA** | Effective Vaccine Management Assessment |
| **GAVI** | Global Alliance for Vaccines and Immunizations |
| **GGHE** | General Government Health Expenditure |
| **GPEI** | Global Polio Eradication Initiative |
| **GPW13** | Thirteenth General Programme of Work |
| **GVAP** | Global Vaccine Action Plan |
| **HBR** | Home-Based Records |
| **Hib** | Haemophilus Influenzae Type B |
| **HIC** | High-Income Country |
| **HIS** | Health Information System |
| **HMIS** | Health Management Information System |
| **HPV** | Human Papillomavirus |
| **HPVc** | Human Papillomavirus complete series |
| **HSCC** | Health Sector Coordinating Committee |
| **IA2030** | Immunization Agenda 2030 |
| **IAPC** | IA2030 Partnership Council |
| **ICC** | Inter-agency Coordinating Committee |
| **IG** | Impact Goal |

| | |
|---|---|
| **IHME** | Institute for Health Metrics and Evaluation |
| **ISCO** | International Standard Classification of Occupations |
| **IVIR-AC** | Immunization and Vaccines Related Implementation Research Advisory Committee |
| **JE** | Japanese Encephalitis |
| **JRF** | Joint Reporting Form |
| **LMIS** | Logistics Management and Information System |
| **LQA** | Lot Quality Assurance |
| **MCV-2** | Measles-containing vaccine, dose 2 |
| **M&E** | Monitoring and Evaluation |
| **M&RI** | Measles and Rubella Initiative |
| **ME&A** | Monitoring, Evaluation and Action |
| **MenA** | Meningococcal group A |
| **MI4A** | Market Information for Access for Vaccines |
| **MIC** | Middle-Income Country |
| **MOV** | Missed Opportunities for Vaccination |
| **NCU** | National Currency Unit |
| **NHWA** | National Health Workforce Accounts |
| **NIS** | National Immunization Strategy |
| **NITAG** | National Immunization Technical Advisory Group |
| **NRA** | National Regulatory Authority |
| **O&A** | Ownership and Accountability |
| **OPV** | Oral Poliovirus Vaccine |
| **PAHO** | Pan-American Health Organization |
| **PCV-3** | Pneumococcal Conjugate Vaccine-3 |
| **PHC** | Primary Health Care |
| **PHEOC** | Public Health Emergency Operations Centre |
| **R&D** | Research and Development |
| **RICC** | Regional Interagency Coordinating Committee |
| **RITAG** | Regional Immunization Technical Advisory Group |
| **RWG** | Regional Working Group |
| **RO** | Regional Office |
| **SAGE** | (WHO) Strategic Advisory Group of Experts |
| **SDGs** | Sustainable Development Goals |
| **SP** | Strategic Priority |
| **SIA** | Supplemental Immunization Activity |
| **TB** | Tuberculosis |
| **UHC** | Universal Health Coverage |
| **UHC-SCI** | Universal Health Coverage-Service Coverage Index |
| **UNDP** | United Nations Development Programme |

| | |
|---|---|
| **UNICEF** | United Nations Children's Fund |
| **VIMC** | Vaccine Impact Modelling Consortium |
| **VPD** | Vaccine-Preventable Disease |
| **WHA** | World Health Assembly |
| **WHO** | World Health Organization |
| **WHO DDI** | WHO Data, Analytics and Delivery for Impact |
| **WHO GHED** | WHO Global Health Expenditure Database |
| **WHO GHER** | WHO Global Health Expenditure Report |
| **WHO IVB** | WHO Immunization, Vaccines and Biologicals |
| **WIISE** | WHO Immunization Information System |
| **WUENIC** | WHO and UNICEF Estimates of National Immunization Coverage |
| **wVSSM** | Web-based Vaccination Supplies Stock Management |

# Annex 1 – Monitoring and Evaluation Framework

## Impact Goal (IG) Indicators:

| INDICATOR 1.1 Number of future deaths averted through immunization | | |
|---|---|---|
| **MONITOR**<br>***How will progress be monitored?*** | **EVALUATE**<br>***How will results of monitoring be evaluated?*** | **ACT**<br>***How will evaluation be used for action?*** |
| **Definition:**<br>Total number of future deaths averted from 2021-2030, based on the IA2030 coverage scenario<br><br>**Measurement approach**:<br>A modelling approach is used to project the number of deaths averted at the global and regional levels by achieving aspirational coverage targets for IA2030. These targets are also aligned with the Impact Goal indicator 2.2. The initial scope focuses on 14 pathogens, which will be expanded to update the estimates at the midpoint of IA2030.<br><br>**2021-2030**: Hepatitis B, Hib, HPV, JE, measles, MenA, *Streptococcus pneumoniae*, rotavirus, rubella, yellow fever, diphtheria, tetanus, pertussis, TB (BCG)<br>**By 2025**: Polio, typhoid, influenza, cholera, multivalent meningitis, COVID-19, varicella, dengue, mumps, rabies, hepatitis A, hepatitis E, and other new vaccines.<br><br>**Calculation:**<br>- Observed and averted deaths, collected from multiple data sources, are converted into a single measure of country-, age-, and vaccine-specific relative risk of death conditional upon coverage levels.<br>- The relative-risk model is used to predict deaths averted in all locations and diseases.<br>- Additional calibration step converts the estimates into deaths averted by year of vaccination, which allows for capturing the | **Baseline:**<br><br>**4.3 million deaths averted per year (2019)**<br><br>Total number of deaths averted due to vaccination in 2019 based on the historical WUENIC estimates; 2019 was used as the baseline year, rather than 2020, to capture the pre-COVID-19 trend. The estimates are measured relative to zero coverage level (absence of vaccination).<br><br>**Target:**<br><br>**Increase to 5.8 million deaths averted in 2030**<br>**50 million total deaths averted during 2021-2030**<br><br>Total number of future deaths averted due to vaccination from 2021-2030 based on the aspirational coverage targets described in impact goal 2.2.<br><br>For this purpose, 2030 country-level coverage estimates were calculated based on the achievement of three goals all countries are urged to pursue:<br><br>a) Introduction of any missing recommended vaccines<br><br>b) A reduction in zero-dose children by half, compared with 2019 baseline<br><br>c) Achievement of DTPcv-1 coverage that is consistent with the aforementioned zero-dose reduction and coverage for all other vaccines within a 5% range of DTPcv-1 | Global, regional, and country partners can use evaluation findings for advocacy in securing commitment and resources for immunization programmes.<br><br>Specific recommendations by vaccine highlighted in evaluation may be used to plan disease-specific interventions at global and regional level |

| | | |
|---|---|---|
| lifetime effect of vaccination aggregated for the year the vaccines are delivered.<br><br>**Data source:**<br>WHO-UNICEF Immunization Coverage estimates, estimates of deaths averted from Vaccine Impact Modelling Consortium (VIMC), Global Burden of Disease Study, and other model inputs from published literature.<br><br>**Stakeholder(s) responsible for measurement:**<br>WHO IVB and DDI project team, project stakeholder committee (BMGF, CDC, Gavi, IHME, VIMC, VIMC Scientific Advisory Board, IVIR-AC, WHO DDI, WHO IVB)<br><br>**Frequency of reporting:**<br>Twice (starting point and midpoint of IA2030) for target setting. The target will be updated for the midpoint based on the expanded scope of pathogens and model updates. | UNPD population estimates for 2019, and projected estimates for 2030 were used to convert absolute numbers of unvaccinated children to equivalent DTPcv-1 targets.<br><br>**Analysis and interpretation:**<br>- Analysis conducted by the WHO IVB and DDI project team; results displayed on shared dashboard; reported at global and regional level<br>- Results disaggregated by pathogen and year of vaccination<br><br>**Frequency of evaluation:**<br>Twice (midpoint and endpoint of IA2030) for monitoring and reporting. The midpoint evaluation will focus on 14 pathogens only, based on the models used for the starting point. The endpoint evaluation will focus on the expanded scope of pathogens based on the updated models from the midpoint. | |

| INDICATOR 1.2 Number and proportion of countries that have achieved regional or global VPD control, elimination, and eradication targets | | |
|---|---|---|
| **MONITOR**<br>***How will progress be monitored?*** | **EVALUATE**<br>***How will results of monitoring be evaluated?*** | **ACT**<br>***How will evaluation be used for action?*** |
| **Definition:** Achievement of all VPD control, elimination, and eradication targets; endorsed by a global or regional body of WHO Member States, with target dates between 2021 and 2030, and that are based on incidence or prevalence measures.<br><br>**Measurement approach:** Two monitoring and evaluation cycles will occur annually. The first is the indicator and revision cycle. WHO Regional Offices will conduct a review to confirm and revise the inclusion criteria for each VPD based on, the global or regional endorsement status, target time frame, and the target type and definition.<br><br>The second is the assessment and reporting cycle. Established regional verification and certification commissions, or verification committees, will assess the achievement status of the disease specific VPD target for each country.<br><br>**Calculation:** Numerator is the number of countries that met the VPD target, and the denominator is the number of countries with an endorsed VPD target based on incidence or prevalence measures.<br><br>**Data source:** Verification, certification, and disease-specific committee reports.<br><br>**Stakeholder(s) responsible for measurement:** Verification and certification commissions, and validation committees established by WHO Regional Offices with technical assistance from VPD control, elimination, and eradication initiatives.[9]<br><br>**Frequency of reporting:** Annual | **Baseline:** Number and proportion of countries that have achieved each VPD control, elimination, and eradication target by the end of 2021*.<br><br>**Target:**<br><br>• All countries achieve the endorsed regional or global VPD control, elimination, and eradication targets.<br><br>**Analysis and interpretation:** The achievement status of each VPD control, elimination and eradication target, based on incidence and prevalence measures, will be monitored annually. Progress will be monitored and reported during the decade to identify countries at risk of not achieving the target by the specified target date, and to provide visibility of disease-specific progress and risk for adjacent countries and regions.<br><br>Annual monitoring of the indicator confirmation and revision cycle will identify the need for new control, elimination, and eradication goals, or changes to the existing targets. The process will also document possible differences across the regions to provide an opportunity to harmonize the target definitions.<br><br>**Frequency of evaluation:** Annual. | Global, regional, and country partners can use evaluation findings for operational planning, and for communication and advocacy to:<br><br>• ensure needed support to countries to achieve VPD control, elimination, and eradication initiatives,<br><br>• highlight and reinforce coordination of strategies to link VPD control, elimination and eradication initiatives with health system strengthening initiatives. |

[9] Disease-specific initiatives include: GPEI Polio Endgame Strategy 2021–2026; Measles and Rubella Strategic Framework 2021–2030; Ending Cholera – A Global Roadmap to 2030; Global Health Sector Strategy on Viral Hepatitis 2016–2021; Defeating Meningitis by 2030 Roadmap; Global Influenza Strategy 2019–2030; Zero deaths from dog-mediated rabies by 2030 (Zero by 30: The Global Strategic Plan); Achieving and sustaining maternal and neonatal tetanus elimination: Strategic Plan 2012-2015; Global Vector Control Response 2017–2030; Eliminate Yellow Fever Epidemics

| INDICATOR 1.3 Number of large vaccine-preventable disease outbreaks | | |
|---|---|---|
| **MONITOR**<br>***How will progress be monitored?*** | **EVALUATE**<br>***How will results of monitoring be evaluated?*** | **ACT**<br>***How will evaluation be used for action?*** |
| **Definition:** A VPD outbreak* meeting size criteria for large outbreaks aligned with global eradication, elimination, or control strategies and at least one criterion from Annex 2 of the International Health Regulations (https://www.who.int/ihr/annex_2/en/)<br><br>*including cholera, Ebola, meningococcus, measles, polio, yellow fever; the list could be revised, especially as additional diseases become vaccine preventable.<br><br>**Measurement approach**: Large VPD outbreaks will be identified using data from specific VPD control programmes and from WHO World Health Emergencies surveillance systems. Different criteria will be applied for each disease. For multi-country outbreaks, each country's portion of the outbreak will be assessed separately. The overall indicator will function as a composite combining data across the different diseases.<br><br>**Calculation:** A collective count of outbreaks of epidemic prone diseases that meet set size criteria, such as the number of cases or disease incidence<br><br>**Data source:** VPD eradication, elimination, and control programmes and the WHO World Health Emergencies surveillance systems<br><br>**Stakeholder(s) responsible for measurement:** International Coordinating Group for Vaccine Provision, WHO Headquarters and WHO Regional Offices with technical assistance from VPD control, elimination and eradication initiatives[10]<br><br>**Frequency of reporting:** Annual | **Baseline:** The mean number of large VPD outbreaks for three years starting in 2019. The inclusion of year 2020 will be determined following a review of the data reported during the COVID-19 pandemic. If the 2020 data are excluded, based on concerns of completeness or validity, the baseline will consist of years 2018, 2019, and 2021.<br><br>**Target:** 50% reduction in the 3-year mean number of large VPD outbreaks compared to baseline.<br><br>**Analysis and interpretation:** The target will be achieved if the mean of the final three years of data (2028-2030) is at least 50% less than the baseline. Progress will be based on the annual comparison of the current three-year mean and the baseline. Annual trends in the number of large outbreaks of each VPD indicate progress of country, regional, and global efforts to prevent and control VPD outbreaks. Analysis of related data, such as those captured by other Impact Goal and Strategic Priority indicators, will help identify reasons for progress or lack of progress towards this goal.<br><br>**Frequency of evaluation:** Annual | Global, regional, and country partners can use evaluation findings for operational planning, and for communication and advocacy to:<br><br>• ensure timely availability and strategic allocation of vaccines and supplies, mobilization of trained human resources for outbreak response<br>• ensure capacity of immunization programmes to anticipate, prepare for, detect and rapidly respond to VPD and emerging disease outbreaks<br>• ensure capacity of immunization programmes to establish timely and appropriate immunization service delivery during emergencies and in communities affected by conflict, disaster and humanitarian crisis<br>• ensure vaccine introduction and scale up of coverage to prevent newly emerging VPDs<br>• use measles cases and outbreaks as a tracer to identify weaknesses in immunization programmes, and to guide programmatic planning in identifying and addressing these weaknesses. |

[10] Disease-specific initiatives include: GPEI Polio Endgame Strategy 2021–2026; Measles and Rubella Strategic Framework 2021–2030; Ending Cholera – A Global Roadmap to 2030; Global Health Sector Strategy on Viral Hepatitis 2016–2021; Defeating Meningitis by 2030 Roadmap; Global Influenza Strategy 2019–2030; Zero deaths from dog-mediated rabies by 2030 (Zero by 30: The Global Strategic Plan); Achieving and sustaining maternal and neonatal tetanus elimination: Strategic Plan 2012-2015; Global Vector Control Response 2017–2030; Eliminate Yellow Fever Epidemics

## INDICATOR 2.1. Number of zero-dose children

| MONITOR<br>*How will progress be monitored?* | EVALUATE<br>*How will results of monitoring be evaluated?* | ACT<br>*How will evaluation be used for action?* |
|---|---|---|
| **Definition**: Zero-dose children are defined as those that lack access to or are never reached by routine immunization services. They are operationally measured as those who lack a first dose of a DTP-containing vaccine.<br><br>**Measurement approach**: This indicator is calculated as the difference between the estimated number of surviving infants and the estimated number of children vaccinated with DTPcv-1.<br><br>The number of zero-dose children will be determined at country, regional and global level using WHO and UNICEF estimates of national immunization coverage (WUENIC) and UNPD population estimates of birth cohorts, adjusted for surviving infants.<br><br>At the national and subnational level, administrative reporting systems can also be used, together with any in-country survey results and other information sources that can help countries establish estimates for zero-dose children.<br><br>**Calculation:** This indicator is calculated as the difference between the estimated number of surviving infants and the estimated number of children vaccinated with DTPcv-1.<br><br>**Data source:** WUENIC, UNPD population estimates<br><br>**Stakeholder(s) responsible for measurement:** WHO IVB, national immunization programmes<br><br>**Frequency of reporting**: Annual at regional and global levels, monthly at national and subnational levels | **Baseline:** 14 million children (2019)<br><br>**Target:** Reduction in the number of zero-dose children by 50% (all levels). In countries where DTP1 coverage already reaches 99%, the target is to maintain coverage.<br><br>**Analysis and interpretation:** The level and trend of the number of zero-dose children needs to be analysed with an equity lens, aiming to find out where inequalities might point to barriers to immunization across specific populations and geographies. This requires disaggregation by subnational levels and other dimensions (socio-economic, language group, ethnicity) as available.<br><br>In this context, the number of zero-dose children needs to be used to identify underserved, undervaccinated communities.<br><br>**Frequency of evaluation:** Annual at global and regional levels. Ideally quarterly at national and subnational levels. | At the global and regional level, the number of zero-dose children by region and country will lead to a prioritization of efforts, and can be used to create accountability for countries that do not reach targets, or backslide from previously attained targets. Furthermore, it can be used to communicate about immunization gaps that exist in the world, and advocate for concerted efforts to bridge them.<br><br>At the country and subnational level, identifying zero-dose children and underserved communities should facilitate a root-cause analysis of the reasons for under-vaccination, and identification of the barriers that exist for certain communities and geographies. From a communication perspective, the importance of this indicator will highlight the need to focus on equity in immunization. |

## INDICATOR 3.1. SDG 3.b.1 - Coverage of vaccines included in national immunization schedules (DTP3, MCV2, HPVc, PCV3)

| **MONITOR**<br>***How will progress be monitored?*** | **EVALUATE**<br>***How will results of monitoring be evaluated?*** | **ACT**<br>***How will evaluation be used for action?*** |
|---|---|---|
| **Definition**: Immunization coverage for DTPcv-3, MCV-2, PCV3 and HPVc<br><br>**Measurement approach**: Immunization coverage for a certain year is defined as the proportion of the targeted population that received the relevant vaccine and dose in that year.<br><br>Coverage will be determined at country, regional and global levesl, using WHO and UNICEF estimates of national immunization coverage (WUENIC). Note that for WUENIC, the annually targeted population for globally recommended vaccines comprises the entire global cohort of surviving infants, regardless of whether the vaccine was introduced in their country.<br>At the national and subnational level, administrative reporting systems can also be used, together with any in-country survey results and other information sources that can help countries establish coverage estimates.<br><br>**Calculation:** Denominator is estimated population of target group of children that should receive DTPcv-3, MCV-2, PCV3 and HPVc. Numerator consists of target population who have received DTPcv-3, MCV-2, PCV3 and HPVc. Target population of children and their appropriate age for last dose is determined by national immunization schedule.<br><br>**Data source:** WHO and UNICEF estimates of national immunization coverage (WUENIC)<br><br>**Stakeholder(s) responsible for measurement:** WHO IVB, national immunization programmes<br><br>**Frequency of reporting**: Annual at regional and global levels, monthly at national and subnational levels. | **Baseline: 85%** DTPcv-3, **71%** MCV-2, **48%** PCV3 and **15%** HPVc (2019)<br>**Target:**<br>Global level: **90%** coverage for all by 2030<br>Country level:<br>• Plan introduction of all globally recommended vaccines by 2030<br>• Ensure coverage for each vaccine reaches levels within a 5% range from DTPcv-1<br>**Analysis and interpretation:** Level and trend, disaggregated by geography and other dimensions (socio-economic, language group, ethnicity) as available.<br>**Frequency of evaluation:** Annual at global and regional levels. Ideally quarterly at national and subnational levels. | At the global and regional level, coverage estimates will be used for prioritization, and to create accountability for countries that do not reach targets, or backslide from previously attained targets.<br>Furthermore, coverage estimates can be used to communicate about immunization gaps that exist in the world, and advocate for concerted efforts to bridge them.<br>At the country and subnational level, measuring the level and trend of coverage, as well as estimates of vaccinated people (numerators), can help establish whether:<br>• Immunization programmes are showing desired progress overall, by geography, and by population group.<br>• Immunization platforms for the different age groups perform adequately.<br>• Vaccine-specific barriers exist.<br>Immunization programmes can then implement any corrective action. |

## INDICATOR 3.2. Universal Health Coverage Service Coverage Index

| MONITOR<br>*How will progress be monitored?* | EVALUATE<br>*How will results of monitoring be evaluated?* | ACT<br>*How will evaluation be used for action?* |
|---|---|---|
| **Definition:** Coverage of essential health services will be measured using the Universal Health Coverage – Service Coverage Index (UHC SCI). The indicator is defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access, among the general and the most disadvantaged population.<br><br>**Measurement approach:**<br>Indicator SDG 3.8.1 - Coverage of essential health services, commonly referred to as the Universal Health Coverage (UHC) Index of service coverage (UHC SCI) will be the initial metric to measure key aspects of UHC and Primary Health Care (PHC). The metrics used to measure UHC and PHC will likely evolve over the decade with advances in data and understanding. The target for the IG3.2 indicator will also evolve to ensure immunization programme's contribution to PHC/UHC is best measured.<br><br>The UHC SCI will be reported as a standalone indicator of health service coverage. It will not be reported together with SDG indicator 3.8.2, which focuses on financial hardship caused by direct health care payments, a key component of UHC.<br><br>**Calculation:** UHC SCI will be reported at the country level, regional and global means will be calculated.<br><br>**Stakeholder(s) responsible for measurement:** WHO IVB; WHO Division of Data, Analytics and Delivery for Impact; Primary Health Care Performance Initiative; WHO Deptment of Service Delivery and Safety; and UHC2030.<br><br>**Data sources:** UHC SCI.<br><br>**Frequency of reporting:** Every second year. | **Baseline:**<br>UHC: national-level UHC SCI values from 2019.<br><br>**Target:** Improve UHC Index of Service Coverage at country, regional and global levels.<br><br>**Analysis and interpretation:**<br>Indicators of service coverage – defined as people receiving the service they need – are the best way to track progress in providing services under UHC. Since a single health service indicator does not suffice for monitoring UHC, the UHC SCI is constructed from 14 tracer indicators selected based on epidemiological and statistical criteria. The index is reported on a unitless scale of 0 to 100, with 100 being the optimal value.<br><br>Progress towards the target will be assessed by monitoring bi-annual trends in the UHC SCI values at the country, regional, and global levels.<br><br>**Frequency of evaluation:** Every second year. | Global, regional, and country partners can use evaluation findings for operational planning, and for communication and advocacy to:<br><br>• identify potential root causes of success and failure and areas for improvement in increasing the UHC SCI<br><br>• identify settings with missed opportunities for improved coverage through better integration<br><br>• ensure needed support to countries to improve UHC SCI as part of health system strengthening efforts<br><br>• promote alignment of IA2030 and UHC<br><br>• promote efforts to integrate delivery and utilization of immunization and other UHC/PHC services<br><br>At a country and subnational level, monitoring this indicator should particularly help in:<br><br>• ensuring immunization programmes are an integral part of national PHC strategies and operations, as well as national strategies for UHC.<br><br>• strengthen delivery of integrated services as part of PHC, across the life course.<br><br>• verifying whether health programmes have policies and/or standard operating procedures in place that promote integration between programmes, thereby reducing missed opportunities. |

## Strategic Priority Objective Indicators Summary

*Additional regional and country indicators for monitoring SP Objectives will be developed by regions and countries for inclusion in their IA2030 M&E plans.*

### Table 1: Indicator summary for monitoring SP1 at all levels

| **SP1: IMMUNIZATION PROGRAMMES FOR PHC/UHC** | | |
|---|---|---|
| **SP Objective 1.1: Reinforce and sustain strong leadership, management and coordination of immunization programmes at all levels** | | |
| **Indicator selected for global monitoring** | **Options for regional monitoring** | **Options for country monitoring** |
| Proportion of countries with evidence of adopted mechanism for monitoring, evaluation and action at national and sub-national levels | **Aligns with global-level monitoring:**<br>Proportion of countries with evidence of adopted mechanism for monitoring, evaluation and action at national and sub-national levels<br>**Indicator options:**<br>1. % of countries with district health management committees (or equivalent at subnational level) that review immunization performance as part of primary health care performance at least annually<br>2. % of countries with up-to-date Immunization Technical Guidelines (not older than 5 years)<br>3. % of countries with functional Interagency Coordinating Committee (ICC)<br>4. % of countries with functional National Immunization Technical Advisory Groups (NITAGs)<br>5. % of countries with functioning Public Health Emergency Operations Centres (PHEOCs), polio or malaria EOCs capable of responding to VPD outbreaks | **Aligns with global-level monitoring:**<br>Mechanism in place for monitoring, evaluation and action at national and sub-national levels<br>**Indicator options:**<br>1. % of district health management committees (or equivalent at subnational level) that review immunization performance as part of primary health care performance at least annually<br>2. Multisector coordination mechanisms functional at all levels<br>3. Number of health facilities reached with supportive supervision visit<br>4. Percentage of facilities that are led by a manager(s) who has official management training (for example, a certification, diploma, or degree)<br>5. Number of times annually that a Public Health Emergency Operations Centre (PHEOC) or disease-specific EOC is activated for VPD outbreaks |
| **SP Objective 1.2: Ensure the availability of an adequate, effective, sustainable health workforce** | | |
| **Indicator selected for global monitoring** | **Options for regional monitoring** | **Options for country monitoring** |
| Density of physicians, nurses and midwives | **Aligns with global-level monitoring:**<br>Density of physicians, nurses and midwives per 10,000 population | **Aligns with global-level monitoring:**<br>Density of physicians, nurses and midwives per 10,000 population |

| | | |
|---|---|---|
| per 10,000 population | **Indicator options:**<br>• % countries that achieve the recommended density of health workers per 10,000 population (five occupations are monitored within this indicator: medical doctors, nursing personnel, midwifery personnel, dentists, pharmacists)<br>• % of countries with >90% of vaccination posts having trained health staff.<br>• % countries with >25% gap in immunization staff<br>• % of countries with health workforce competencies established | **Indicator options:**<br>1. Health staff competent in immunization per 10,000 population per region<br>2. Number of health workers per 10,000 population by cadre (nurse, midwife, physician, community health worker) with disaggregation by gender, age, level of service delivery, managing authority, and subnational administrative area.<br>3. Number and % of service delivery points with a trained vaccinator in the last 2 years<br>4. Ratio of unfilled posts to total number of posts, by occupation and by subnational level (% vacant positions of nursing and frontline health workers) |
| **SP Objective 1.3: Build and strengthen comprehensive vaccine-preventable disease surveillance as a component of the national public health surveillance system, supported by strong, reliable laboratory networks** | | |
| **Indicator selected for global monitoring** | **Options for regional monitoring** | **Options for country monitoring** |
| Proportion of countries with 90% on-time reporting from 90% of districts for suspected cases of all priority vaccine-preventable diseases included in nationwide surveillance (including reporting of zero cases) | **Aligns with global-level monitoring**:<br>Proportion of countries with 90% on-time reporting from 90% of districts for suspected cases of all priority vaccine-preventable diseases included in nationwide surveillance (including reporting of zero cases)<br><br>**Indicator options:**<br>• % of countries achieving the non-measles/non-rubella discard rate of ≥2/100,000 persons and the non-polio acute flaccid paralysis rate of >1/100,000 among <15 years population) in a 12-month period<br>• % of countries with access to laboratory capacity to test for at least one bacterial VPD | **Aligns with global-level monitoring:**<br>% of districts reporting at least 90% on time during a one-year period for suspected cases for all priority VPDs under nationwide surveillance, including reporting of zero cases.<br><br>**Indicator options:**<br>1. Non-polio acute flaccid paralysis rate (target >1/100,000 among <15 years population) in a 12-month period<br>2. Non-measles/non-rubella discard rate (target ≥2/100,000 population)<br>3. Access to laboratory capacity to test for at least one bacterial VPD |
| **SP Objective 1.4: Secure high-quality supply chains for vaccines and related commodities and effective vaccine management, within the primary health care supply system** | | |

| Indicator selected for global monitoring | Options for regional monitoring | Options for country monitoring |
|---|---|---|
| Proportion of time with full availability of DTPcv and MCV at service delivery level (mean across countries) | **Aligns with global-level monitoring:**<br>Proportion of time with full availability of DTPcv and MCV at service delivery level (mean across countries)<br><br>**Indicator options:**<br>• % of countries having electronic vaccine and supply stock management system to monitor vaccine stock down to service delivery<br>• % countries that carried out Effective Vaccine Management Assessment during the last 3 years<br>• % of countries meeting AQE (adequacy, quality, efficiency) score of 70% and above (EVMA score)<br>• % countries that have regularly updated and complete (min once per 6 months) cold chain inventories (CCI with geolocated CCE)<br>• % of countries below 1% closed vial wastage for PCV | **Aligns with global-level monitoring:**<br>Full availability of DTPcv and MCV at service delivery level<br><br>**Indicator options:**<br>1. % districts reporting stock availability (vaccines and supplies) at a service delivery level<br>2. % districts having electronic vaccine and supply stock management system to monitor vaccine stock down to service delivery<br>3. Stock out events of DTP or MCV at national level<br>4. Stock out days at national level<br>5. Stock out events of DTP or MCV at sub-national level<br>6. Effective Vaccine Management Assessment (EVMA) conducted<br>7. Percentage of sites with functional PQS equipment<br>8. EVM score (not just whether it has been conducted)<br>9. Functionality of cold chain equipment<br>10. Closed vial wastage for PCV |
| **SP Objective 1.5: Information Systems** | | |
| **Indicator selected for global monitoring** | **Options for regional monitoring** | **Options for country monitoring** |
| None | **Indicator options:**<br>• Number of countries in the region in which the percentage of population with access to personal immunization records* is ≥80%**<br>* includes both paper-based and digital records.<br>**targets to be set at regional level.<br>• Evaluation score (e.g. Countries with Effective Information System Quality ≥90)<br>• % of countries with 90% or more completeness and timeliness reporting<br>• Proportion of countries that have: | **Indicator options:**<br>1. % of population with access to personal immunization records<br>2. Availability of sustainable and effective immunization information system integrated within a robust national health information system (HIS)<br>3. % of districts with on-line access to HMIS<br>4. % of live births registered<br>5. Country uses quality data on under-vaccinated to inform plans at community, subnational and national levels<br>6. % of children with home-based immunization records<br>7. % of districts with complete and timely reporting |

| | | |
|---|---|---|
| | • Electronic immunization registers (EIR) with national coverage (i.e. an EIR that covers their entire population of children born in that year)<br>• An integrated HMIS that includes vaccination data<br>• A digital health information strategy | 8. Percentage of districts reporting negative DTP1-DTP3 drop out<br>9. Percent of districts with year-to-year variation of children vaccinated with DTP3 less than 15% |
| **SP Objective 1.6: Vaccine Safety** | | |
| **Indicator selected for global monitoring** | **Options for regional monitoring** | **Options for country monitoring** |
| Proportion of countries with at least one documented (with reporting form and/or line listed) individual serious AEFI case safety report per million total population | **Recommended indicator:**<br>Proportion of countries that are reporting individual serious AEFI into Vigibase*<br>**Indicator options:**<br>1. % of countries where vaccine safety data is shared between the NRA and the immunization programme (i.e. the data on serious AEFI cases reported in the JRF for the previous year is identical to the data uploaded to the Vigibase in the same year based on date of AEFI onset)<br>2. % of countries with a functional** AEFI committee<br><br>*this applies to ALL countries irrespective of access to Vigibase as countries are encouraged to report AEFI cases to Vigibase progressively so that 100% of countries are reporting individual serious AEFI into Vigibase by 2030<br>** as described in section 4.6 of the global manual on surveillance of AEFI accessed at https://www.who.int/vaccine_safety/publications/Global_Manual_revised_12102015.pdf?ua=1 | **Aligns with global-level monitoring:**<br>Individual AEFI case safety reports per million total population<br><br>**Indicator options:**<br>1. Proportion of provinces/districts or other subnational units with at least one documented (with reporting form and/or line listed) individual serious AEFI case safety reports per million total population<br>2. Proportion of serious* AEFI cases where causality assessment was done<br><br>*An event that results in death, is life-threatening, requires in-patient hospitalization or prolongation of existing hospitalization, results in persistent or significant disability/ incapacity, or is a congenital anomaly/birth defect. Any medical event that requires intervention to prevent one of the outcomes above may also be considered as serious. |

## Table 2: Indicator summary for monitoring SP2 at all levels

| **SP2: COMMITMENT & DEMAND** |
|---|
| **SP Objective 2.1: Build and sustain strong political commitment for immunization at all levels** |

| Indicator selected for global monitoring | Options for regional monitoring | Options for country monitoring |
|---|---|---|
| Proportion of countries with legislation in place that is supportive of immunization as a public good | **Aligns with global-level monitoring:**<br>Proportion of countries with legislation in place that is supportive of immunization as a public good | **Aligns with global-level monitoring:**<br>Legislation is in place that is supportive of immunization as a public good<br><br>**Indicator options:**<br>• Commitment tracking and accountability frameworks used at country and subnational levels |
| **SP Objective 2.2: Ensure that all people and communities value, actively support and seek out immunization services** | | |
| **Indicator selected for global monitoring** | **Options for regional monitoring** | **Options for country monitoring** |
| Proportion of countries that have implemented behavioural or social strategies (i.e. demand generation strategies) to address under-vaccination | **Aligns with global-level monitoring:**<br>Proportion of countries that have implemented behavioural or social strategies (i.e. demand generation strategies) to address under-vaccination<br>**Indicator options:**<br>1. Government support for community action (e.g. earmarked funds for community action, provision of technical tools tailored to communities, programmes for subgroups at particular risk)<br>2. Countries with dedicated online resource for sharing accurate information about vaccines and immunization, including local schedule<br>3. Countries with routine digital listening platforms established | **Aligns with global-level monitoring:**<br>Implementation of behavioural or social strategies (i.e. demand generation strategies) to address under-vaccination in the previous year<br><br>**Indicator options:**<br>1. Health facility microplans that include engagement with civil society and community representatives<br>2. Health facilities with staff that received training (refresher or other) on interpersonal communications or similar<br>3. % of population that values vaccination<br>4. Placeholder for additional BeSD-based indicator<br>5. Placeholder for programmatic indicator on overcoming gender-related barriers to immunization |

## Table 3: Indicator summary for monitoring SP3 at all levels

| SP3: COVERAGE & EQUITY |
|---|
| **SP Objective 3.1: Extend immunization services to regularly reach "zero-dose" and under-immunized children and communities** |

| Indicator selected for global monitoring | Options for regional monitoring | Options for country monitoring |
|---|---|---|
| None | **Indicator options:**<br>1. Number of countries with evidence-based and funded plan to address coverage of high-risk communities (zero-dose and under-immunized)<br>2. % of countries with strategies to reach disadvantaged population<br>3. % of countries that include activities to reach zero-dose children and missed communities in their national immunization strategies<br>4. % of countries for which at least 80%* of districts have microplans that specifically target zero-dose communities (*target to be set at regional level)<br>5. % of countries that have conducted an analytic assessment (coverage and equity analysis) of the number and distribution of zero-dose and underimmunized children and the determinants of missed communities<br>6. Number of immunization sessions conducted, disaggregated by delivery type. | **Indicator options:**<br>**1.** Evidence-based and funded plan to address coverage of high-risk communities exists<br>2. Dropout rates between first dose (DTP1) and third dose (DTP3) of DTP-containing vaccines; and dropout rates between DTP1 and MCV1<br>3. Number of immunization sessions (1) planned and (2) conducted, disaggregated by delivery type (e.g. fixed, outreach).<br>4. % of districts in which at least 80% of planned (outreach) sessions are also held<br>5. % of eligible children in the disadvantaged population that are reached and vaccinated according to national schedule.<br>6. % of districts with (micro) plans that specifically target zero-dose and under-immunized communities<br>7. % of acute flaccid paralysis (AFP) cases who are identified as being "zero dose" or previously unvaccinated with OPV |
| **SP Objective 3.2: Advance and sustain high and equitable immunization coverage nationally and in all districts** | | |
| **Indicator selected for global monitoring** | **Options for regional monitoring** | **Options for country monitoring** |
| DTP3, MCV1, and MCV2 coverage in the 20% of districts with lowest coverage (mean across countries) | **Aligns with global-level monitoring:**<br>DTP3, MCV1, and MCV2 coverage in the 20% of districts with lowest coverage (mean across countries)<br><br>**Indicator options:**<br>1. % of countries with annualized national dropout rate of DTPcv1 and DTPcv3 greater than 5% points<br>2. % of countries that have explicit strategies in their national immunization strategies to overcome gender-related barriers to vaccination | **Aligns with global-level monitoring:**<br>DTP3, MCV1, and MCV2 coverage in the 20% of districts with lowest coverage<br><br>**Indicator options:**<br>1. Dropout rates between first dose (DTP1) and third dose (DPT3) of DTP-containing vaccine<br>2. Geographic equity of immunization coverage<br>3. Percentage points difference in coverage of DTPcv1, MCV1 and FIC associated with the most important socio-economic determinants of vaccination coverage in the country (poverty, education, ethnicity, religious affiliation) |

| | | |
|---|---|---|
| | | 4. % of population living within 5 km to a fixed-site facility offering immunization services |

## Table 4: Indicator summary for monitoring SP4 at all levels

| **SP4: LIFE COURSE & INTEGRATION** | | |
|---|---|---|
| **SP Objective 4.1: Strengthen immunization policies and service delivery throughout the life course, including for appropriate catch-up vaccination and booster doses** | | |
| **Indicator selected for global monitoring** | **Options for regional monitoring** | **Options for country monitoring** |
| Breadth of protection (mean coverage for all WHO-recommended vaccine antigens, by country) | **Aligns with global-level monitoring:**<br>Breadth of protection (mean coverage for all WHO-recommended vaccine antigens, by country)<br><br>**Indicator options:**<br>1. Proportion of countries with at least three vaccines targeting population beyond the first year of life in the national immunization schedule<br>2. Proportion of countries with MCV2, DTP-containing vaccine (DTPcv) booster dose, HPV in the national immunization schedule.<br>3. Proportion of countries with seasonal influenza vaccination programmes for either all individuals or targeted high-risk sub-populations | **Aligns with global-level monitoring:**<br>• Proportion of WHO recommended vaccines present within their national immunization schedule.<br><br>**Indicator options:**<br>1. Number of vaccines targeting population beyond the first year of life in the national immunization schedule<br>2. Availability of policies and/or laws for vaccination in childhood, adolescence and adulthood, including policies on catch-up of earlier missed vaccinations<br>3. Coverage of MCV2, Penta booster dose, HPV<br>4. Coverage of seasonal influenza vaccination in countries that include it in the national immunization schedule for all individuals or targeted high-risk sub-populations<br>5. Percentage of LQAs achieving >80% “pass” rate during SIA campaigns, such as polio, measles, etc. |
| **SP Objective 4.2: Establish integrated delivery points of contact between immunization and other public health interventions for different target age groups.** | | |
| **Indicator selected for global monitoring** | **Options for regional monitoring** | **Options for country monitoring** |
| None | **Indicator options:** | **Indicator options:** |

| | | |
|---|---|---|
| | **1.** Proportion of countries with national policies or standard operating procedures in place to strengthen delivery of immunization services integrated with primary health care, across the life course<br>2. Proportion of countries with national guides for service delivery integration to prevent missed opportunities, for all age groups<br>3. Proportion of countries with >90% of PHC providing immunization services.<br>4. Proportion of countries with >80% of tertiary health care providing immunization services<br>5. Proportion of countries integrating immunization delivery in ≥90% of existing non-traditional delivery strategies (e.g. schools, pharmacies)<br>6. Proportion of countries with a composite coverage index (CCI) (e.g. GVAP integration indicator G5.2) stratified by CCI < 60 (weak health systems), CCI 60–70 (less weak health systems), CCI > 70 (stronger health systems)<br>7. Proportion of countries that link home-based records (HBR) with civil birth registration through immunization services | 1. National policies or standard operating procedures in place to strengthen delivery of immunization services integrated with primary health care, across the life course<br>2. Existence of national guides for service delivery integration to avoid missed opportunity, for all age groups<br>3. % of existing non-traditional delivery strategies (e.g. schools, pharmacies) integrating immunization delivery<br>4. % of PHC centres integrating immunization services with other PHC services<br>5. % of tertiary health care providing daily immunization service<br>6. Linkage of home-based records (HBR) with civil birth registration through immunization services<br>7. % of immunization clinics with an active mechanism to offer post-partum family planning in the first year after childbirth<br>8. Number of districts, and % coverage, with routine well child checks in second year of life that include growth, nutrition and vaccination<br>9. Number of districts with active investigation of the % of missed opportunities for vaccination (MOV) using the WHO MOV strategy in annual immunization plans |
| **SP Objective 4.3: Accelerate new vaccine introductions to protect more people from more diseases in all countries** | | |
| **Indicator selected for global monitoring** | **Options for regional monitoring** | **Options for country monitoring** |
| None | **Indicator options:**<br>1. Proportion of countries with all WHO-recommended vaccines within their national immunization schedule<br>2. Proportion of countries with newly recommended vaccines introduced post-2020. | **Indicator options:**<br>1. Proportion of all WHO-recommended vaccines within their national immunization schedule within X years of WHO policy recommendation.<br>2. Proportion of each life course stage reached with the last dose of WHO-recommended vaccines<br>3. % of coverage of newly recommended vaccines introduced post-2020.<br>4. Rate of scale up of new vaccines |

| | | |
|---|---|---|
| | | 5. Number of vaccine introductions |

## Table 5: Indicator summary for monitoring SP5 at all levels

| **SP5: OUTBREAKS & EMERGENCIES** | | |
|---|---|---|
| **SP Objective 5.1: Ensure preparation for, detection of, and rapid, high-quality responses to vaccine-preventable disease outbreaks** | | |
| **Indicator selected for global monitoring** | **Options for regional monitoring** | **Options for country monitoring** |
| Proportion of polio, measles, meningococcal disease, yellow fever, cholera, and Ebola outbreaks with timely detection and response (includes only outbreaks with an outbreak response vaccination campaign) | **Aligns with global-level monitoring:**<br>Proportion of polio, measles, meningococcal disease, yellow fever, cholera, and Ebola outbreaks with timely detection and response (includes only outbreaks with an outbreak response vaccination campaign)<br><br>**Indicator options:**<br>1. Annual number of laboratory-confirmed epidemic-prone vaccine-preventable disease outbreaks<br>2. For epidemic-prone vaccine-preventable diseases, average coverage achieved by outbreak response vaccination campaigns<br>3. % of countries with national outbreak response plan | **Aligns with global-level monitoring**:<br>Proportion of polio, measles, meningococcal disease, yellow fever, cholera, and Ebola outbreaks with timely detection and response<br><br>**Indicator options:**<br>1. Annual number of laboratory-confirmed epidemic-prone vaccine-preventable disease outbreaks<br>2. For epidemic-prone vaccine-preventable diseases, average coverage achieved by outbreak response vaccination campaigns<br>3. (National outbreak response plan developed - Y/N)<br>4. % of stockpile applications that demonstrate use of evidence (e.g. disease surveillance data, root cause analysis, and coverage data) to support planning/targeting of outbreak response campaigns |
| **SP Objective 5.2: Establish timely and appropriate immunization services during emergencies, and in communities affected by conflict, disaster and humanitarian crisis** | | |
| **Indicator selected for global monitoring** | **Options for regional monitoring** | **Options for country monitoring** |
| None | **Indicator options:** | **Indicator options:** |

| | | |
|---|---|---|
| | Percentage of children who have age-appropriate vaccination for DTP3, MCV (last dose), and PCV (last dose) in settings with humanitarian crises or emergencies | 1. Annual % of children who have age-appropriate vaccination coverage for DTP3, MCV (last dose), and PCV (last dose) in settings with humanitarian crises or emergencies<br>2. Number of zero-dose and underimmunized children in fragile, conflict and emergency settings<br>3. SMART or equivalent vaccine surveys carried out during a year of crisis |

## Table 6: Indicator summary for monitoring SP6 at all levels

| SP6: SUPPLY & SUSTAINABILITY | | |
|---|---|---|
| **SP Objective 6.1: Build and maintain healthy global markets across all vaccine antigens** | | |
| **Indicator selected for global monitoring** | **Options for regional monitoring** | **Options for country monitoring** |
| Level of health of the vaccine market, disaggregated by vaccine antigens and country typology | **None** | **None** |
| **SP Objective 6.2: Ensure sufficient financial resources for immunization programmes in all countries** | | |
| **Indicator selected for global monitoring** | **Options for regional monitoring** | **Options for country monitoring** |
| Proportion of countries whose domestic government and donor expenditure on primary health care increased or remained stable, constant prices per capita (GGHE indicator) | **Aligns with global-level monitoring:**<br>Proportion of countries whose domestic government and donor expenditure on primary health care increased or remained stable<br><br>**Indicator options:**<br>1. Number of countries with stagnant or increased government expenditure (broken down by domestic and donor funding) – in constant prices per live birth – on immunization (breaking down vaccine and estimated operational cost)<br>2. Number of countries where immunization was de-prioritized, i.e.<br>- share of domestic public budget allocated to immunization (vaccines and operational cost) declined<br>- share of public budget – including donor money – allocated to immunization declined | **Aligns with global-level monitoring:**<br>Increasing or stagnant trend of domestic government and donor expenditure on primary health care and on immunization, in constant prices per capita and live birth<br><br>**Indicator options:**<br>1. Has the share of domestic government only on primary health care and on immunization, in constant Ps per capita and live birth, increased?<br>2. Is the annual execution rate of immunization budget less than 90%?<br>3. Is the annual execution rate of PHC budget less than 90%?<br>4. Is there an annual operational plan in place, stipulating the needs for the programme and the available resources to cover those needs?<br>5. Has an analysis for the financing of immunization been conducted recently to identify bottlenecks to progress towards universal |

| | | |
|---|---|---|
| | **3.** Number of countries that track immunization expenditure using health accounts | access to immunization, and explore possibilities for efficiency gain through integrated services? |
| **SP Objective 6.3: Increase immunization expenditure from domestic resources in aid-dependent countries, and when transitioning away from aid, secure government funding to achieve and sustain high coverage for all vaccines** | | |
| **Indicator selected for global monitoring** | **Options for regional monitoring** | **Options for country monitoring** |
| Proportion of countries whose share of national immunization schedule vaccine expenditure funded by domestic government resources increased | **Aligns with global-level monitoring:**<br>Proportion of countries whose share of national immunization schedule vaccine expenditure funded by domestic government resources increased<br><br>**Indicator options:**<br>Number of countries with stagnant or increased share of immunization schedule vaccine expenditure funded by domestic government resources | **Aligns with global-level monitoring:**<br>Percentage of total expenditure on vaccines in the national immunization schedule financed with domestic government funds<br><br>**Indicator options:**<br>The cost reduction of vaccines over time, by antigen |

## Table 7: Indicator summary for monitoring SP7 at all levels

| **SP7: RESEARCH & INNOVATION** | | |
|---|---|---|
| **SP Objective 7.1: Establish and strengthen capacity at all levels to identify priorities for innovation, and to create and manage innovation** | | |
| **Indicator selected for global monitoring** | **Options for regional monitoring** | **Options for country monitoring** |

| | | |
|---|---|---|
| Proportion of countries with an immunization research agenda | **Aligns with global-level monitoring:**<br>Proportion of countries with an immunization research agenda<br>**Indicator options:**<br>1. Availability of common framework/process/format for developing country immunization research agendas<br>2. Proportion of countries that developed immunization research agenda, relative to baseline<br>3. Proportion of countries that have secured funding to develop and implement national immunization agendas<br>4. Proportion of countries engaged in vaccine product and delivery, R&D, implementation research and/or manufacturing | **Aligns with global-level monitoring:**<br>• Immunization research agenda exists<br>**Indicator options:**<br>1. Improved institutional and technical capacity to carry out vaccine clinical trials<br>2. Number of districts that have identified their priorities for new products/innovations |
| **SP Objective 7.2: Develop new vaccines and technologies, and improve existing products and services for immunization programmes** | | |
| **Indicator selected for global monitoring** | **Options for regional monitoring** | **Options for country monitoring** |
| Progress towards global research and development | **Indicator options:**<br>1. Number of new vaccine-related products/innovations approved/implemented or in pilot studies<br>2. Number of pivotal clinical trials performed<br>3. Number new vaccines prequalified<br>4. Number of countries with RITAG approving their research immunization agenda priorities<br>5. Number of vaccines in commercial manufacture<br>6. The establishment of an evaluation framework to assess uptake and implementation effectiveness of new and existing products and services | **Indicator options:**<br>1. Number of new vaccine-related products/innovations approved by national regulatory authority (NRA)<br>2. Number of new vaccines recommended for use<br>3. Number of pivotal clinical trials performed<br>4. Number of vaccines in commercial manufacture |
| **SP Objective 7.3: Evaluate promising innovations and scale up innovations as appropriate based on the basis of the best available evidence** | | |
| **Indicator selected for global monitoring** | **Options for regional monitoring** | **Options for country monitoring** |

| | | |
|---|---|---|
| None | **Indicator options:**<br>1. Proportion of countries that have established processes/frameworks for identifying vaccine products and innovations to develop, introduce or use<br>2. Proportion of countries with at least one implemented recommendation from a NITAG or other relevant independent technical advisory group | **Indicator options:**<br>1. At least one implemented recommendation from a NITAG or other relevant independent technical advisory group implemented<br>2. List of evidence-based solutions to strengthen immunization service delivery<br>3. Progress implementing/scaling up evidence-based solutions to strengthen immunization service delivery |

# Metadata for Strategic Priority Objective Indicators

## Global Strategic Priority Objective Indicators

*Each Global SP Objective Indicator will be defined with the following characteristics*:

| Indicator ID, Name | SP 1.1- Proportion of countries with evidence of adopted mechanism for monitoring, evaluation and action at national and sub-national levels |
|---|---|
| Definition | **Mechanism that drives monitoring, evaluation and action (ME&A) cycles at national and sub-national (equivalent to district) levels is defined according to the following criteria.**<br><br>**Criteria include:**<br>1. Presence of a functional NITAG or equivalent technical advisory group<br>2. Monitoring, evaluation and action cycles are in place<br>3. Feedback loop is in place to communicate assessments of progress, and recommendation actions from sub-national to national and from national to sub-national level |
| Calculation and operational considerations | Data-driven decision-making is an indication of strong leadership and management. This indicator should help in uniting the key stakeholders to drive actions in an accountable manner. Information from ME&A exercises should be reported to higher levels, and recommendations fed back to lower levels. Actions planned/taken should be reported to higher levels and from higher to lower levels. The indicator will be self-reported according to the criteria above. Meeting each criterion gives 1 point, with a maximum score of 3 points. Data for this indicator is not currently available at the global level, except for NITAG presence and functionality which is collected through the JRF.<br>**JRF questions:**<br><br>**Criteria 1**: Presence of a functional NITAG or equivalent technical advisory group (already collected through JRF).<br>"Functional" defined as meeting the following: *1. Technical advisory group has a formal written terms of reference; 2. There is a legislative or administrative basis for the advisory group; 3. The following areas of expertise are represented in the group as core membership: pediatrics; public health; infectious diseases; epidemiology; immunology; 4. members of the technical advisory group are required to disclose conflict of interest; 5. Committee meets at least once a year on a regular basis; and 6. agenda and background documents distributed to technical advisory group members at least 1 week ahead of meetings.*<br><br>**Criteria 2**:<br>Monitoring, evaluation and action cycles were in place in [insert previous year].<br><br>1 In [insert previous year], did your country have monitoring, evaluation, and action (ME&A) cycles in place for data-driven decision making?<br>2 If yes, please share an operational document describing the ME&A process in your country in the previous year: |

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| | 3 If yes, please provide a description summary of implemented actions to strengthen immunization programme performance that occurred through the implementation of monitoring, evaluation, and action cycles.<br>4 If yes, select stakeholders that provided guidance for monitoring, evaluation, and action cycles (ME&A) in [insert previous year]<br>4.1 NITAG<br>4.2 Government<br>4.3 CSOs<br>4.4 Other (specify)<br><br>**Criteria 3:** Feedback loop is in place to communicate assessments of progress, and recommendation actions from sub-national to national and from national to sub-national level<br>3.1 In [insert previous year], was the evaluation of immunization indicator results communicated from national to subnational levels?<br>3.2 In [insert previous year], was the evaluation of immunization indicator results communicated from subnational levels to the national level? |
| Method of measurement | Data for this indicator will be collected through self-report (Yes/No) and a request to provide supporting documentation.<br>Supporting documentation will include:<br>- Operational document describing the ME&A process at all levels<br>- Evidence of implemented actions to strengthen immunization programme performance at all levels |
| Data source | Proposed to be collected through JRF |

| **Indicator ID, Name** | **SP 1.2- Density of physicians, nurses and midwives per 10,000 population** |
|---|---|
| Definition | Number of physicians, nurses and midwives per 10,000 population |
| Calculation and operational considerations | Density of physicians, nurses and midwives per 10,000 population:<br>Numerator: Number of physicians, nurses and midwives, defined in headcounts<br>Denominator: Total population (per 10,000)<br>Physicians comprise the following occupations: generalists, specialist medical practitioners and medical doctors. The International Standard Classification of Occupations (ISCO) unit group codes included in this category are 221, 2211, 2212.<br>Nursing and midwifery personnel comprise the following occupations: nursing professionals, nursing associate professionals, midwifery professionals, midwifery associate professionals and related occupations. The ISCO unit group codes included in this category are 2221, 2222, 3221 and 3222 of ISCO-08. |
| Method of measurement | In response to WHA resolution, WHA 69.19, an online National Health Workforce Accounts (NHWA) data platform was developed to facilitate reporting. Complementing national reporting through the NHWA data platform, additional sources such as the National Census, Labour Force Surveys and key administrative national and regional sources are also employed. In general, the denominator data for |

| | |
|---|---|
| | workforce density (i.e. national population estimates) are obtained from the United Nations Population Division's World Population Prospects database. In cases where the official health workforce report provides density indicators instead of counts, estimates of the stock were then calculated using the population estimated from the United Nations Population Division's World population prospects database.<br>Further information:<br>https://www.who.int/data/gho/data/indicators/indicator-details/GHO/nursing-and-midwifery-personnel-(per-10-000-population)<br>https://www.who.int/activities/improving-health-workforce-data-and-evidence |
| Data source | Numerator: WHO National Health Workforce Accounts (NHWA)<br>Denominator: United Nations Statistics Division population data |

| **Indicator ID, Name** | **SP 1.3- Proportion of countries with 90% on-time reporting from 90% of districts for suspected cases of all priority vaccine-preventable diseases included in nationwide surveillance (including reporting of zero cases)*** |
|---|---|
| Definition | Countries with on time reporting from districts of suspected cases of all priority VPDs included in nationwide surveillance (including reporting of zero cases)<br>*suspected cases for all priority VPDs under nationwide surveillance. Priority VPDs include at a minimum, polio, measles, rubella, neonatal tetanus, yellow fever (for endemic countries), meningococcal (for meningitis belt countries) and other diseases under nationwide surveillance that a country/region determines is a priority. |
| Calculation and operational considerations | Denominator - total countries reporting data.<br>Numerator consists of countries where at least 90% of districts have achieved at least 90% on time reporting for all priority vaccine-preventable diseases included in nationwide surveillance (including reporting of zero cases)<br>- Report the number of cases for all suspected cases of the predefined VPDs to the provincial or national level. The number of cases can be zero<br>- Submit those reports in a timely manner as defined by the country's internal deadlines for reporting.<br>- To achieve 90% reporting per year: If a country expects weekly reporting for a given disease then the district needs to report ≥47 times by the deadline set by the country. If they have monthly reporting for a disease, then reporting should be ≥11 times in a calendar year.<br>Districts will not count in the numerator if they:<br>- Report the number of suspected cases for some, but not all, of the predefined VPDs<br>- Do not report on time<br>- Report less than 90% of the time.<br>Countries that are small can use their primary administrative unit or health facilities as their unit of measure |
| Method of measurement | To calculate this indicator, the following questions are proposed for the JRF.<br>1. What are the priority VPDs in your country (priority VPDs are those that a country defines as those that they want to achieve high quality surveillance to drive their vaccination programme. These could be diseases targeted for elimination/eradication or those |

<table>
<tr><td></td><td>that a country is looking at for vaccine introduction or because disease burden is high or because they are highly outbreak prone) that are included in nationwide surveillance (drop down/select all of all VPDs)<br><br>2. Number of districts: ____<br><br>3. Please fill in the table to help calculate the indicator.<br><br>
<table>
<tr><th>Priority VPD (select all priority VPDs)</th><th>Frequency of reporting (daily, weekly, monthly)</th><th>Total number of districts that reported at any time during the ____ (year)</th><th>Number of districts that report at least 90% on the time during the ___ (year)</th></tr>
<tr><td>Fill in name of VPD 1</td><td></td><td></td><td></td></tr>
<tr><td>Fill in name of VPD 2</td><td></td><td></td><td></td></tr>
<tr><td>Fill in name of VPD 3 (etc. through all VPD)</td><td></td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>Data source</td><td>Proposed to be collected through JRF</td></tr>
</table>

| Indicator ID, Name | SP 1.4- Average proportion of time with full availability at service delivery level of DTPcv and MCV (across countries) |
|---|---|
| Definition | Average over all reporting countries of the percentage of health facilities that reported no stock-outs for the full year for DTPcv and MCV |
| Calculation and operational considerations | Countries that report having a system in place to measure vaccine availability at the service delivery level will consolidate facility-level data and calculate the yearly average % of facilities with no stock-outs of DTPcv and MCV.<br>The following questions are proposed to be added to the JRF:<br><br>• Does your country have a system in place to measure vaccine availability at the service delivery level (Y/N)?<br>• What was the availability of measles-containing vaccine in [insert previous year] – defined as the percentage of health facilities that reported no stock outs for the full year?<br>• What was the availability of DTP containing vaccine in [insert previous year] – defined as the percentage of health facilities that reported no stock-outs for the full year?<br><br>Calculation: Average percentage of DTPcv and MCV across all countries that have a system in place to collect this information.<br><br>Operational considerations: |

| | |
|---|---|
| | In the context of this indicator, this means for each month, every health facility was able to meet all vaccine needs and reported no stock-outs for the full year. |
| Method of measurement | Countries to monitor and collect facility-level data on DTP containing vaccine and MCV full stock availability over a year using existing information system (e.g. LMIS, HMIS, DHIS2, wVSSM or other available information management platforms).<br>Countries that lack this data (e.g. no reporting of the indicator, no system to keep track of stock at service delivery level) indicate N for the first question. |
| Data source | Proposed to be collected through JRF |

| **Indicator ID, Name** | **SP 1.6- Proportion of countries with at least 1 documented (with reporting form and/or linelisted) individual serious AEFI* case safety report per million total population** |
|---|---|
| Definition | Countries with documented (with reporting form and/ or line-listed) individual serious AEFI case safety reports per million total population |
| Calculation and operational considerations | Annual number of individual AEFI case safety reports available in the WHO global database for safety monitoring<br>Threshold: All countries with at least 1 AEFI individual case safety report/1, 000 000 population<br>Total population: UN Population Division's World Population Prospects for e.g.<br>https://population.un.org/wpp/Publications/Files/WPP2019_Highlights.pdf<br>* WHO global database – VigiBase: https://www.who-umc.org/vigibase/vigibase/ |
| Method of measurement | Individual serious AEFI reporting rate in million total population per year= Number of individually documented serious AEFI cases reported from country/sub-national area per year / Total population in the same country/sub-national area per year * 1,000,000<br>Individual serious AEFI reporting rate in million total population per year = (Number of individually documented serious AEFI cases reported from a country/ sub-national area per year / Total population in the same country/ sub-national area per year) X 1,000,000 |
| Data source | Primary data source: WHO global database VigiBase: https://www.who-umc.org/vigibase/vigibase/ .<br>VigiBase data will be used for countries which have capacity to upload data to VigiBase.<br>JRF will be used temporarily for countries that are transitioning to case based reporting into VigiBase. |

| Indicator ID, Name | 2.1 Proportion of countries with legislation in place that is supportive of immunization as a public good |
|---|---|
| Definition | Proportion of countries with legislation in place that is supportive of immunization as a public good |
| Calculation and operational considerations | This data is currently not systematically collected at the global level so will need to be added to the JRF in 2021. Calculation will be through self-report (Yes/No) by countries and request to upload a copy or link to the relevant legislation.<br>Proposed JRF Questions:<br>- Do you have a vaccination law or other legislation that is supportive of immunization and commits the government to finance all aspects of the immunization programme at all levels?<br>- Please provide the year it was passed<br>- Please upload supporting document or provide the website link in the comment field: |
| Method of measurement | The existence (or not) of a legislative basis underlying the commitment to provide government-funded immunization to the population. This will be measured through self-report (Yes/No) and a request to provide supporting documentation. |
| Data source | To be included in JRF. Note: PAHO is piloting this question on the 2020 JRF. Based on feedback from the countries in the region, the exact phrasing of the question may be modified accordingly.<br>Question will also contain an explanatory note (sample text below):<br>A "vaccination law or other legislation" could include written laws (acts, statutes) or regulations, orders or decrees established by public authority and enforceable by law. Legislation may be specialized for immunization or be contained in other general public health legislation and, among other things, must consider securing financing for all components of the Immunization Programme at all levels, including the purchase and timely availability of vaccines in accordance with national planning, training, supervision, outreach activities, information systems, and others. |

| Indicator ID, Name | 2.2 Percentage of countries that have implemented behavioral or social strategies (i.e. demand generation strategies) to address under-vaccination |
|---|---|
| Definition | Percentage of countries that have implemented behavioral or social strategies (i.e. demand generation strategies) to address under-vaccination |
| Calculation and operational considerations | This data is currently not collected at the global level so will need to be added to the JRF in 2021. Calculation will be through self-report by countries to the following question:<br>In [insert previous year] did the country implement any behavioral or social strategies (i.e., demand generation strategies) to address under-vaccination? Choose all that apply: |

| | |
|---|---|
| | • Interventions to improve access to vaccination<br>• Interventions to improve service quality<br>• Interventions to build capacity among healthcare workers<br>• Community engagement<br>• Interventions to communicate or educate the public<br>• Interventions to manage misinformation based on social or digital listening data<br>• Interventions at the policy level (e.g. incentives)<br>• Other, please specify: |
| Method of measurement | Indicator to be reported by countries through the JRF and will replace former demand questions in the JRF |
| Data source | Proposed to be collected through JRF |

| **Indicator ID, Name** | **3.2: DTP3, MCV1, and MCV2 coverage in the 20% of districts with lowest coverage (by country)** |
|---|---|
| Definition | Average over all reporting countries of coverage for DTP3, MCV1, and MCV2 in each country's 20% lowest performing districts |
| Calculation and operational considerations | Average coverage in lowest performing quintile for each country that reports district level coverage.<br>Group of worst performing districts may change from year to year (i.e. no attempt to follow performance in a fixed group of districts) |
| Method of measurement | Analysis of district level coverage reported by member states. |
| Data source | Annual member state reporting of district level coverage data through the Joint Reporting Form process |

| **Indicator ID, Name** | **4.1 Breadth of protection: mean coverage for all vaccine antigens recommended by WHO** |
|---|---|
| Definition | Breadth of protection defined as mean coverage for all vaccine antigens recommended by WHO |
| Calculation and operational considerations | The average of the coverage achieved at global, regional, country level for the following antigens:<br>- Diphteria, Tetanus, Pertussis, Hepatitis B, Hib, Measles, Measles 2nd dose, Pneumo, Polio, IPV, Rubella, Rota, HPV<br><br>Note that this definition may be further refined. |

| | |
|---|---|
| Method of measurement | Analysis of WUENIC |
| Data source | JRF, WUENIC |

| **Indicator ID, Name** | **5.1 Proportion of polio, measles, meningococcal disease, yellow fever, cholera and Ebola outbreaks with timely detection and response (includes only outbreaks with an outbreak response vaccination campaign)** |
|---|---|
| Definition | Proportion of polio, measles, meningococcal disease, yellow fever, cholera, and Ebola outbreaks* with timely** detection and response<br><br>*Only applies to outbreaks for which there is an outbreak response vaccination campaign.<br>**Acceptable time from onset of outbreak to campaign implementation to be defined for each disease |
| Calculation and operational considerations | Time from onset of outbreak to implementation of vaccination campaign should be determined for each polio, measles, meningococcal disease, yellow fever, cholera, and Ebola outbreak for which there is an outbreak response vaccination campaign.<br>Maximum time for the period from onset of outbreak to implementation of vaccination campaign to be considered timely will be defined for each vaccine. Criteria for determining onset of outbreak and timeliness of outbreak detection and response to be consistent with WHO surveillance standards and disease eradication, elimination, or control strategies.<br>Calculation of indicator will involve division of collective total number of known polio, measles, meningococcal disease, yellow fever, cholera, and Ebola outbreaks with timely detection and outbreak response vaccination campaigns by collective total number of known polio, measles, meningococcal disease, yellow fever, cholera, and Ebola outbreaks with outbreak response vaccination campaigns. |
| Method of measurement | Information from the International Coordinating Group on vaccine provision, Measles Rubella Initiative, Global Polio Eradication Initiative, and WHO World Health Emergencies group, supplemented by national immunization and disease surveillance programs via the WHO/UNICEF Joint Reporting Form. |
| Data source | ICG, MRI, GPEI, WHO, national immunization and disease surveillance programs.<br>Information will be systematically collected from national immunization and disease surveillance programs to provide data for regional and global level data. |

| Indicator ID, Name | 6.1 Level of health of the vaccine market, disaggregated by antigen and country typology |
|---|---|
| Definition | Level of health of the market, disaggregated by antigen and country typology (Gavi, non-Gavi MICs, HICs) |
| Calculation and operational considerations | • Global supply exceeds global demand by more than x and by no more than y – x and y as defined in the MI4A vaccine-specific market studies: https://www.who.int/immunization/programmes_systems/procurement/mi4a/platform/module2/en/, by antigen<br>• The 2 largest suppliers do not exceed 2/3 of the market, by antigen<br>• Total number of manufacturers exceeds 3 including the ones with product in clinical development (at least phase IIa), by antigen |
| Method of measurement | A number of criteria have been defined to determine the level of health of a market. The number of criteria 'met' directly determine the health of the market for each vaccine. Each organization provides their inputs, and an adjustment exercise is undertaken in case of misalignment.<br><br>More specifically the following attribute will be measured:<br>• supply meeting demand<br>• individual supplier risk<br>• buffer capacity<br>• long term competition<br>Semi-quantitative assessment of the individual market health will be conducted by partners [WHO, UNICEF, Gavi, BMGF]. Based on assessments of individual antigen the above attributes and a holistic overview of each market's programmatic context, markets will be assessed based on the following categories:<br><br>• Insufficient and requires further intervention: severe supply security challenges and risks exist, no improvement is expected without Gavi Alliance intervention<br>• Insufficient with conditions for improvement: severe supply security challenges and risks exist, improvements possible but requiring further monitoring and lead time to materialize.<br>• Sufficient with risks: limited supply security challenges with unacceptable risks of backsliding, interventions are required to mitigate risks.<br>• Sufficient and sustainable: limited supply security challenges with acceptable risks, monitoring required to ensure risks to not increase. |
| Data source | 1. UNICEF<br>2. WHO: via the MI4A initiative<br>3. Gavi Secretariat<br>4. BMGF |

| Indicator ID, Name | 6.2 Proportion of countries whose domestic government and donor expenditure on primary health care increased or remained stable |
|---|---|
| Definition | Proportion of countries whose current government expenditure level (from domestic and donor funding) on primary health care (PHC) per capita in US$ (constant prices) increased or remained stable since pre-2020 level. |
| Calculation and operational considerations | Per capita constant US$ PHC expenditure data is calculated using PHC expenditure, divided by population and measured in constant US$ price (converted in 2020 NCU price and then converted into 2020 US$).<br>The trend calculation will be defined subsequently, leveraging methodologies used for WHO GHED and GHER (Global Health Expenditure Report). |
| Method of measurement | To monitor growth, proposed methodology is to take the annual growth rates, using constant prices per capita values.<br>See https://apps.who.int/nha/database/DocumentationCentre/GetFile/57752201/en |
| Data source | WHO GHED (health accounts data)<br><br>https://apps.who.int/nha/database/Select/Indicators/en |

| Indicator ID, Name | 6.3 Proportion of countries whose share of national immunization schedule vaccine expenditure funded by domestic government resources increased |
|---|---|
| Definition | Number of countries whose share of current expenditure on vaccines (in the national immunization schedule) that is financed with domestic government funds increased since pre-2020 level. |
| Calculation and operational considerations | The share is calculated from domestic government spending on vaccine as a % of total expenditure on routine immunization vaccines.<br>The trend calculation will be defined subsequently, leveraging methodologies used for WHO GHED and GHER (Global Health Expenditure Report). |
| Method of measurement | To monitor growth, proposed methodology is to compare shares of Yt with Yt-1.<br><br>The total value of vaccines used for the provision of immunization. All the materials and services are to be fully consumed during the production activity period.<br><br>Domestic public resources spent on all vaccines used in conformity with the national immunization programme, including routine doses of vaccines, and following each country's vaccination schedule. Includes the international market price, as well as transport and handling expenditures. Vaccines used in Child Health Days are included in routine vaccine expenditures, but expenditures related to doses of vaccine given through supplemental immunization activities (SIAs) are excluded |
| Data source | JRF |

| Indicator ID, Name | SP 7.1- Proportion of countries with national agenda for research on immunization |
|---|---|
| Definition | Number of countries with national agenda for research on immunization defined and based on clearly identified and prioritized evidence needs and specified in national immunization strategy or other national strategy document |
| Calculation and operational considerations | The national agenda should identify priority research areas that increase the likelihood that the country will achieve its IA2030 targets. Research is defined as activities that span 5 areas:<br>• measuring the magnitude and distribution of a health problem;<br>• understanding the diverse causes or the determinants of the problem, whether they are due to biological, behavioral, social or environmental factors;<br>• identifying and developing solutions or interventions that will help to prevent or mitigate the problem;<br>• implementing or delivering solutions through policies and programmes; and<br>• evaluating the impact of these solutions on the magnitude, level and distribution of the problem.<br><br>Research agendas will vary depending on national context and priorities. Some countries may focus on disease burden and implementation/operational research to inform new product implementation, whereas others may have wider-ranging agendas. |
| Method of measurement | Proposed JRF Questions:<br>- Do you have a national agenda for research on immunization?<br>**IF YES,**<br>- Please provide the supporting document (e.g. national immunization strategy, national health plan) which can provide an evidence of national agenda for research on immunization<br><br>From this self reported and supporting documentation, a desk review will be conducted to:<br>• Establish the baseline of how many national immunization research agendas currently exist, what form are they in (how variable), where are they situated, how are they monitored (desk review, surveys through ROs?)<br>• Assess whether a framework or guidance for developing national immunization strategies is desirable, useful – and develop one if needed<br>• Assess progress towards national immunization strategy as part of NIS reporting |
| Data source | Primary data source<br>- Proposed to be collected through JRF<br><br>Countries should review these sources for the document of their research agenda<br>• National Immunization Technical Advisory Groups<br>• National Immunization strategies |

| | |
|---|---|
| | • National regulatory bodies<br>• RITAGs<br>• Clinical trial registeries |

| Indicator ID, Name | SP 7.2- Progress towards global research and development targets |
|---|---|
| Definition | Progress towards global research and development targets will be monitored based on "short list" of global targets which will be developed by WHO and endorsed by SAGE |
| Calculation and operational considerations | WHO HQ and regional offices together with key partners/stakeholders will mutually define targets and monitor and evaluate progress at the global and regional level. The process will require a prioritization framework to align on priorities, targets, and a mechanism for monitoring and evaluation.<br>The suggested short list should be presented no later than SAGE Oct 2022. |
| Method of measurement | **Global**: Measurement will require<br>- Periodic review of literature to track topical trends and progress<br>- Baseline will be established through the same process using periodic review of literature |
| Data source | Primary data source:<br>- Periodic review of literature, including grey literature<br>Review of literature should include the following sources:<br>• WHO Product Development and Vaccine Advisory Committee and associated working groups (https://www.who.int/immunization/research/committees/pdvac/en/)<br>• Vaccine Innovation Prioritization Strategy (https://www.gavi.org/our-alliance/market-shaping/vaccine-innovation-prioritization-strategy)<br>• Infuse (https://www.gavi.org/investing-gavi/infuse)<br>• Clinical trial registries, manufacturers websites, product pipelines etc, ethics research review |

## Further Development of Impact Goal and Strategic Priority Objective Indicators

The IA2030 M&E Framework includes several impact goal (IG) and strategic priority (SP) objective indicators that were not previously collected and need further development. In addition, the Learning Agenda indicates that the M&E Framework should be reviewed and updated at least once every three years in response to changing programmatic needs and improvements in M&E methods, to ensure it delivers the data required to improve immunization programme performance. This periodic review should assess if the collected data are fit for purpose and make necessary revisions to update the indicators as immunization programme capacities are continuously strengthened.
The following impact goal indicators need further development, including additional data collection and/or in-depth analyses of historical trends and projections (e.g. the anticipated long-term impact of the COVID-19 pandemic) to produce baseline estimates and to set realistic targets.

**IG 1.1** Number of deaths from vaccine-preventable diseases averted.

- Over the next few years, additional pathogens (p.22) will be added to the scope of IG 1.1. These pathogens were categorized based on strategic priorities, data availability and feasibility.
- Estimates for IG 1.1. will be updated and reported on an annual basis with the WUENIC release.
- The models and the methodology will be further refined, and estimates will be validated with additional data.
- The anticipated impact of the COVID-19 pandemic on coverage rate will be incorporated as more data become available.

**IG 1.2** Number and proportion of countries that have achieved global or regional VPD control, elimination and eradication targets.

- Additional VPDs may be included for analysis as regional or global bodies endorse new VPDs for control, elimination and eradication.
- Updates to both the VPD indicators and the VPD targets will be made as disease programmes' monitoring strategies evolve. Possible updates include update from regional endorsement to global endorsement, target value, target type and target date timeframe.

**IG 1.3** Number of large outbreaks of vaccine-preventable diseases.

- Criteria for large outbreaks of polio, measles, cholera, Ebola, meningococcus and yellow fever will be finalized in alignment with global vaccine-preventable disease eradication, elimination and control goals.
- Historical and baseline disease surveillance data will be assessed against the finalized criteria. Assessments of the number of outbreaks qualifying as large outbreaks will be updated annually for each disease within scope of IG 1.3.
- Over the next few years, additional pathogens may be added to the scope of IG 1.3 in alignment with global vaccine-preventable disease eradication, elimination and control goals, particularly as additional outbreak-prone diseases become vaccine-preventable.

**IG 3.2** UHC Index of Service Coverage (UHC SCI)

- The metrics used to measure UHC and PHC will likely evolve over the decade with advances in data and understanding. The target for the IG3.2 indicator will also evolve to ensure immunization programme's contribution to PHC/UHC is best measured.

In addition, all of the IG indicators need to be assessed as they are implemented to properly collect, measure, analyse, interpret, communicate and use the results to drive progress to achieve the IA2030 impact goals.

The following SP objective indicators need further development:

**SP Objective 1.1**: Reinforce and sustain strong leadership, management and coordination of immunization programmes at all levels.

- Well-functioning monitoring, evaluation and action cycles to continuously improve immunization programme quality are a key proxy measure of leadership, management and coordination. Monitoring of this indicator might require development of new reporting and feedback mechanisms and capacity building for implementation of ME&A cycles at all levels.

**SP Objective 2.2**: Ensure that all people and communities value, actively support and seek out immunization services.

- This indicator is intended to drive national immunization programmes to allocate dedicated resources to assess and address barriers to vaccination. However, it was not feasible to develop a single global demand creation indicator that is applicable to all countries, and the availability of data to measure this indicator might be a challenge in some countries.

**SP Objective 3.1:** Ensure preparation for, detection of, and rapid, high-quality responses to vaccine-preventable disease outbreaks.

- Criteria for timely outbreak detection and response will be finalized for each disease in scope of SP5.1 in alignment with global vaccine-preventable disease eradication, elimination and control goals.
- Historical and baseline disease surveillance data will be assessed against the finalized criteria. Assessments of the proportion of outbreaks with outbreak response vaccination campaigns that had timely outbreak detection and response will be updated annually for each disease within scope of SP 5.1. Criteria for timely outbreak detection and response may be revised periodically in light of new diagnostic technology and methodologies for disease surveillance and outbreak response.
- Over the next few years, additional pathogens may be added to the scope of SP5.1 in alignment with global vaccine-preventable disease eradication, elimination and control goals, particularly as additional outbreak-prone diseases become vaccine-preventable.

**SP Objective 7.2**: Develop new vaccines and associated technologies, and improve existing products and services for immunization programmes

- This indicator from GVAP (i.e. a short list of global priority R&D targets) is intended to be an interim indicator until a strategic approach to set R&D agendas for development of new vaccines and technologies, and improvements of existing products and services for immunization programmes, is defined through global and regional mechanisms.
- The strategic approach to set R&D agendas should consider national agendas for immunization research (SP7.1), and reflect the IA2030 Research & Innovation strategy which focuses on “needs-based innovation and aims to strengthen mechanisms to identify research and innovation priorities according to community needs, particularly for the under-served, and ensure these priorities inform innovations in immunization products, services and practices.” Regional R&D agendas should be focused on achieving the greatest impact among countries in the region; regional R&D agendas should feed into the global R&D agenda, ensuring that the global R&D agenda is anchored in the needs of communities.