APPLICATION GUIDELINES: GAVI’S SUPPORT TO COUNTRIES

Financial support: Health System and Immunisation Strengthening (HSIS)
Vaccine support: New Vaccine Support (NVS)
Cold chain equipment support: Cold Chain Equipment Optimisation Platform (CCEOP)
Application guidelines: Gavi’s support to countries

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Introduction

Gavi’s mission is to save children’s lives and protect people’s health by increasing equitable use of vaccines in lower income countries. Despite tremendous progress in the past decade, one in five children still miss out on their basic vaccinations. Gavi’s strategy for the 2016-20 period therefore focuses on sustainably enhancing immunisation coverage with a focus on reducing inequities in countries.¹

How to navigate this document

This document is a practical guide to countries on the programmatic elements related to their request for Gavi support. It should be read in conjunction with the guidance on “How to request new Gavi support” which outlines the process (including eligibility criteria) that countries follow to request support.

This guideline covers the programmatic elements to consider in requests for Health System Strengthening (HSS) support, New Vaccine Support (NVS) and Cold Chain Equipment Optimisation Platform (CCEOP).

References

All Gavi-related documents referenced in this guideline can be found on the “Support guidelines” webpage, accessed via: www.gavi.org/support/process/apply/

The icons below call out specific information

- Tips/ helpful guidance for countries
- Lessons learned
- Links to additional resources

1. What types of support does Gavi provide to countries?

Gavi provides financial health system strengthening (HSS) support to strengthen the capacity of integrated health systems to deliver immunisation programmes (see section 4).

Gavi also provides support for the introduction of nine vaccines into the national immunisation schedule and for campaigns, in the form of vaccines and associated supplies. Financial support is also provided to facilitate the introduction of a new vaccine and/or the effective implementation of a Gavi-supported campaign. This support provides an opportunity to strengthen routine immunisation services and to ensure integrated delivery of immunisation with other health interventions. Available vaccine support options are described in section 5.

Through the cold chain equipment optimisation platform (CCEOP), Gavi jointly invests with countries in the purchase, deployment and installation of modern, high performing cold chain

¹ Key equity dimensions include difference in immunisation coverage across geographies, wealth quintile, maternal education and gender (amongst potential other dimensions).
equipment, as an essential component of the supply chain to ensure that life-saving vaccines reach every child (see section 6).

Gavi provides technical assistance to support countries in introducing vaccines and strengthening routine immunisation programmes through its core partners (WHO, UNICEF, CDC and the World Bank) and expanded partners (including local institutions) via Targeted Country Assistance (TCA). Technical assistance is expected to i) be targeted and tailored to countries’ needs; ii) ensure country focus, transparency, accountability and differentiation; and iii) support vaccine (see section 4) and HSS investments. Guidance can be found in the “Partners Engagement Framework TCA 2019 Reporting & 2020 Planning Guidance” available here.

In addition, Gavi provides support for global vaccine stockpiles for oral cholera, meningitis, and yellow fever vaccines. Stockpiles are managed by the International Coordinating Group (ICG) Secretariat within the World Health Organisation (WHO). Countries experiencing an epidemic may apply for emergency supplies directly through the ICG Secretariat or through its member agencies and should share their applications with the Gavi Secretariat for additional follow-up.

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**Figure 1: Overview of available Gavi support to countries**

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2 CDC: Centers for Disease Control and Prevention.

3 Targeted Country Assistance (TCA) is provided as part of the Gavi Alliance Partners’ Engagement Framework (PEF).

4 For more information please see the WHO websites:
2. Key highlights for 2020

New or updated information relevant for country requests for new Gavi support are highlighted below with references to specific sections for detailed information.

- Prioritisation of routine immunisation strengthening (sections 4; 5.1)
- Key aspects to consider across all Gavi-supported campaigns (section 5.2)
- Integration and complementarity of immunisation with other health interventions and across investments (sections 3; 4; 5.2)
- Considerations for countries classified under Gavi’s Fragility, Emergencies, Refugees policy (sections 4; 5)
- Sustainability considerations (sections 3; 4)
- Applications for new vaccine support for countries in accelerated transition phase (section 5.1)
- Flexibility for use of operational support for measles and measles rubella follow-up campaigns (sections 5.2; 5.3.3)
- Support for catch-up vaccination as part of introduction of PCV into the routine immunisation schedule (section 5.3.5)

Summary of key considerations for 2020:

- Focus on zero dose children and leaving no child behind.
- Focus on routine immunisation strengthening, including leveraging financial support for vaccine introductions and campaigns.
- Adopt a portfolio approach to planning and Gavi support: no component of Gavi support should be considered in isolation but be considered together to increase the impact on strengthening the performance of the immunisation system.
- Greater targeting of and identifying innovative approaches to reach un/underserved communities and zero dose children, including careful planning and post-assessment of campaigns, and consideration of sub-national campaigns.
- Greater collaboration and alignment with the Global Fund, Global Financing Facility (GFF) and other bilateral donors to ensure funding is complementary and leveraged for greatest impact.
- CCEOP to be fully leveraged to address coverage and equity issues by ensuring that HR plans, service delivery plans and demand-side approaches are also in place for facilities where new cold chain equipment will be provided.
- Addressing gender-related barriers to immunisation is a priority as gender-related factors on both the demand and supply side can affect the likelihood of both boys and girls being immunised. Contextualised, locally tailored strategies, including the engagement of fathers and improvements in service quality can ensure that immunisation services meet the needs of the most marginalised children and women.
- Focus on integration of immunisation with other health interventions in the context of primary healthcare.

These points are further explained in the core principles below (see section 3).

3. Core principles associated with Gavi support

Gavi’s support to countries aims at contributing to sustainable improvements in immunisation coverage and equity through harmonised, complementary and transparent support aligned to national health priorities. Specific principles and guidance are provided to help ensure that investments in countries are aligned to these principles. It is particularly important for countries to understand these principles before moving further to the other sections in this set of guidelines. They apply to all Gavi support.
**Strong emphasis on reaching unreached children and leaving no child behind**

To facilitate sustainable improvements in immunisation coverage and equity (C&E), Gavi expects countries to:

- **Analyse their coverage and equity situation** and determine where and why coverage is low or inequitable in specific populations or where and why there are pockets of un/under-immunised children. For example:
  - In specific geographical zones—e.g. districts with persistently lower coverage (i.e. DPT3 or MCV1/2) or high number of zero dose children (i.e. children who do not receive any vaccination),
  - In groups or communities (e.g. children of female caretakers with low socio-economic status or from ethnic religious minorities, nomads, remote rural, urban slum dwellers, areas affected by conflict etc.)
- **Identify constraints** particularly as they relate to service delivery, supply chain, data, demand generation, immunisation financing, leadership/management/coordination and/or political will
- **Identify gender-related barriers to immunisation** and other primary health care services. Gender with socioeconomic factors such as wealth, education, ethnicity/caste, religion, geographic setting, and migration status to shape disparity and mediate immunization outcomes. Consideration of these challenges, and implementation of strategies to mitigate their effects, are vital to ensuring more effective, quality and context-specific immunisation programmes that meet the needs of the most marginalised children and women. Examples of effective strategies include adjusting the location, timing and quality of services; behaviours, attitudes, or even in some settings the gender of service providers; as well as finding ways to engage fathers and other male caregivers more in immunisation and other health seeking behaviours.
- **Reflect the findings** (i.e. coverage and equity situation) in the country’s plans and **use Gavi support** (i.e. HSS, vaccine support or technical assistance provided via TCA) to address identified constraints.

**Prioritisation of approaches and strategies with the highest potential for impact**

To ensure that investments deliver results, there must be a clear linkage or rationale between the constraints to achieving and sustaining high coverage and equity and the proposed objectives and activities supported by Gavi. As per the description in the previous paragraph, countries are encouraged to target their investments towards:

- **Specific populations or geographies** that suffer from persistent challenge of poor access to services, including gender-related barriers;
- **Specific programmatic constraints** (including supply chain, data, gender-related barriers to immunisation, demand generation, leadership/management/coordination/political will); and
- **Interventions that are appropriately sequenced to maximise impact** (refer to section 4 for additional information).

Noting that, countries with high coverage should focus more on programmatic and financial sustainability, particularly as they approach transition and that some interventions may be targeted less at this point. For example, this could be recurrent and routine operational costs, activities relating to supply chain and procurement or Health Management Information System (HMIS) strengthening (if not already in place).

**Prioritisation of routine immunisation strengthening**

Routine immunisation is the core mechanism to reaching children and Gavi support should be focused on strengthening it. However, Gavi recognises that in countries with routine immunisation gaps, campaigns will sometimes be necessary to reach the unreached children. To ensure that
Gavi’s support is clearly aligned to strengthening routine immunisation outcomes, thus avoiding over-reliance on campaigns, countries are strongly encouraged to:

- **Ensure that campaigns (including outbreak response) are well targeted and designed to reach consistently missed children** and to strengthen and generate demand for routine immunisation and mitigate any adverse impact the campaign may have on routine services;
- **Leverage opportunities for integration and complementarity** across investments. For example, ensuring complementarity of vaccine support, particularly campaign activities, with investments via HSS support and/or other donor funding; and
- **Consider more targeted alternatives** (e.g. enhanced routine immunisation activities, subnational campaigns) to raise routine coverage both at national and sub-national level.

**Integration of immunisation with other health interventions**

Integration of immunisation with other health interventions. Countries are encouraged to:

- **Leverage immunisation touchpoints and roll out other interventions** (which evidence suggests could boost immunisation coverage) to ensure that those being reached with vaccines also receive basic services as part of a comprehensive primary health care (PHC) package. Countries are encouraged to use other guidance like missed opportunities for vaccination to ensure that children coming to avail other PHC services are screened for vaccination status and given relevant vaccines if needed. Examples are provided in the WHO resource referenced below and vaccine programme guidelines (see section 5.2; 5.3).
- **Take an integrated approach** to planning PHC services to ensure that all strengthening efforts and external donor support (e.g. the Global Fund, Global Financing Facility) are complementary and part of a coherent PHC strengthening approach.
- **Build a stronger immunisation platform** and health system, which will help to prepare for future introductions and supplementary immunisation activities to achieve better immunisation outcomes.

![Figure 2: Overview of opportunities for integration of immunisation with other health interventions.](source: WHO resource guide available here)
Evidence-based interventions reflecting lessons learned

To increase the likelihood that Gavi support contributes to results, countries are requested to systematically use data and evidence to inform planning of Gavi support and monitor implementation. This includes:

- Ensuring **adequate monitoring and reporting** on progress towards achieving the proposed results. Countries must commit to results in a **Grant Performance Framework**, including selecting appropriate indicators and targets and regularly reporting on programmatic and financial performance.

- **Building on lessons learned** from past experience and best practices, including from innovative approaches, from other countries when determining the rationale/justification for the prioritised objectives, plans and activities.

- **Using data** from assessments, post introduction evaluations, surveys, outbreak investigations, polio/measles surveillance, and joint appraisals to inform requested support and plans and to target and design interventions.

Alignment of Gavi support with national vision, planning and financing

Gavi strongly encourages countries to base their requests for all types of new support on their national vision on the health of their populations, and to align Gavi support to country planning and financial cycles. As best practice, countries are expected to align support from Gavi to:

- **National health plans**;

- **Multi-year national immunisation plans** (e.g. comprehensive Multi-Year Plan (cMYP)\(^5\)) which are typically 3-5 years and include planned vaccine introductions and campaigns as well as key activities to improve coverage and equity); and

- **Annual operational plans and budget for immunisation** which describes the broader activities that the countries will perform, when they will be performed, how they will be funded and who is accountable for them plus monitoring frameworks (inclusive of Gavi support).

Gavi also requires effective oversight and coordination of the EPI programme. As such to be eligible for new support, Gavi requires countries to ensure a basic functionality of their **Coordination Forum** (such as Inter-agency Coordination Committee or ICCs). Specific requirements to demonstrate the effectiveness of such forums are listed [here]\. Gavi recognises that improving the functionality of coordination forums is an ongoing effort for countries that may take time. Therefore, there will be a degree of flexibility in approving new support if the national Coordination Forum does not have a basic functionality yet, but the request coherently points out the requirements not met, and the approach to address these.

Investments that support the long-term programmatic and financial sustainability of the country’s immunisation programme

An immunisation programme may achieve adequate programmatic performance, but if it is reliant on parallel, externally financed funding streams; is completely separated from routine health systems and processes; and does not possess key institutional and human capacities needed to deliver results without partner support; then, achievements may not be sustainable.

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\(^6\) Gavi recognises that improving the functionality of coordination forums is an ongoing effort for countries that may take time. Therefore, there will be a degree of flexibility in approving new support if the national Coordination Forum does not have a basic functionality yet, but the request coherently points out the requirements not met, and the approach to address these.
The programmatic and financial sustainability of a country’s immunisation programme, and consequently, of Gavi’s investments, necessitates a number of key elements. These include: high-level, national political leadership and commitment to immunisation; capacities for planning and strategy formulation; adequate and timely financing; robust service delivery systems that are responsive to communities’ needs; well performing and motivated human resources; functioning data, procurement, supply chain and public financial management systems; and continued trust and demand for vaccines. To support this, Gavi’s investments should be clearly aimed at:

- **Creating or strengthening** these critical capacities at national and sub-national level, without which immunisation outcomes are unlikely to be sustainable;
- Approaches to sustainably build, and do not replace, local capacity to effectively and efficiently deliver immunisation services; and
- **Identifying and addressing gaps in programmatic management and systems’ capacity** that may create risks to the programme following transition from Gavi support.

To ensure sustainable Gavi support, all country requests for Gavi support should:

- Demonstrate how co-financing requirements (see section 5.1) will be met and ensure funding for service delivery and operational costs;
- Confirm a) Minister of Health and Minister of Finance endorsement of the proposal, b) the inclusion of the funds necessary for implementation (e.g. co-financing) in the annual budget, and c) that Gavi financial support (specifically for salaries, salary top-ups/allowances, per diems and incentives) does not duplicate funding from other sources or create perverse incentives with poor contribution to sustainability;
- Demonstrate the sustainability of investments in recurrent costs such as Human Resources (HR), noting that countries are expected to progressively absorb an increasing proportion of these costs as they approach transition; and
- Ensure the efficient, transparent and accountable use of Gavi support/ funds reflected in sound financial and vaccine management systems.

It is expected that the principles and requirements listed above are reflected across documents submitted with applications for support, including Gavi’s application forms, new vaccine introduction plans or campaign plan of actions or other documents as applicable. The **full list of documents to support your request** for new support is provided in **Annex 1**: Document checklist for requests for new Gavi support.

### 4. Health System and Immunisation Strengthening (HSIS) support

Health System Strengthening (HSS) support is intended to contribute to sustainable improvements in immunisation coverage and equity by targeting and tailoring investments to improve immunisation outcomes, specifically reaching the zero dose (i.e. children who do not receive any vaccination) and missed children (i.e. missing DPT3, MCV1/2). When requesting new HSS support, countries will build a portfolio view for the upcoming 3-5 years across all types of existing and new support provided by Gavi (i.e. HSS investments, vaccine support, CCEOP support and PEF TCA). Through this portfolio planning exercise, countries should ensure coordination and integration of the different support for vaccines) into a single portfolio view. This facilitates longer term predictability, visibility on complementarities and more integrated grant planning and budgeting. HSIS is an umbrella term that refers to health system strengthening (HSS) support and complementary financial support to countries (i.e. Vaccine Introduction Grants (VIGs), Operational support for campaigns (Ops), Product and Presentation Switch Grants, Operational support for outbreak response campaigns, Transition Grants, Performance Payments (PBF reward), and Operational support for HPV demonstration projects).
types of Gavi support, including the appropriate sequencing and timing of future vaccine introductions and/or planned campaigns. This integration is documented through the Programme Support Rationale that countries are required to submit (see “How to request new Gavi support” for full details).

Taking a portfolio perspective on Gavi support will enable HSS investments to strengthen routine immunisation and support new vaccine introductions and planned preventive campaigns. To do so, Gavi requires countries to identify opportunities for integration and complementarity of HSS investments with vaccine introductions/campaign activities as well as other donor funding of immunisation and PHC services (e.g. the Global Fund, Global Financing Facility and other bilateral investors). More guidance is provided in the vaccine section 5.2 below on defining strategies to link campaign activities to strengthening routine immunisation to reach every child.

Interventions should be prioritised and programmatically sequenced to maximise impact and sustainability. Countries in earlier development stages with weaker systems are encouraged to prioritise interventions that address systemic constraints (e.g. in supply chain, data, governance, financing, etc.) that hamper service delivery and may require longer term investments. Interventions for building institutional capacities for supply chain management, governance, data and financial systems might be sequenced later or be prioritised by countries with a more mature PHC system. Similarly, for example, supply chain systems’ redesign should be considered prior to procuring relevant equipment (i.e. cold chain vis-à-vis the supply chain or computers vis-à-vis data systems).

Countries in or about to enter the accelerated transition phase should pay particular attention to building additional functions, which are also critical for the successful operation of the EPI. For example:

- Procurement rules and regulations for direct sourcing of vaccines: Do procurement rules and regulations allow for the direct sourcing of vaccines from UNICEF-SD once Gavi support ends? If the government intends to procure vaccines independently, does it have the necessary expertise, experience and access to the right information to ensure it can procure high-quality vaccines at the appropriate prices?;

- Technical capacity to advise on new vaccine introductions or campaigns: Does the country possess or have access to the technical advisory expertise needed for the development of robust, evidence-based decisions on future vaccine introductions? For example, does it have a functioning NITAG?; and

- Vaccine regulation and safety: Can the country ensure the quality and safety of the vaccines used? Does it have a functioning National Regulatory Authority?8.

Through the programming process, it is also important to consider that immunisation programmes that rely on parallel systems and processes (e.g. from management to service delivery) may be less financially and technically sustainable and may miss out on important opportunities to leverage broader health systems to achieve immunisation goals. It is critical to identify elements (e.g. in supply chain, data), based on country context, which can and should be integrated into broader health systems and delivery platforms to enhance programme performance and sustainability in order to

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8 The expected functions of an NRA vary depending on whether vaccines are procured through the UN system (such as UNICEF), self-procured or whether the country is a vaccine producer. For countries procuring through the UN system, this means that, it should, at a minimum, (i) publish a set of requirements for licensing, (ii) perform marketing authorisation and licensing activities, and (iii) perform surveillance of vaccine field performance (pharmacovigilance including AEFI surveillance). Additional information can be found at: http://www.who.int/immunization_standards/national_regulatoryAuthorities/role/en/
achieve immunisation goals. How such elements will be integrated and accomplished should be clearly outlined.

**Use of Gavi resources to fund recurrent costs**: the use of Gavi resources for recurrent costs (including human resource remuneration and transport costs) is generally discouraged, as countries are encouraged to make strategic use of resources. However, in certain circumstances when there is a clear justification, including a strong link to coverage and equity outcomes, countries may use Gavi support for recurrent costs providing that plans for the government to increasingly cover and sustain such costs, as appropriate for the country context, are provided. Countries in later stage of transition (i.e. accelerated transition phase) are discouraged from using HSS support for recurrent costs.

**Additional guidance specific to supporting Human Resource (HR) capacity**: Gavi’s approach to eligibility of HR-related costs is differentiated around three factors: (a) HR category, differentiating between programme management & administration activities and service delivery activities, (b) countries’ transition status, and (c) type of intervention supported, with greater restrictions over interventions which engage higher recurrent costs and are seen as less sustainable. When HR-related costs are eligible for funding they should overall remain at a reasonable share of the total Gavi financial support. Based on historical average, this share is estimated at **20-30% of the total grant**, which is therefore an indicative maximum. Refer to the ‘Guidance on supporting government human resources capacity’ for details.

**Countries classified as facing fragility, affected by emergencies, or hosting refugees**: Certain flexibilities to Gavi’s support and/or processes may be granted to better meet the country’s specific needs. The programming of HSS investments within these contexts and other considerations should be discussed with your Gavi Senior Country Manager (SCM).

The **programming guidance materials** available [here](#) draw upon countries’ experiences for targeting investments for immunisation outcomes on these topics:

- Gender-related barriers to immunisation
- Supply chain management
- Data quality and use
- Demand generation
- Leadership, management and coordination
- Immunisation Financing
- Urban immunisation

### 5. Vaccine support

Gavi provides support for the introduction of new vaccines into the national immunisation schedule and/or campaigns. This support is provided for vaccine doses and associated supplies (i.e. injection safety devices--auto-disable syringes, reconstitution syringes and safety boxes). In addition, Gavi provides financial support to facilitate the introduction of new vaccines into the national immunisation schedule (see [section 5.1](#)) and/or to facilitate the effective implementation of a Gavi-supported campaign (see [section 5.2](#)).

Gavi expects that the decision to introduce a vaccine into the national immunisation schedule (or campaigns) be discussed and supported by a national technical advisory group, such as the **National Immunisation Technical Advisory Group (NITAG)**.

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9 Gavi’s policy on is available here: [https://www.gavi.org/about/programme-policies/fragility-emergencies-and-refugees-policy/](https://www.gavi.org/about/programme-policies/fragility-emergencies-and-refugees-policy/)

10 Additional information can be found at: [http://www.who.int/immunization/sage/national_advisory_committees/en/](http://www.who.int/immunization/sage/national_advisory_committees/en/)
National immunisation technical advisory groups, or NITAGs, guide policy and programme decisions at country level and are critical for sustainable immunisation programmes. They promote evidence-based decisions and enable countries to take full ownership of their policies and immunisation programmes. NITAGs provide objective recommendations based on scientific evidence in an increasingly complex immunisation landscape. These recommendations include:

- new vaccine introduction decisions
- specific product choices and characteristics
- immunisation schedules and practices

Gavi-eligible countries may access technical assistance that is designed to prepare for and support the successful introduction and scale-up of vaccine programmes as well improve and sustain coverage and equity. Technical assistance (TA) activities for vaccine introductions can range across the following areas: evidence analysis and decision making; applications and grant renewals; program planning and preparation; social mobilization, advocacy, and communications; logistics and vaccine and other supply management; vaccine delivery, monitoring, and supervision; evaluation; routine immunization strengthening. TA may also be used to support the development of a vaccine application and adopt lessons learned from relevant processes or reviews (e.g. recommendations coming out of the independent review, EPI reviews, post introduction evaluation reports, etc.). This support is provided through Gavi’s Targeted Country Assistance (TCA). Guidance can be found in the “Partners Engagement Framework TCA process: 2019-2020 guidance note” available here.

Full details on procurement of vaccine and vaccine devices and cold chain equipment can be found in this document: Guidance on procurement. Additional conditions apply for pneumococcal vaccine (see section 5.3.5 Pneumococcal Conjugate Vaccine (PCV))

As per the 2017 Board recommendations, countries can apply for new vaccine support in any of the five years of the accelerated transition phase, as opposed to previously where countries could only apply in the first year of the accelerated transition phase. Refer to the “FAQ on co-financing rules for country requests for new vaccine support in the accelerated transition phase” for details. Available here.

Countries classified as facing fragility, affected by emergencies, or hosting refugees⁹: Certain flexibilities to Gavi’s support and/or processes may be granted to better meet the country’s specific needs. Such countries may request additional doses to cover a broader age range (within the Gavi supported antigen range) or to cover an increasing number of people following a refugee influx. These requests may be reviewed as part of the country’s request for new vaccine support and should be discussed ahead with your Gavi Senior Country Manager (SCM). Refer to "WHO Vaccination in Humanitarian Emergencies: Implementation Guide" for more guidance.

The following sections (5.1; 5.2) cover the aspects to include in requests for support for either vaccine introductions or campaigns, respectively. Programming guidelines per vaccine are covered in section 5.3.

### 5.1. Key aspects to consider for all Gavi-supported vaccine introductions

#### Co-financing of vaccines

To increase country ownership of vaccine financing, build capacity relating to procurement processes and ensure that countries are on a trajectory towards financial sustainability and the eventual phasing out of Gavi support, countries are required to co-finance all Gavi-supported vaccines in the routine immunisation schedule and additionally for measles or measles rubella follow-up campaigns (see Annex 2: Additional conditions for measles and rubella support).
Co-financing requirements for vaccines

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\(^\text{11}\) Not required for countries in initial self-financing phase.

\(^\text{12}\) With the exception of countries with whom it is agreed to have co-financing aligned with a non-calendar fiscal year, in which case obligations are due by June 30\(^\text{th}\) of each year.

\(^\text{13}\) A description of the default mechanism can be found in Section 8 of Gavi’s co-financing policy. Please visit: http://www.gavi.org/about/governance/programme-policies/co-financing/
financing commitments are communicated through the Decision Letter following Gavi approval.

• Countries should clearly indicate in their request for new vaccine support how co-financing commitments will be funded including the sources of funds (governments and/or donor) and discuss how predictable and reliable these resources are. If the country has recently defaulted on its co-financing obligations, countries should clearly indicate the steps taken to mitigate the likelihood of further defaults.

### How is co-financing applied?\(^1,2,3\)

<table>
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<th>Description</th>
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<tbody>
<tr>
<td>Initial self-financing phase</td>
<td>Countries in this phase are required to co-finance a small proportion of doses every year, equivalent to US$0.20 per dose of all co-financed vaccines.</td>
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<tr>
<td>Preparatory transition phase</td>
<td>Countries in this phase are required to co-finance an increasing share of the weighted average price (WAP) of the vaccine presentation. The total co-financing amount paid during the first year in this phase is used to calculate the fraction of the total cost of vaccines being co-financed by the country. This fraction will then increase by 15% every year throughout the preparatory transition phase for each of the co-financed vaccines.(^{14}) New vaccines introduced during this phase are co-financed at the same proportion (price fraction) of the vaccine price (WAP) as other vaccines.</td>
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| Accelerated transition phase   | • For countries in the first year of this phase, the co-financed share of vaccines increases by 15% (as it did in the previous phase).
  • Over the subsequent years, the co-financed share ramps up linearly to reach the full projected\(^{15}\) Gavi price for the first year without Gavi support.
  • With regards to new vaccine introductions, countries are eligible for up to four years of Gavi support based on the year of accelerated transition phase in which the country applies\(^{16}\) for new vaccine support. That is, countries who apply in the first of this phase are eligible for four years of support. For countries who apply in the following years of this phase, the years of support will be: three years (2\(^{nd}\) year), two years (3\(^{rd}\) year) and one year (4\(^{th}\) & 5\(^{th}\) years). This is designed to incentivize countries to accelerate introductions and immunisation sustainability.
  • The introductory fractions for new vaccine applications in the accelerated transition phase are determined by the year of application. Countries who apply for support in the first year of this phase introduce at the price fraction of that given year. For countries in the second – fifth years of this phase, the introductory co-financed share of vaccines will be: 40% (2\(^{nd}\) year), 60% (3\(^{rd}\) year) and 80% (4\(^{th}\) & 5\(^{th}\) years), respectively. |

Note 1: Gavi classifies all eligible countries into three transition phases (initial self-financing, preparatory and accelerated transition phase). See "How to request new Gavi support" for background on the three phases.

Note 2: Additional conditions apply for Measles/Measles-Rubella support (see Annex 2: Additional conditions for measles and rubella support).

Note 3: Refer to the “FAQ on Co-financing rules for country requests for new vaccine support in the accelerated transition phase” for detailed breakdown and examples on how co-financing is applied in this phase.

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\(^{14}\) For example, in a given year a country could be financing 10% of the pentavalent vaccine price, 10% of the HPV vaccine price, etc. in the following year (following the 15% increase of the price fraction), the country would then be financing 11.5% of the pentavalent vaccine price, 11.5% of the HPV vaccine price, etc.

\(^{15}\) The projected price is based on the weighted average price of the chosen vaccine presentation.

\(^{16}\) The application year is determined by the year in which the New Vaccine Support application window closes.
Financial support for vaccine introductions
Gavi provides financial support to help prepare the introduction of new vaccines into the national immunisation schedule, referred to as Vaccine Introduction Grants (VIGs). Countries are encouraged to use VIGs to cover a share of the pre-introduction activities as well as leveraging this opportunity to strengthen vaccine delivery platforms and reach zero dose children. VIGs are intended for start-up investment costs associated with the introduction of a new vaccine and strategic investments to strengthen health systems, rather than the incremental recurrent costs that would occur year after year.

Calculation and application of financial support for vaccine introductions:
This section shows how VIGs are calculated and applied, based on the country’s Gavi transition phase.

- **Initial self-financing countries:** $0.80 per infant in the birth cohort\(^{17}\) in year of introduction, or a lump sum of $100,000, whichever is higher.
- **Preparatory transition phase countries:** $0.70 per infant in the birth cohort\(^{17}\) in year of introduction, or a lump sum of $100,000, whichever is higher.
- **Accelerated transition phase countries:** $0.60 per infant in the birth cohort\(^{17}\) in the year of introduction, or a lump sum of $100,000, whichever is higher.
- **HPV Conditions:** $2.40 per targeted girl in routine cohort, or a lump sum of $100,000, whichever is higher, regardless of the country’s transition phase.

Use of VIGs:
- VIGs should aim to strengthen the system to deliver vaccines in a way that increases routine immunisation coverage.
- VIGs provided across concurrent introductions should be coordinated to find synergies, including with investments via HSS, to ensure the integrated delivery of immunisation.
- Unspent funds from VIGs may be “rolled into” an existing HSS grant subject to an approved workplan and budget. More detailed information on this is provided in Guidance for financial reporting and annual re-budgeting.
- In line with Gavi’s approach for supporting HR capacity, VIGs can be used for short-term HR remuneration and cost recovery mechanisms associated with introduction of a vaccine with a strong priority for areas of low coverage. However, countries should have plans in place to show how they will cover and sustain HR-related costs as they move towards transition. When HR-related costs are eligible for funding they should overall remain at a reasonable share of the total Gavi financial support. Based on historical average, this share is estimated at **20-30% of the total grant**, which is therefore an indicative maximum. More details are provided in Guidance on supporting government human resources capacity.

5.2. Key aspects to consider across all Gavi-supported campaigns

Defined strategies to link campaigns to strengthening routine immunisation efforts
Well planned and implemented campaigns can also contribute to strengthening routine immunisation services, and potentially contribute to increasing coverage. Gavi strongly encourages countries to:
- Demonstrate how they will identify and vaccinate consistently missed children both in the campaign itself and through enrolling missed children into subsequent routine service delivery.

\(^{17}\) *Birth cohort = live births in the year of introduction.*
• Ensure that the selection of routine immunisation activities is aligned to investments already planned or budgeted for within existing HSS.
• Identify opportunities to use campaigns to strengthen routine immunisation services (e.g. by providing refresher training to health workers when training them for campaigns) and to assess potential adverse impacts of campaigns on routine immunisation and identify ways to mitigate these.
• Prioritise delivery approaches that are more targeted than nationwide campaigns to contribute to routine coverage at national or sub-national level, taking into account country context and programme capacity. In certain settings, nationwide campaigns may not be cost-effective, or required, and more targeted subnational campaigns could be considered based on available data to differentiate between high risk and low risk areas or communities.
• Consider other examples of targeted delivery approaches such as Periodic Intensification of Routine Immunisation (PIRIs), expanding or intensifying regular outreach sessions, and/or child health days during which administered doses are recorded on a child’s routine vaccination card.

Achieving high coverage campaigns

Campaigns should be well planned, of high quality and aim to achieve high coverage (e.g. WHO recommendation for measles campaigns of ≥95% coverage); however, this has not always been consistently achieved. To address challenges observed in achieving high coverage campaigns, strong emphasis should be placed on quality planning, preparations and implementation. Gavi encourages countries to:

• **Planning:** Develop micro-plans for all campaigns and leverage an integrated, national annual EPI planning or other existing micro-plans (e.g. for polio). Additional aspects for consideration, where possible, include:
  • Clearly articulating roles and responsibilities and oversight off micro-plans.
  • Leveraging PEF technical assistance for campaign preparations, including provision of oversight and quality assurance.
  • Complementarity with Gavi’s HSS support.
• **Implementation:** Improve monitoring and supervision, countries should include performance-based incentives for health workers with the objective of achieving high coverage campaigns, based on country context and capacity. Key aspects to consider during planning or implementation include:
  • Clear objective and targets to improve coverage at district-level for health workers.
  • Source for performance-based funding (e.g. Gavi financial support, government funding or other donor funding).
  • Defined method for performance measurement, taking into account the difficulty in assessing performance and implementation.
  • Mechanism for reporting, accountability and fund flow (e.g. countries may consider a fiduciary agent).

Leveraging opportunities for integration and/or complementarity

Gavi supports the delivery of immunisation as part of an integrated package of disease prevention strategies. Accordingly, possible integration with other health interventions, as well as potential synergies across vaccine programmes should be considered when planning for new vaccine introductions and/or conducting campaigns. Where possible:

• Countries should consider opportunities for joint delivery (where relevant) or integrated planning across campaigns, in consultation with WHO/technical partners and based on country context/plans. Thematic areas for specific consideration include, but are not limited to:
• Injection and vaccine safety; AEFI monitoring and response; Vaccine procurement and cold chain capacity; Social mobilisation and advocacy; Personnel needs, training, monitoring and supervision; Planning; and financial resources at both central and periphery levels.
• Countries should integrate other health interventions with immunisation delivery (e.g. vitamin A, de-worming, malaria control, Water, Sanitation and Hygiene interventions, etc.).

Additional information on potential interventions and strategies related to the integration of immunisation services is available in the WHO resource guide ‘Working together: An integration resource guide for immunisation services throughout the life course’ available at: http://immunizationeconomics.org/recent-activity/2018/12/19/who-resource-guide-working-together?utm_source=Immunization+Economics+Community+of+Practice&utm_campaign=f7a4b11959-IMMUINIZATIONECONOMICS_2017_12_05_COPY_01&utm_medium=email&utm_term=0_d3e5b5d159-f7a4b11959-105377565

Financial support for campaigns
Gavi provides financial support to facilitate the effective implementation of a Gavi supported campaign, referred to as Operational support for campaigns (Ops). Countries are encouraged to use Ops to cover a share of the campaign operational costs as well as leveraging this opportunity to strengthen vaccine delivery platforms and reach zero dose children (for example, through targeted intensification of routine immunisation).

Calculation and application of financial support for campaigns:
This section shows how Ops are calculated and applied, based on the country’s Gavi transition phase.

• **Initial self-financing countries:** $0.65 per targeted person
• **Preparatory transition phase countries:** $0.55 per targeted person
• **Accelerated transition phase countries:** $0.45 per targeted person
• Countries applying for phased campaigns or other phased delivery strategies (i.e. phased approach for HPV) may allocate operational support funds flexibly across phases.
  • Note: the funding is adjusted according to the size of the annual target group.
  • Note: the funding is provided for the initial year of each phase.

Additional flexibilities for countries requesting new measles or measles rubella follow-up campaign support: In line with the November 2018 Board decision, countries requesting new measles or measles rubella follow-up campaign support may request operational support that is calculated on the basis of the national 9-59 month population, which can be used for national campaigns, subnational campaigns and enhanced routine immunisation activities targeted at reaching missed children.

Use of Ops:
• Unspent funds from Ops may be “rolled into” an existing HSS grant subject to an approved workplan and budget. More detailed information on this is provided in Guidance for financial reporting and annual re-budgeting.
• In line with Gavi’s approach for supporting HR capacity, Gavi expects countries to progressively absorb HR related costs, which are often recurrent in nature, as they move towards transition. When HR-related costs are eligible for funding they should overall remain at

Targeted person = 100% of the population in the target age cohort (i.e. people in the age range of your country). See vaccine-specific section below for guidance on target population age range.
a reasonable share of the total Gavi financial support. Based on historical average, this share is estimated at **20-30% of the total grant**, which is therefore an indicative maximum. In addition, the use of Ops to support HR related costs is subject to a number of principles and requirements and are linked to a country’s transition status. Refer to the “Guidance on supporting government human resources capacity” (here) for more detailed guidance.

**Table 1: Summary of requirements by country transition phase**

<table>
<thead>
<tr>
<th>Use of Ops: Programme management, administration and Service Delivery</th>
<th>Initial self-financing countries</th>
<th>Preparatory transition countries</th>
<th>Accelerated transition countries</th>
</tr>
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<tbody>
<tr>
<td>• Can be used for short-term HR remuneration and cost recovery mechanisms with a strong priority for areas of low coverage.</td>
<td>• Can be used for cost recovery mechanisms or incentives only, as defined in section 5 of the Guidance on supporting government HR capacity. • In all cases, salaries will not be supported, and salary top-ups would only be acceptable when linked to a performance-based incentive scheme.</td>
<td>• May not be used.</td>
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**Measuring campaign vaccination coverage (JE, M/MR, MenA, PCV, TCV, YF)**

As illustrated in Figure 1, Gavi provides campaign support for Japanese Encephalitis, Measles/Measles-Rubella, Meningitis A, Pneumococcal Conjugate Vaccine, Typhoid and Yellow Fever (see relevant vaccine support section below for type of campaign vaccination delivery strategy supported). All Gavi-supported campaigns (excluding PCV catch-up vaccination for which it is not required, but strongly recommended) are required to conduct a high-quality, nationally representative survey using probability sampling to assess coverage. This is to have an independent estimation of coverage of the completed campaign and hold in-country leader and other key stakeholders accountable for the campaign. In addition, the survey results should provide estimates of the number and proportion of unvaccinated and under-vaccinated children reached during the campaign. Lessons learned from the results of the campaign can in turn be used to plan future campaigns and other strategies. All post campaign surveys should be completed as soon as it is feasible and **no later than 3 months** after completion of the campaign, so as to reduce recall bias. The survey cost should be included in the operational budget to ensure the necessary support for the survey.

**Application of lessons learned from post-campaign survey results:** Results from the survey can be used to further improve strategies to reach particular age groups during the next campaign, assuming sampling is stratified by age group. Also, based on the results on proportion of children reached for the first time by campaigns, countries can plan and adopt strategies that could be used to improve routine immunisation coverage.

For more information on the key principles for consideration when conducting a post campaign survey, refer to “Guidance for post-campaign surveys to measure campaign-vaccination coverage of Gavi supported campaigns” available [here](#). Additional information on planning and implementing high quality campaign activities is also available via WHO. Refer to “Planning and Implementing High-Quality Supplementary Immunisation Activities for Injectable Vaccines using an example of measles and rubella...”
vaccine: Field Guide” available here: http://www.who.int/immunization/diseases/measles/en/ which can also be applied/adapted for all other Gavi-supported campaigns (i.e. JE, M/MR, MenA, PCV, TCV and YF)

5.3. Vaccine programme guidelines
Countries should refer to “How to request new Gavi support” for more information on eligibility prior to referring to the relevant vaccine guidelines below. Contact your Gavi Senior Country Manager (SCM) if you are unclear about eligibility.

Specific vaccine products: refer to the Detailed Product Profiles of each vaccine for information on: serotypes covered; vaccine type; dose schedule; presentation; price; product availability; and links to WHO pre-qualification information and WHO position papers. The Detailed Product Profile will be updated if information changes, so please check this link regularly for updates.

5.3.1. Human papillomavirus (HPV) vaccine

WHO recommendations
WHO recommends that HPV vaccines be included in the national immunisation schedule, in the context of prevention of cervical cancer and/or other HPV-related diseases, and in conjunction with other adolescent health interventions (including other vaccines).

In October 2016 and 2018 SAGE\(^\text{19}\) reviewed the effectiveness and cost-effectiveness of different HPV immunisation schedules and delivery strategies. The evidence demonstrated that the priority target population should remain girls aged 9-14 years with a 2-dose immunisation schedule. More specifically, SAGE recommended one-time immunisation of multi-age cohorts (e.g. 9-14 years), followed by an annual routine immunisation of a single cohort (e.g. 9 years) to achieve wider protection and stronger herd effect. This strategy was shown to result in faster population impact and offer opportunities for economies of scale in delivery.

![Figure 4: Immunisation of additional multi-age cohorts (e.g. 9-14 years), followed by annual routine immunisation of a single cohort (e.g. 9 years) with a two-dose schedule. WHO HPV position paper, May 2017.](image)

\(^{19}\) SAGE: Strategic Advisory Group of Experts on Immunisation.
Available Gavi support

Gavi currently only provides support for **HPV vaccination in girls aged 9-14 years**. Within this age range, countries may request support for a single age cohort to be vaccinated annually in routine immunisation, either with or without additional multi-age cohorts. **NOTE: Due to current constraints with HPV vaccine supply, Gavi will prioritise vaccination of routine cohorts and may not be able to support a country’s MAC until additional vaccine supply is available.**

Please find details on the two types of support below.

**Routine cohort without additional multi-age cohorts vaccination:**

**Target population guidance**
- Routine cohort: Countries are required to identify a **single cohort of girls** (within ages 9-14 years) to be immunised on an annual basis (e.g. girls aged 9 years).

**Routine cohort with additional multi-age cohorts vaccination:**

**Target population guidance**
- Routine cohort: Countries are required to identify a single cohort of girls (within ages 9-14 years) to be immunised on an annual basis (e.g. girls aged 9 years).
- Multi-age cohorts: Countries identify **additional girls** (within ages 9-14 years) that are older than the routine cohort (e.g. 10-14 years), who will be immunised on a one-off basis (or in the case of a phased introduction, the initial year of each phase).

**Key aspects to consider for routine cohort with/without additional multi-age cohorts**

a) **Planning for a phased introduction approach:**
- Countries that cannot afford or operationally implement an initial country-wide introduction of HPV may adopt a phased introduction approach by region, province or district. In such case the following additional aspects should be taken into account.
  - Countries will be required to have full national vaccination implemented within three years of introduction.
  - Vaccines and complementary financial support (i.e. VIG and Ops) will be based on the size of the total target population and disbursed according to the year of each new phased introduction (as outlined in the HPV implementation plan).
  - When a country decides on a phased introduction, it should include areas (i.e. districts, provinces, zones etc.) which provide the greatest learning opportunities in the first phase. These are likely to include challenging districts (i.e. that have been achieving consistently low vaccine coverage; for example, due to geographical factors (e.g. rural/ urban), social and economic factors, etc.).

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*Countries that may be interested in vaccinating other populations (e.g. girls ≥ 15 years or boys) should note that the government will have to bear the full operational and vaccine costs to reach these additional populations.*
cultural factors (e.g. religion, early marriages, and low school enrolment), health system factors (e.g. low human resources, quality of health facilities) and behavioural factors (e.g. age of sexual debut) as well as strong performing areas.

- At all stages of planning for a phased introduction, countries are encouraged to review, analyse and revise strategies based on experience from earlier phases.

b) Lead time between Gavi application and Introduction:
Due to the high global demand for HPV vaccine and time required to scale up production, countries that are currently considering the introduction of HPV are encouraged to consider lead times for supply availability in their application and introduction plans. Countries are advised to allow for at least 24 months from the application submission to the planned introductions. For instance, a country applying in 2020 should plan for an introduction in 2022. This lead time will allow UNICEF, Gavi Secretariat and partners to work with manufacturers to confirm supply availability, and if needed, communicate options of programmatic changes e.g. vaccinating a single cohort in the year of introduction and the remaining multi-age cohort when supply is available.

HPV guidance and requirements
To apply for a nationwide introduction of HPV vaccine through Gavi support, the country is required to fill out an HPV implementation plan. Countries should refer to the guidance below to ensure critical elements to develop the HPV implementation plan are included. Please use the template available via the link in the tools & templates box at the end of this section.

Figure 5: Steps for developing an HPV Implementation Plan

Resources for designing, implementing and scaling up HPV vaccination programmes
WHO Clearing House: https://www.who.int/immunization/hpv/en/
Additional information on the selection of the HPV delivery strategy:
- WHO Scaling up HPV vaccine introduction: http://apps.who.int/iris/bitstream/10665/251909/1/9789241511544-eng.pdf?ua=1
- WHO Guide to introducing HPV Vaccine into national immunisation programmes: http://apps.who.int/iris/bitstream/10665/253123/1/9789241549769-eng.pdf?ua=1
- LSHTM/PATH lessons learned on HPV introduction: http://www.rho.org/HPVlessons/
- Leveraging HPV vaccine introduction with other school based health programmes: www.who.int/immunization/diseases/hpv/AdoPlusHPV.pdf?ua=1

1. Identify target population
The choice of the target ages and/or school grades for the routine and additional multi-age cohorts among girls 9 to 14 years should be guided by a good understanding of local factors such as:
- Average age of becoming sexually active: given that HPV vaccination is most effective when administered prior to the onset of sexual activity.
- If schools are used as a location for vaccination: school attendance rates, average age of girls in primary school, and difference between primary school and secondary school attendance rates for girls should be considered. If girls tend to drop out of school as they get older, it may be better to target the earlier school ages/grades.
• If knowledge of age is culturally or socially unimportant/limited, a country may choose a significant
age (e.g. coming of age ceremony) or historical event (e.g. born in the year of a presidential
election).

Once the target population has been chosen, it is important to decide how this age will be
determined. There are two common practices: 1) by age at time of vaccination, e.g. all 10-year-old
girls or 2) by year of birth, e.g. all girls born in the year 2005. The approach will depend upon the
level of knowledge/documentation of birth dates.

Next: the country should accurately identify the total size of the target population by year\(^{21}\) and where
girls are located. A country is therefore required to calculate what percentage of the target girls attend
school regularly and what percentage will be located out of school (especially if using school as a
venue for vaccination). The Ministry of Health is encouraged to work with its national statistical office,
the Ministry of Education and refer to additional sources of data (e.g. UNPOPULATION (WHO)\(^{22}\),
UNDP\(^{23}\), UNESCO\(^ {24}\) data estimates) for assistance in estimating the size of the national target
population. In case of significant difference between estimates, countries should take the estimated
average of a national and a UN data source (e.g. UNDP) to avoid underestimation as well as
overestimation.

2. Outline delivery strategies

Once the target population has been identified, countries are required to outline how the target
population will be reached for vaccination.

a) Dose Schedule for HPV:
As per WHO recommendations, girls aged 9 to 14 years should receive 2-doses of HPV vaccine with
at least a 6-month interval between doses—countries should note that there is no maximum interval,
but it is suggested that the interval between the two doses not be greater than 12-15 months. Please
note exceptions for special populations, such as girls with autoimmune disorders or who are immune
compromised (e.g. known HIV-positivity) and those 15 years or older, for which 3 doses administered
within 12 months is recommended\(^ {25}\). However, note that Gavi currently only provides support
for the SAGE recommended priority age group of girls aged 9 to 14 years.

Recent evidence indicates that a longer gap (i.e. at least 12 months) between doses is more
immunogenic. This also offers opportunities for reduced vaccine delivery costs. For these reasons,
several Gavi countries including Zimbabwe, Gambia, Zambia and Liberia have opted for a single,
yearly vaccination round (0, 12 month) whereby target girls can get their first or second dose. On
the other hand, countries such as Senegal, Tanzania, Ethiopia, Mauritania, Kenya, Cote d'Ivoire
have preferred to maintain a bi-annual dosing schedule (0,6 months) to complete the 2-dose
schedule within the same school calendar year, thereby reducing vaccination dropout rates.

\(^ {21}\) If the HPV introduction is delayed, the targets (routine and multi-age cohort) will need to be revised and updated according to the
actual year of introduction. In such a scenario, Gavi will provide the country with the requisite template to update targets.
\(^ {22}\) UNPOPULATION: http://www.who.int/immunization/diseases/hpv/UN_population_estimates_9-14_year-old_cohort/en/
\(^ {23}\) UNDP: https://population.un.org/wpp/
\(^ {24}\) UNESCO: http://uis.unesco.org/#en/cover
\(^ {25}\) WHO recommends 3 doses for females 15 and older and immunocompromised populations e.g. HIV+ girls (i.e. 0, 1-2, 6 months).
When selecting the dosing interval (e.g. 0, 6 months vs. 0, 12 months), countries are strongly encouraged to carefully consider trade-offs between vaccination coverage, cost of delivery and immunogenicity.

b) Delivery Strategy:
Financial sustainability is a key cornerstone for HPV vaccine introduction. Sustainability for the programme is more than the ability to purchase HPV vaccine, but also includes financing of any additional expenses incurred by adapting the immunisation programme for the introduction or for new delivery strategies. WHO has developed a Cervical Cancer Prevention and Control Costing (C4P) Tool to assist countries to assess both the financial and economic five-year costs of HPV vaccine introduction (see resource box below).

Countries may need a variety of delivery strategies to reach different populations of girls eligible for the HPV vaccine (e.g. in-school, out of school and HIV+) and should indicate what share of the population they intend to reach through each strategy. For HPV vaccine the following delivery strategies may be considered: (i) routine outreach\(^26\) to communities; (ii) health facility-based vaccination\(^27\); (iii) routine outreach to schools; and (iv) campaign mode (if adopted, only acceptable for the multi-age cohort vaccination).

Further information on different HPV delivery strategies is available here:
WHO Guide to introducing HPV vaccine into national immunisation programmes
http://apps.who.int/iris/bitstream/handle/10665/253123/9789241549769-eng.pdf?sequence=1

i. For strategies that will utilise routine outreach to (i) community and (ii) health facilities as locations for vaccinations, the following should also be considered:

- Demand generation activities and community acceptance strategies, to ensure girls attend vaccination sessions in specific venues (market, churches, households etc.) or come to health facilities.
- Establishing strong linkages with schools, e.g. mandatory immunisation requirements for primary and secondary school enrolment.

ii. For strategies that will utilise routine outreach in (iii) schools as a location for vaccinations\(^28\), the following should also be considered:

- If school grades are chosen as a proxy for age, countries should note that girls under 9 years of age should not receive the vaccine and the girls who receive the first dose above 14 years of age will not be fully protected with 2 doses, as they require 3 doses. Therefore, countries should ensure that girls within the selected school grades are between the ages of 9 and 14.

\(^{26}\) Routine outreach: Outreach refers to any strategy that requires health workers to leave their facility in order to transport and deliver immunization services to a variety of fixed or mobile sites close to large numbers of target-aged girls. Some examples of outreach venues are community centres, schools

\(^{27}\) Health Facility vaccination: Similar to the infant vaccination programme, this approach provides HPV vaccination to eligible girls at a fixed health-care facility. This strategy reduces transport and personnel costs (such as travel allowance) to the health system because it relies on the girls to come to the facility.

\(^{28}\) The delivery strategy involves leveraging planned routine outreach sessions for providing HPV vaccination to girls in the community as well as in schools.
• Vaccination sessions will need to be scheduled taking into account exam periods, holidays, and other times when it may not be convenient for health workers to disrupt classes.
• Reaching the girls who may miss the initial vaccination session or any of the remaining doses. Strategies may include using the second dose visit to mop-up girls who missed earlier doses, encourage teachers to refer girls to the nearest health centre/ outreach.
• Close coordination at all levels will be required with the Ministry of Education and educational authorities when assessing how and when to conduct vaccinations at the school. For instance, ensuring representation from Ministry of Education in the technical committees as well as the ICC while planning the HPV application.
• Provide a description of health services, vaccination for adolescents and/ or health education currently provided to younger adolescent girls and boys within the 9-14-year-old age group and indicate any potential synergy for integrating with HPV vaccination.

iii. For strategies that will employ a (iv) campaign mode to deliver HPV vaccinations, the following should also be considered:
• Potential to make use of existing campaign days e.g. Child Health Days, Measles Rubella or tetanus containing vaccination activities, national immunisation week etc. and the cost-sharing, platform-leveraging, and/or sustainability implications of such use.
• The sustainability of a campaign delivery strategy must be carefully assessed. If this mode of delivery is being used, then the impact of this strategy on the routine service delivery should be mentioned, as well as a justification of how costs will be covered in subsequent years.
• Countries with very small and difficult to access population (e.g. island states) may wish to conduct a campaign every 3-5 years. However, countries must note that Gavi will only provide a VIG at the time of HPV national introduction and one-time operational cost support for a MAC. Thus, countries who select this approach will have to self-finance these periodic campaigns and provide evidence of adequate funds as well as government commitment.

3. Guidance on coverage and equity issues for HPV vaccination
Countries should include a coverage and equity analysis that identifies how each of the following key issues will be addressed:
• Vulnerable girls – ensuring the inclusion of comprehensive delivery strategies to provide vaccination opportunities for all girls, including vulnerable girls, e.g. out of school and HIV+ girls.
• Gender-neutral vaccination – While HPV vaccination in males is not financially supported by Gavi, any education activities adolescent health services or complementary health interventions (e.g. deworming) reaching the target range of girls should also include boys.
• Rural/ urban and socioeconomic barriers related to geographic access, ethnicity, religion etc. are comprehensively considered and captured in delivery strategies to achieve equitable coverage.
• Districts with low coverage for infant vaccinations – Consider how HPV vaccination strategies maybe different than in high performing districts.

4. Communication and social mobilisation plans
The country will be requested to describe how their plans for communication and social mobilisation reflect the unique needs of the programme. This plan should include:

29 A campaign strategy involves administration of vaccine doses to a large population over a short period of time. Campaigns are variably scheduled (depending on epidemiology, disease and programmatic needs to reach a population) and provide limited times to access the vaccine on patient/ parent demand. Additionally, campaigns are also very resource intensive in terms of human and financial resources. Countries must note that HPV vaccination delivery strategies are encouraged to have traditional ‘routine’ vaccination characteristics, which are delivered periodically and timely accessible and available on patient/parent demand.
30 WHO recommends immunocompromised populations (e.g. HIV+ girls) should receive 3 doses of the HPV vaccine.
• Key messages and mechanisms for reaching the target population, out of schoolgirls and additional multi-age cohorts (including communication and sensitisation on the number of doses, follow-up)
• Plans for the engagement of key stakeholders including parents, health professionals, teachers and religious leaders.
• Plans and budget for communication and social mobilisation activities needed prior to the delivery of dose 2, especially if following an annual schedule, to ensure minimum drop out between dose 1 and dose 2.
• A crisis communication plan (including communication and training for AEFI\textsuperscript{31}) to address the spread of rumours which can threaten the acceptability of an HPV vaccination programme.

Further information on developing communication and social mobilisation plans are available here:
http://who.int/immunization/hpv/communicate/en/

Additional recommendations on CSO engagement: Countries are strongly encouraged to engage with civil society organisations (CSOs) to pursue opportunities of collaboration in the social mobilization and communication activities prior to national rollout. CSOs may include stakeholders working in child health, adolescent health, social mobilisation, community education, cancer, maternal health, reproductive health, health promotion and programme communication, as well as other women’s groups and professional associations (e.g. gynaecologists, paediatricians, midwives, nurses, oncologists (i.e. cancer specialists), general practitioners and others).

5. Evaluation requirements
Given the unique delivery challenges for the target population of HPV vaccine, countries are required to conduct a post introduction evaluation (PIE) preferably not later than a year after dose two of the first year of introduction. This survey will evaluate the impact of the HPV vaccine introduction on the country’s immunisation programme and to rapidly identify any problems needing corrective action. Countries are required to include a budget for the PIE as part of their VIG.

As per WHO recommendation, countries are encouraged to conduct an HPV coverage survey integrated with other vaccines or leverage other population-based surveys already planned in the country e.g. nutritional household surveys, census surveys, DHS surveys. Countries should request support for HPV coverage surveys through PEF TCA.

HPV-related documents, tools and templates here
• HPV Detailed Product Profile
• HPV implementation plan, including workplan
• HPV regional profile
• Budgeting and planning template and guidance
The new WHO coverage survey methodology is available for HPV here:

\textsuperscript{31} AEFI: An adverse event following immunisation.
5.3.2. Japanese Encephalitis (JE) vaccine

WHO guidance

WHO recommends that the most effective immunisation strategy in Japanese Encephalitis (JE) endemic settings is a one-time catch-up campaign targeting at-risk populations, followed by incorporation of JE vaccines into the national routine immunisation schedule.

WHO position paper on Japanese Encephalitis, available at: www.who.int/wer/2006/wer8134_35.pdf?ua=1

Available Gavi support

Gavi provides support for the introduction of JE vaccine into the routine immunisation schedule, with an initial catch-up campaign. Please find below details on this support type. Countries should note that Gavi does not provide support for JE outbreaks or epidemic responses.

Introduction in routine, with catch-up campaign:

Target population guidance
- For routine: surviving infants 12 months of age in the year of introduction.
- For the catch-up campaign: 9 months to 14 years.

Key aspects to consider
- Countries should focus on raising routine vaccine coverage as a top priority. Guidance is provided in section 5.2 on using campaigns to strengthen routine immunisation.
- Countries will need to provide plans to introduce JE into the routine immunisation schedule following the completion of the catch-up campaign to ensure good coordination between campaign and routine introduction planning. These plans should be reflected in the NVIP and/or PoA (these documents may be combined into one document to minimise duplication).
  - Introduction of the vaccine into the routine immunisation schedule may be nation-wide or subnational/ regional.
  - Countries must describe the target population for the Gavi supported campaign and routine introduction based on the epidemiological information (see JE guidance and requirements: Epidemiology below).
  - The geographical areas identified for the introduction of JE in routine should be, at the minimum, the same areas as for the Gavi supported campaign.
  - For countries that already conducted campaigns in geographical areas and/or age groups other than the ones identified in the request for new support, evidence of such campaigns areas, targets and coverage must be provided.
  - Countries should also reference their target population for measles vaccine first dose in their request since JE is usually co-administered at the same age as for measles first dose.

JE guidance and requirements

1. Epidemiology and disease burden and description of target population

Countries are required to provide the rationale for the introduction of JE using available disease burden data. If countries do not have national or sentinel JE and/or Acute Encephalitis Syndrome (AES) data, they should plan to establish systems or conduct studies to collect this data. These activities or rationale should be reflected in the JE introduction plan. The epidemiological information should include:
• JE data from the JE/AES surveillance system including the definition of the geographical extent of high-risk areas for JE; and
• Reports on outbreak or clustering of cases in the past three years; OR
• In case of absence of data from JE/AES surveillance, data from rapid assessments and/or an argumentation on environmental and biological plausibility.

2. JE surveillance indicators
a) If available: Countries should provide information on the following indicators of the quality of JE surveillance for at least two years prior to requesting new support for JE:
   • Reporting rate at national level: (number of reported AES cases per 100,000 population).
   • Laboratory confirmation rate: (% of tested AES cases that were JE IgM-positive).

3. JE-related key information to be captured in the NVIP and/or PoA
Refer to Outline for Plan of Action for campaigns for general guidance on developing a robust PoA. To ensure good coordination between the JE catch-up campaign and routine introduction planning, the NVIP and/or PoA should include:
   • A comprehensive vaccination strategy for introduction of the JE vaccine, including a description of:
     • The initial JE campaign, including the planning process and plans to reach remote rural populations.
     • Implementation plan for the smooth transition to the routine immunisation programme, which specifies geographical extent, timing of routine introduction, and projected coverage.
   • A description of the following surveillance activities:
     • Acute Encephalitis Syndrome (AES)/JE surveillance: status of reporting system, existence of a national laboratory for confirmation of JE, data management; or if not in place, plans to establish AES surveillance.
     • Adverse event following immunisation (AEFI) surveillance: status of the reporting system, awareness of health care workers on AEFI reporting, AEFI data management, status of AEFI expert committee.
   • The communication strategy for the introduction of JE vaccine for campaigns and routine.
   • Vaccine coverage monitoring and reporting including a description of plans to track individual vaccination status.
   • Under the NVIP, countries are required to provide the estimated date for the introduction into the routine programme, with appropriate plans to ensure that no cohorts are missed.

JE-related documents, tools and templates [here]:
• JE Detailed Product Profile
• Guidance post-campaign surveys
• Outline plan of action for campaigns
• Budgeting and planning template and guidance
5.3.3. Measles (M) and Measles-Rubella (MR) vaccines

**WHO guidance**

WHO recommends\(^{32}\) that all children should be reached with two doses of measles containing vaccine (MCV) through routine immunisation and/or campaigns in order to obtain high population immunity. All countries should therefore include a second routine dose of MCV (MCV2) in their national vaccination schedules regardless of the level of MCV1 coverage. The introduction of MCV2 aims to reduce the accumulation of susceptible children, by immunising those who did not respond to MCV1, thereby reducing the risk of outbreaks. As it takes time to achieve high rates of population-wide coverage with two doses of MCV, countries should use available good quality data on population immunity (i.e. MCV1 and MCV2 vaccination coverage, surveillance, serological studies) to a) monitor the accumulation of susceptible people and b) plan additional immunisation activities, including follow-up campaigns, to target these susceptible people.

The WHO rubella vaccine position paper\(^{33}\) recommends that countries take advantage of the measles platform to introduce measles-rubella (MR) vaccine. Countries are recommended to conduct a wide age-range MR catch-up campaign, followed immediately by the introduction of MR vaccine into the national routine immunisation schedule. Countries should give MR in the routine schedule at the same age as they currently give the first dose of measles vaccine. The timing of subsequent follow-up campaigns should be determined by measles epidemiology. In addition, countries should make efforts to reach women of childbearing age by immunising adolescent girls or women of childbearing age, or both, either through routine services or campaigns. Countries should also establish and conduct surveillance for rubella (integrated with measles) and congenital rubella syndrome (CRS).

SAGE\(^{19}\) (October, 2018) reviewed new guidance to support countries in identifying and addressing gaps in immunity to measles and rubella and endorsed the following guiding principles, according to a ‘continuous quality improvement’ approach that entails the following steps in regular cyclical review:

- review all available national and sub-national data on the epidemiology of measles and rubella or CRS and potential immunity gaps; identify, prioritise and implement interventions and assess the outcomes of interventions;
- strengthen routine vaccination as the primary strategy for increasing population immunity;
- conduct campaigns (as rescue measures) when routine vaccination with 2 doses is suboptimal and to address specific gaps in immunity; and
- during and after campaigns, quickly prioritise activities to strengthen routine vaccination.

SAGE stressed that vaccination campaigns are resource intensive and are not sustainable as a strategy. Countries should therefore prioritise routine immunisation strengthening, so as to become less reliant on campaigns. The primary goal of campaigns should be to reach unvaccinated (zero dose i.e. has not received MCV1) and under-vaccinated children. Unvaccinated and under-vaccinated children should be identified, monitored, and documented so that they can also be given other vaccines and health interventions. Campaigns should be used as opportunities to strengthen the immunisation system and to integrate other health interventions, to the extent that additional interventions or activities do not compromise the quality of the campaign.

\(^{32}\) Measles Vaccines: WHO Position Paper, Weekly Epidemiological Record, No 17, 2017, 92, 205-228

Available Gavi support

Acknowledging that uniformly high and timely measles and rubella routine immunisation coverage, complemented by high quality campaigns, is essential to achieving continuously high levels of population immunity and preventing future outbreaks, Gavi’s measles and rubella strategy approved by the Board in December 2015 provides a single, coherent approach towards measles and rubella control. Gavi support puts a strong focus on routine immunisation strengthening and on well planned, high quality, and independently monitored campaigns that reach at least 95% coverage (as per independent and statistically sound survey). It also emphasises long-term programmatic and financial sustainability for recipient countries.

Under the comprehensive measles and rubella strategy, Gavi provides support for:

- Introduction in routine with co-financing:
  - measles second dose or
  - MR vaccine first and/or second dose;
- MR catch-up campaigns, when followed by or coincident with MR routine introduction;
- Measles and MR follow-up campaigns with co-financing;
- Outbreak response fund (managed by the Measles and Rubella Initiative).

In November 2018, the Board approved the flexibility for countries requesting measles or MR follow-up campaign support to apply for operational support (Ops) calculated on the basis of the national 9-59 month population to be used for national campaigns, subnational campaigns and enhanced routine immunisation activities targeted at reaching missed children (see section 5.2). The underlying objectives of this flexibility are to:

- Strengthen the routine immunisation system sufficiently to slow the accumulation of susceptible pre-school age children and thereby increase the interval between Supplementary Immunisation Activities (SIA), and in the long-term, decrease reliance on SIAs;
- Improve MCV coverage while strengthening routine immunisation overall; and
- Ensure that selection of routine immunisation activities is aligned to investments already planned or budgeted for within HSS.

Detailed guidelines are made available to guide countries on routine immunisation (RI) strengthening activities that can be supported through the new flexibility in programming operational support for measles or MR follow-up campaigns. Examples of the RI activities that can be supported include:

- activities conducted before, during, and after a campaign (although Gavi highly encourages that this be part of the comprehensive campaign cost);
- activities aimed beyond a campaign to leverage other existing platforms such as the second year of life (2YL) platform or implementing missed opportunities vaccination;
- activities related to PIRIs; and
- longer term activities that can be supported through HSS investments. Contact your Gavi Senior Country Manager (SCM) for more information.

Timelines for application, approval and preparation for measles and rubella activities: In order to ensure timely review, approval, and preparations, leading to high quality implementation of measles and rubella campaign and/or routine introduction, countries are strongly encouraged apply for Gavi support at least 12 months prior to the start date of the activities. Applications submitted within 12 months of the start date will require countries to defer the date of the campaign and/or routine introduction. Countries should keep in mind their measles high transmission season,

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the accumulation of measles-susceptible individuals and the risk of measles outbreaks, other planned activities on the national calendar and other seasonal considerations, and any implications this may have when deferring planned campaigns.

**Synergies across investments:** In addition to the Gavi support provided for vaccination activities outlined in these vaccine guidelines (vaccines, supplies, and grants for campaign operational costs and vaccine introduction costs), support for routine immunisation strengthening, surveillance and modelling to help with programme planning can be accessed through other Gavi funding platforms, such as Health Systems Strengthening (HSS) grants, technical assistance provided via Targeted Country Assistance (TCA), and funds from other donors (e.g. US-CDC, BMGF, and bilateral donors).

When applying for new measles and rubella support, countries should ensure the existing (or newly requested) HSS investments are adequately aligned to the measles and rubella activities. Particular attention should be paid to for routine immunisation strengthening and measles, rubella and CRS surveillance strengthening activities. Joint Appraisals and reviews of support should be used to ensure such linkages. This will help harmonise measles and rubella and HSS inputs, avoid possible redundancies and help maximise the effect of measles and rubella activities on strengthening the overall immunisation programme. Refer to “How to request new Gavi support” for the process to ensure alignment with HSS investments.

Additional programmatic conditions apply for countries requesting new support for measles and rubella. Refer to Annex 2: Additional conditions for measles and rubella support for details.

Eligibility for the different types of support for measles and rubella depends on a country’s current immunisation schedule for MCV.

### Gavi type of support available

<table>
<thead>
<tr>
<th>Vaccines in schedule prior to application</th>
<th>M2, MR1 and/or MR2 in routine</th>
<th>MR catch-up campaign Type 1 below</th>
<th>Measles follow-up campaign Type 3 below</th>
<th>MR follow-up campaign Type 3 below</th>
<th>Outbreak response Type 4 below</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country not yet using rubella-containing vaccine</td>
<td>YES</td>
<td>YES&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>YES</td>
<td>YES&lt;sup&gt;(2)&lt;/sup&gt;</td>
<td>YES</td>
</tr>
<tr>
<td>Only single measles dose (M1) in routine</td>
<td>YES&lt;sup&gt;(2)&lt;/sup&gt;</td>
<td>YES&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>YES</td>
<td>YES&lt;sup&gt;(2)&lt;/sup&gt;</td>
<td>YES</td>
</tr>
<tr>
<td>Only two measles doses (M1 M2) in routine</td>
<td>YES&lt;sup&gt;(4)&lt;/sup&gt;</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Single MR dose (MR1)</td>
<td>YES&lt;sup&gt;(6)&lt;/sup&gt;</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Two measles containing doses (MR1 MR2) or MR1 M2</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
</tr>
</tbody>
</table>

(1) in preparation of MR introduction into routine. Eligibility requirement: DTP3 coverage >70% in 2016 (as determined by WJENIC released July 2017) AND Routine MCV1 coverage ≥ 80% in 2016 (as determined by WJENIC released July 2017) OR most recent measles campaign coverage ≥ 80% (by high quality coverage survey)

(2) For replacement with MR

(3) After rubella-containing vaccine introduced

(4) For two doses of MR

**Figure 6:** Possible scenarios of available Gavi support for measles and rubella

**Type 1. Introduction of measles second dose or MR vaccine first and/or second dose in routine:**

**Target population guidance**

- Recommended schedule: first dose at 9-12 months; second dose 15-18 months. However, routine delivery of MCV1 should not be limited to infants aged 9-12 months, and routine delivery of MCV2 should not be limited to infants aged 15-18 months of age. **Every opportunity should be taken to vaccinate all children who missed one or both MCV routine doses.** The minimal interval between MCV1 and MCV2 is 4 weeks.
Key aspects to consider

- Gavi provides support for the introduction of first dose MR vaccine (MR1) and measles-containing vaccine second dose (M2 or MR2) into the routine immunisation schedule. Please refer to Annex 2: Additional conditions for measles and rubella support for more info on the co-financing of MCV for routine introduction.
- Countries introducing MCV2 into the routine immunisation schedule should use the same vaccine (i.e. either M or MR) for both doses. This is to simplify procurement, logistics, recording, reporting and vaccine wastage, with the benefits outweighing the marginal increase in vaccine cost.
- The introduction of MCV2 should be used:
  - to establish a well-child visit during the second year of life; and
  - as a platform to strengthen vaccine coverage through the administration of MCV2, catch-up of missed doses of MCV1 and other routine doses (e.g. PCV) as well as maximise linkages with other health interventions in this age group (i.e. 2nd year of life).
- The introduction of MCV2 should accompany policy changes that help overcome barriers to vaccinating children older than 12 months who have not completed their vaccination schedule.

Countries may also want to refer to WHO guidelines on Missed Opportunities for Vaccination or on Establishing and Strengthening Immunisation in the Second Year of Life when developing their plans for introduction of routine MCV2.

https://www.who.int/immunization/programmes_systems/policies_strategies/2YL/en/

Type 2. MR catch up campaigns:
Target population guidance

- 9 months to 14 years
  - Any expansion of the target population beyond 14 years of age will need to be financed by the country or other partners.

Key aspects to consider

- Gavi only provides this support in preparation for the introduction of MR into the routine immunisation schedule, as a transition from one/two doses of measles monovalent vaccine to one/two doses of MR vaccine. Support for catch-up campaign can therefore only be requested in combination with a routine introduction. Please see Type 1 above for information on accompanying MR routine support.
- The target age range should be determined by a review of the measles and rubella epidemiology.
- Countries are strongly recommended to launch a campaign only after timely and adequate planning and preparations (to ensure a high-quality, high coverage campaign) have been carried out (please see measles and rubella guidance and requirements).

Type 3. Measles or MR follow-up campaigns:
Target population guidance

- 9 months to 59 months
  - Focus of Gavi support is 9-59 months, but there is flexibility to support a wider age group if countries provide strong epidemiological evidence to justify this for measles control.

Key aspects to consider

- Gavi strongly encourages countries to prioritise and target delivery approaches that contribute to a) routine coverage at national or sub-national level and to b) reaching unvaccinated and susceptible children, taking into account country context (e.g. already existing delivery strategies for measles vaccine) and programme capacity. Examples of such delivery approaches include,
re-introduction of regular outreach services, Periodic Intensification of Routine Immunisation (PIRI), and child health days.

- The campaign strategy (including the choice of target age group, frequency, timing, geographical scope and delivery strategy) needs to be informed by data on population immunity and epidemiology (and modelling where possible).
- Integration with other health interventions, such as joint delivery (where relevant) or integrated planning across campaigns, in consultation with WHO/technical partners and based on country context/plans (see section 5.2).
- Plans for the campaign should demonstrate how consistently missed children will be identified and vaccinated.
- Countries should focus on raising routine vaccine coverage as a top priority. Where campaigns are needed to prevent outbreaks, planning and implementation of such campaigns need to effectively contribute to achieve equity and high coverage and strengthening of routine immunisation efforts.
- Countries with high routine immunisation coverage and quality record keeping and/or high card retention should consider targeted immunisation of zero and one dose children and not children that have been vaccinated before. This is particularly important in the context of rising vaccine hesitancy in some settings.
- Countries are strongly recommended to launch a campaign only after timely and adequate planning and preparations (to ensure a high-quality, high coverage campaign) have been carried out (please see below for guidance).
- Within the financial envelope over the 5-year period, there will be flexibility for countries to revise the key parameters (e.g. target age range) of the activities in the 5-year plan (see Situation analysis and 5-year plan below).

**Type 4. Outbreak response fund (managed by the Measles and Rubella Initiative):**
Countries that are experiencing a significant measles and/or rubella disease outbreak of national public health importance and cannot respond to the outbreak fast enough with local funding (domestic epidemic response funds or donor funding) should consider applying to the Measles & Rubella Initiative (M&RI) Outbreak Response Fund for support for vaccines and operational costs.

Further details on the M&RI Outbreak Response Fund, including eligibility requirements: [www.who.int/immunization/diseases/measles/SOP_MRI_Outbreak_Response_Fund_June2014_Final.pdf](www.who.int/immunization/diseases/measles/SOP_MRI_Outbreak_Response_Fund_June2014_Final.pdf)

**Measles and Rubella guidance and requirements**

In line with the comprehensive Gavi strategy for measles and rubella described above, countries are required to take into account the following steps and requirements outlined below in their request for Gavi support.

**Figure 7: Key steps to apply for, implement, evaluate and review Gavi measles and rubella support**

1. **Situation analysis and 5-year plan for measles and rubella**
   - As part of the application for Gavi support, countries are required to conduct a comprehensive situation analysis for measles and rubella and, based on this analysis, develop a high-level 5 year
plan with coherent and integrated measles and rubella disease control activities and budget for the coming five years.

- The 5-year plan needs to include all Gavi measles and rubella support needed over the 5-year period (e.g. MCV2 introduction, any additional campaigns, etc.), with an indicative timing, target population and indicative costs.
- Information on measles and rubella routine immunisation strengthening and surveillance strengthening activities should also be included in the 5-year plan, including funding sources (e.g. Gavi HSS) for the activities.
- Both the situation analysis and the 5-year plan must be included in the countries’ multi-year national immunisation plan (e.g. cMYP) or provided as an addendum to the plan (e.g. if current cMYP already includes comprehensive analysis on measles and rubella but it is not up to date). The aim for this is to encourage better planning and long-term programmatic and financial sustainability. If available, a Measles (& Rubella) Strategic Plan for elimination can also be used as a reference for the situation analysis and 5-year plan.
- Upon submission of the 5-year plan, Gavi will approve the activity(ies) detailed in the application and recommend for endorsement any other indicative activities planned for the later years of the 5-year plan. Approval of these activities will take place the year prior to implementation, upon submission of support-specific documents (e.g. operational plans and budget).

![Figure 8: Illustration of flow from situation analysis to development of plans for measles and rubella](image)

2. Development of EPI plan

- Following the comprehensive situation analysis and development of a high-level 5 year plan for measles and rubella, countries are expected to include in their annual EPI plan (as part of the countries’ operational planning processes) detailed planning of all measles and rubella-related activities for the current year, including realistic timelines, designated responsible person(s) and a budget.
- The annual EPI plan must include strategies to strengthen routine immunisation, including activities to increase the coverage of MCV2 (if MCV2 is already in schedule), details on monitoring and surveillance activities, including how surveillance data will be used to guide future action to consistently reach whole target population.

For guidance on the development of an annual EPI plan, please refer to Section 2.7.2 in the “WHO-UNICEF guidelines for cMYP” and for guidance on a template, please refer to the example from the PAHO region.

35 https://apps.who.int/iris/bitstream/handle/10665/100618/WHO_IVB_14.01_eng.pdf?sequence=1
36 http://www.paho.org/immunization/toolkit/epi-planning.html
3. Development of detailed plans and budgets for campaign and/or introduction in routine

a) Campaigns:
   • For Gavi-supported measles or measles-rubella campaigns, countries need to develop a Plan of Action (POA), a detailed operational plan for the campaign. The POA must reflect the use of available tools and best practices to achieve high coverage (>95%), with coverage validated by independent reliable post campaign coverage surveys (PCCS) at least at the national level.
   • To ensure best practices, while developing the POA countries should follow the guidance in the WHO SIA Planning and Implementation Guide. This Guide provides comprehensive information on planning and implementing a high-quality campaign, including critical activities and proposed timelines (Annex 6 of SIA Guide) and highlights the opportunities to strengthen routine immunisation and surveillance (Section 3.1 of SIA guide). Countries must incorporate this information in the POA; particular attention should be paid to:
     • Timeline of activities, with campaign planning and preparations to start 15 months ahead of the start date;
     • Use of the WHO SIA Readiness Assessment tool (below);
     • Microplanning to identify the best strategies to reach the unvaccinated;
     • Opportunities to strengthen routine immunisation;
     • Intra-campaign monitoring (Rapid Convenience Monitoring) during the campaign in order to take immediate corrective action in low performing areas and achieve high coverage;
     • Post-campaign independent monitoring; and
     • Mop-up vaccination activities.
   • The POA also needs to include a summary of the epidemiological analysis included in the situation analysis (see #1) to justify the timing, target age range and geographical scope of the campaign. This information should be provided for all campaigns, particularly follow-up campaigns. Flexibility is encouraged for countries to use tailored strategies to reach the unvaccinated, such as through subnational or selective campaigns and follow-up activities targeted to areas with high numbers of susceptible people.
   • The WHO SIA Readiness Assessment Tool allows countries to assess readiness and ensure that all preparatory activities have been conducted before the campaign. Countries must use the SIA Readiness Assessment Tool in their campaign planning and preparations and must indicate in their Campaign Plan of Action how the tool will be used. If required, technical assistance on the use of the tool can be requested from WHO.

The WHO SIA Planning and Implementation Guide and the accompanying SIA Readiness Assessment Tool and Dashboard can be accessed at:

For English version of guidelines (i.e. delete from French version):
   • http://www.who.int/entity/immunization/diseases/measles/SIA-Field-Guide.pdf?ua=1
   • http://www.who.int/entity/immunization/diseases/measles/SIA-Readiness-Dashboard.xlsx?ua=1
   • http://www.who.int/entity/immunization/diseases/measles/SIA-Readiness-Assessment-Tool.xlsx?ua=1

For French version of guidelines (i.e. delete from English version):
   • http://www.who.int/entity/immunization/diseases/tetanus/SIA_Field_Guide_FR.pdf?ua=1
   • http://www.who.int/entity/immunization/diseases/measles/SIA-Readiness-Assessment-Tool-Fr.xlsx?ua=1
   • http://www.who.int/entity/immunization/diseases/measles/SIA-readiness-dashboard-Fr.xlsx?ua=1
b) Introduction in routine:

- For Gavi-supported measles or measles-rubella routine introductions, countries need to develop a New Vaccine Introduction Plan (NVIP), a detailed operational plan for the introduction. The NVIP will need to be accompanied by a checklist and activity list & chronogram and a detailed budget using the Gavi template.

**Strengthening of routine immunisation through routine introductions and campaigns:** New routine introductions and campaigns of measles or measles-rubella should be used as strategic opportunities to strengthen routine immunisation. Campaigns, for example, utilise the same platform for many of the activities (e.g. human resources, cold chain and waste management facilities, surveillance, social mobilisation network, AEFI surveillance, etc.). Therefore, routine immunisation system issues can be successfully addressed during different phases of the campaign, with many of the activities carried out before and during the campaign not requiring additional resources and/or with the possibility of pooling routine and campaign resources together. Please refer to Section 3 of the WHO Supplementary Immunisation Activity (SIA) Planning and Implementation Guide (link above) for additional information on suggested activities for routine immunisation strengthening as part of campaign planning and implementation. Use of these opportunities should be based on a situation analysis and need to be aligned with a countries’ expressed needs and priorities for routine immunisation to ensure that they address recognised gaps or problems.

For guidance on the New Vaccine Introduction Plan or campaign Plan of Action, please use the template available via the link in the tools & templates box at the end of this section.

4. Preparation and implementation of the campaign and/or routine introduction

- For campaigns, preparatory activities should start at least 15 months before the campaign, following the guidance in the WHO SIA Planning and Implementation Guide.
- For routine introduction, preparatory activities should start 6-12 months before the introduction, following the guidance in the WHO principles and considerations for adding a vaccine to a national immunisation programme.

5. Evaluation of the campaign and/or routine introduction

a) Campaigns:
- Following all Gavi-supported measles and MR campaigns, countries must conduct an independent, statistically and technically sound post campaign coverage survey (PCCS) with probability sampling, to assess levels of vaccination coverage achieved during the campaign. Countries must include the budget for the PCCS in their request for support from Gavi, as part of the detailed budget for the operational costs support grant, even if funded by a third party. The survey should be completed as soon as it is feasible and no later than 3 months after completion of the campaign, so as to reduce recall bias. Please refer to the PCCS guidance in section 5.2 and the new WHO Vaccination Coverage Cluster Survey Reference Manual for additional information on conducting post campaign coverage surveys. The SIA technical report and the PCCS report must be submitted to Gavi and should be discussed as part of the annual joint appraisal exercise to inform routine immunisation planning and any additional routine immunisation strengthening activities that may be required.

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37 [https://apps.who.int/iris/bitstream/handle/10665/111548/9789241506892_eng.pdf?sequence=1](https://apps.who.int/iris/bitstream/handle/10665/111548/9789241506892_eng.pdf?sequence=1)
b) **Introduction in routine:**

- Following Gavi-supported measles or measles-rubella introductions, particularly MCV2, countries are recommended to conduct a Post Introduction Evaluation following WHO guidance.

6. **Yearly review of measles and rubella situation analysis and update of 5-year plan and annual EPI plan**

- On a yearly basis, preferably as part of the Joint Appraisal or alternatively during countries’ operational planning processes, countries are to update the situation analysis for measles and rubella based on a robust review and analysis (if possible, supported by modelling) of all the key measles and rubella activities, including immunisation coverage, epidemiological and surveillance data. This should be done with support from immunisation partners. Countries should also take into account findings and action points from any PCCS or PIEs. Countries should also undertake a detailed assessment at national and sub-national level to determine disease burden and identify high risk regions and populations. Countries may also complete measles outbreak risk assessments as needed in select large countries to feed into the analysis. A summary of the analysis should be presented at the Joint Appraisal.

- Based on this robust review and analysis, countries also need to update their 5-year plan and refine their annual EPI plan, including strengthening routine immunisation in areas where measles and/or rubella risk is considered highest. This analysis will also allow for the identification of technical assistance needs to be covered as part of PEF Targeted Country Assistance (TCA).

- Gavi recognises that over the course of 5 years, data may become available leading to a change in key parameters (recommended target age group, frequency/timing and/or geographical scope) for a follow-up campaign. Within the financial envelope of the 5-year plan, there will be flexibility for countries to revise these key parameters. Decisions regarding these revisions should be made by countries and their immunisation partners, based on the robust review and analysis of measles and rubella, particularly epidemiology of disease. These revisions should be discussed during Joint Appraisals, detailed in the annual EPI plan and reflected in the campaign POA.

- Additional guidance on the measles and rubella considerations and requirements for the Joint Appraisal process and discussions are available in the [Joint Appraisal guidance](#) document.

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Measles/Measles-Rubella (M/MR) related documents, tools and templates [here](#)

- M/MR Detailed Product Profile
- M and R situation analysis and 5 year plan template
- M/MR New Vaccine Introduction plan template
- M/MR Campaign Plan of Action template
- Guidance on post-campaign coverage survey
- Budgeting and planning template and guidance
5.3.4. Meningitis A (MenA) vaccine

WHO recommendations

WHO recommends the following strategies in the 26 countries, where Neisseria meningitidis A (NmA) meningitis is endemic:

• A single dose preventive mass campaign with MenA vaccine in the population aged 1-29 years old.
• Introduction of MenA vaccine into the routine childhood vaccination schedule should be done as soon as possible and within no more than five years following the preventive mass campaign completion, along with a one-time catch-up campaign.
  • The catch-up campaign targets birth cohorts born since the initial mass vaccination and which would not be within the age range targeted by the routine immunisation programme. The exact age range for the catch-up campaign will depend on the time lag between the preventive mass campaign and the introduction into the routine immunisation schedule.
• For countries that have not yet conducted preventive mass campaigns, introduction into the routine immunisation schedule should be concomitant with the mass preventive campaign, unless a strong justification is provided for the delay and plans for introduction are outlined.

Rapid outbreak response for meningitis: Gavi channels funds for outbreak response through the International Coordinating Group on Vaccine Provision for Meningitis. More details on accessing funding for outbreak response are found on: https://www.who.int/csr/disease/meningococcal/icg/en/

Decisive action towards NmA epidemics elimination available on Gavi website here.

Available Gavi support

Gavi provides support for the introduction of MenA vaccine into the routine immunisation schedule, either combined with support for an initial preventive mass campaign or a catch-up campaign. Please find below details on these two support types:

Introduction in routine, including preventive mass campaign:
Target population guidance
• For the preventive mass campaign: 1 to 29 years.
• For routine: one dose at 9 or 15-18 months, depending on specific country situation and epidemiology.

Introduction in routine with catch-up campaign:
Target population guidance
• For catch-up campaign: should target susceptible cohorts born between the previously conducted preventive mass campaign and the introduction of MenA in routine.
• For routine: one dose at 9 or 15-18 months, depending on specific country situation and epidemiology.

38 The 26 endemic countries are Burkina Faso, Benin, Burundi, Cameroon, Central African Republic, Chad, Cote d’Ivoire, DR Congo, Eritrea, Ethiopia, The Gambia, Ghana, Guinea, Guinea Bissau, Kenya, Mali, Mauritania, Niger, Nigeria, Rwanda, Senegal, South Sudan, Sudan, Tanzania, Togo and Uganda.
39 Sometimes referred to as a one-time mini catch-up campaign.
Key aspects to consider

For both types of support, the following apply:

- Countries should focus on raising routine vaccine coverage as a top priority. Guidance is provided in section 5.2 on using campaigns to strengthen routine immunisation.
- The geographical areas identified to conduct MenA catch-up campaigns should be the same areas as for the Gavi-supported preventive mass campaigns (i.e. targeting hyperendemic areas as defined through the risk assessment—see #2 below on “epidemiology and disease burden”—unless appropriate justification to proceed otherwise is provided).
- For introduction of the vaccine into the routine immunisation schedule, nation-wide introduction is encouraged. However, some countries, and in particular, large countries with relatively small hyperendemic areas may consider regional introductions. When making decisions regarding the scope of the introduction into the routine schedule—i.e. nationwide versus in high risk areas/districts only, additional elements may be taken into consideration. These include:
  - the complexity of implementing different vaccination programmes in the same country could be a challenge;
  - public perceptions of inequity could arise with regard to vaccination in different parts of the country;
  - climate variability could result in evolution of at-high risk areas in the country (i.e. “extension of the meningitis belt”), since epidemic risk is highly related to climatic conditions; and
  - nationwide introduction might also benefit neighbouring countries (e.g. building geographic herd protection and maintaining the benefits of the initial mass campaigns).
- Countries should also reference their target population for measles vaccines first and second dose in their request, since MenA is usually co-administered at the same age as measles.

Additional technical guidance through WHO is also available for countries planning to use a Controlled Temperature Chain (CTC) strategy when implementing a preventive mass campaign or mini catch-up campaign.

- Countries wishing to make use of a CTC strategy should summarise how they will use CTC, when they plan to start using it, and how they will comply with the WHO guidelines during implementation in their request for Gavi support.


MenA guidance and requirements

1. Timing and coordination for the delivery strategies

   Requests for routine introduction with catch-up or preventive mass campaign should be prepared together and include a detailed new vaccine introduction plan for the routine introduction (NVIP) and a Plan of Action (PoA) for the campaign.40
   - Requests for (a) routine introduction and (b) preventive mass campaign (for countries that are yet to conduct one) should include a detailed new vaccine introduction plan (NVIP), as well as a Plan of Action (PoA) for the preventive mass campaign.
   - Note: the timing for the campaign depends on the age at routine introduction:

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40 If support for a campaign and routine introduction is requested at the same time, the new vaccine introduction plan and campaign plan of action can be combined into one document to minimise duplication
• If routine introduction at 9 months of age → campaign 3 months after routine introduction
• If routine introduction at 15 months of age → campaign 3 months before routine introduction
• If routine introduction at 18 months of age → campaign 6 months after routine introduction
• Countries are strongly encouraged to identify cross-cutting synergies (e.g. communications, training) across the different delivery strategies. These should be reflected in the budgets for each component of the support requested (i.e. routine programme, catch-up campaign or preventive mass campaign, including any use of a Controlled Temperature Chain (CTC) strategy during campaigns).

2. Epidemiology and disease burden
Countries requesting support are required to submit:
• Risk Assessment Report\textsuperscript{41}: A risk assessment report is required to determine the epidemiological information on MenA circulation and relevant data, disease burden, and the target population at risk; if a District Prioritisation Tool (DPT) exercise was conducted, the DPT report should be submitted as part of the risk assessment materials.

3. Identification of target zones
Countries requesting support to conduct a catch-up campaign are required to provide the areas and the target population per district or region where the catch up will be conducted, including the source\textsuperscript{42}.

4. MenA-related key information to be captured in the implementation plans
The following aspects should be considered when developing a plan specific to MenA.
• Refer to the Outline for Plan of Action for general guidance on developing a robust plan for campaigns.
• For countries requesting support for routine introduction and catch up campaign, the plan should include how some of the lessons learned from past preventive mass campaigns will be integrated into the implementation.
• Countries should provide evidence that once MenA has been introduced in routine systems, they will be able to finance potential mop-up campaigns (to catch-up low routine coverage), if these are required in the future.
• A comprehensive national communication strategy and communication plan, including the introduction of MenA into the routine immunisation system and the campaign (catch up or preventive mass campaign).
• A description of the Meningitis control surveillance system: either a meningitis-specific system or preferably, an integrated surveillance system that includes \textit{Neisseria meningitidis} with other diseases. Details of the status of the reporting system, data management processes, and the national laboratory and other systems for handling and confirmation of Meningitis cases related to all serogroups, should be provided, or indicate if these are not in place.

5. Monitoring and evaluation
• The WHO SIA Readiness Assessment Tool allows countries to assess readiness and ensure that all preparatory activities have been conducted before the campaign. Countries must use the SIA Readiness Assessment Tool in their campaign planning and preparations and must indicate in their Campaign Plan of Action how the tool will be used. If required, technical assistance on the use of the tool can be requested from WHO.

\textsuperscript{41} The report should be endorsed by WHO and a consensus meeting report may be submitted together with the report.

\textsuperscript{42} This information is typically included in the risk assessment report.
• Following all Gavi-supported campaigns, countries must conduct an independent, statistically and technically sound post campaign coverage survey (PCCS) with probability sampling, to assess levels of vaccination coverage achieved during the campaign. Countries must include the budget for the PCCS in their request for support from Gavi, as part of the detailed budget for the operational costs support grant, even if funded by a third party. The survey should be completed as soon as it is feasible and no later than 3 months after completion of the campaign, so as to reduce recall bias. Please refer to the PCCS guidance in section 5.2 and the new WHO Vaccination Coverage Cluster Survey Reference Manual for additional information on conducting post campaign coverage surveys.

• The SIA technical report and the PCCS report must be submitted to Gavi upon completion and no later than 6 months after the campaign was implemented.


The WHO SIA Planning and Implementation Guide and the accompanying SIA Readiness Assessment Tool and Dashboard can be accessed at:

For English version of guidelines (i.e. delete from French version):

• http://www.who.int/entity/immunization/diseases/measles/SIA-Field-Guide.pdf?ua=1
• http://www.who.int/entity/immunization/diseases/measles/SIA-Readiness-Dashboard.xlsx?ua=1
• http://www.who.int/entity/immunization/diseases/measles/SIA-Readiness-Assessment-Tool.xlsx?ua=1

For French version of guidelines (i.e. delete from English version):

• http://www.who.int/entity/immunization/diseases/tetanus/SIA_Field_Guide_FR.pdf?ua=1
• http://www.who.int/entity/immunization/diseases/measles/SIA-Readiness-Assessment-Tool-Fr.xlsx?ua=1
• http://www.who.int/entity/immunization/diseases/measles/SIA-readiness-dashboard-Fr.xlsx?ua=1

MenA-related documents, tools and templates here

• MenA Detailed Product Profile
• Guidance post-campaign survey
• Outline plan of action for campaigns
• Budgeting and planning template and guidance
• Technical report template

5.3.5. Pneumococcal Conjugate Vaccine (PCV)

WHO recommendations

WHO recommends that pneumococcal vaccines be given priority in childhood immunisation programmes, especially in countries with under-five mortality of greater than 50 per 1,000 live births. In 2015, SAGE19 reviewed the evidence on the administration of multiple injectable vaccines during the same visit and found that evidence supports co-administration. Therefore, countries should not make modifications to recommended immunisation schedules with the aim of preventing multiple injections during the same visit when such modifications are not evidence-based. To this extent, countries should provide training to health-care workers on vaccine co-administration practices (e.g. techniques to mitigate pain at the time of vaccination, information about safety and effectiveness of vaccines when co-administered, effectiveness and value of multiple vaccine
injections) and develop a communication strategy to address vaccine hesitancy and refusals. In 2017, SAGE\textsuperscript{19} reviewed recommendations on PCV catch-up vaccination and recommended catch-up vaccination as part of introduction in children aged 1 to 5 years old, stating that a single dose can be used to vaccinate this group.

Available Gavi support

Gavi provides support for the introduction of PCV into the routine immunisation schedule (co-financing applies) and PCV catch-up vaccination for children from 1 to 5 years of age (all doses financed by Gavi).

Introduction in routine, with/without catch-up:

Target population guidance

- For routine: up to 12 months of age.
- For catch-up: 12 months to 59 months of age.

Key aspects to consider

- For the routine target population: support is provided for a three-dose schedule.
- For the catch-up target population: support is provided for a single dose only.
  - Countries should demonstrate how the operational support for the catch-up implementation will be used for long-term strengthening of vaccine delivery through the routine immunisation programme.
  - Countries are strongly recommended to implement catch-up to reduce disease burden in areas/communities with low coverage.
  - Where campaigns for other antigens are planned within the same year, countries are encouraged to leverage implementation synergies and budget efficiencies.

PCV guidance and requirements

1. Procurement of vaccines

PCV vaccines must be procured through UNICEF due to the terms and conditions of the pneumococcal Advance Market Commitment (AMC). Countries procuring vaccines through UNICEF can still self-procure vaccine devices.

There are multiple PCV vaccine presentations available, and new options are expected soon. Please consult Gavi's Detailed Product profiles page for the most up-to-date information on newly available vaccines.
2. Integrated disease prevention, control and linkage to existing health interventions

As highlighted in the WHO/UNICEF Integrated Global Action Plan for the Prevention and Control of Pneumonia and Diarrhoea (GAPPD), the use of pneumococcal vaccines needs to be part of a comprehensive and integrated strategy alongside other related interventions such as oral rehydration therapy, exclusive breastfeeding, zinc treatment, improvements in water, sanitation, and hygiene, as well as proper nutrition. Countries are required to provide the following information in line with GAPPD objectives:

• A high-level description of any existing interventions for the prevention and treatment of pneumonia and diarrhoea and the status of implementation;
• A description of how pneumococcal or rotavirus vaccination could be used to strengthen joint delivery of services and communication about healthy actions such as exclusive breastfeeding and hand washing with soap, safe drinking water and sanitation, and guidance around care-seeking behaviours; and
• A description of potential barriers to the integration of activities (e.g. policy development, management and coordination, supply and data management, service delivery, financing, health worker training, communication and social mobilisation, monitoring and evaluation).

If a country would like to pursue GAPPD interventions, they should contact their Gavi SCM for how to leverage Gavi’s Health Systems Strengthening support.

<table>
<thead>
<tr>
<th>PCV-related documents, tools and templates here</th>
</tr>
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<tbody>
<tr>
<td>• PCV Detailed Product Profile: available here</td>
</tr>
<tr>
<td>• Budgeting and planning template and guidance available here</td>
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<tr>
<td>• GAPPD guidance available here</td>
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5.3.6. Rotavirus vaccine

WHO recommendations

WHO recommends that rotavirus vaccine for infants should be included in all national immunisation programmes and considered a priority in countries with high rotavirus gastroenteritis (RVGE) associated death rates, such as in south and south-eastern Asia and sub-Saharan Africa. WHO recommends that Rotavirus vaccine is administered at the same time as DTP.

Prematurely born infants should follow the vaccination schedules recommended for their chronological age. WHO also recommends that all immunisation programmes have routine adverse events following immunisation (AEFI) monitoring in place, regardless of which vaccines are included in the national immunisation schedule.

| WHO rotavirus vaccine information: www.who.int/immunization/diseases/rotavirus/en/ |
| WHO position paper on rotavirus vaccines: |
| www.who.int/wer/2013/wer8805/en/index.html |
| PATH rotavirus disease and vaccine information: |
| sites.path.org/rotavirusvaccine/rotavirus-disease/ |
| sites.path.org/rotavirusvaccine/key-messages-rotavirus-disease-and-vaccines/ |
Available Gavi support
Gavi provides support for introduction of Rotavirus vaccine into the routine immunisation schedule.

Key aspects to consider
• Gavi provides support for routine rotavirus vaccination.
• There are multiple new rotavirus vaccines presentations available. Please consult Gavi’s Detailed Product profiles page for the most up-to-date information on newly available vaccines.

Rotavirus guidance and requirements
1. Guidance on monitoring adverse events following immunisation (AEFI)
For rotavirus vaccines, countries should:
• provide proper planning and training of staff for pharmacovigilance prior to introducing the vaccine;
• develop a strategy to inform relevant health staff that although the benefits of vaccination outweigh the risks of intussusception, a small potential risk of intussusception after rotavirus vaccination remains;
• ensure that caregivers are adequately trained to recognise danger signs of dehydration or intussusception that need immediate medical consultation; and
• establish the baseline incidence of intussusception at sentinel sites and to use epidemiological studies, such as the self-controlled case series method, to assess the safety of rotavirus vaccines.
• encourage health staff to strengthen the detection, reporting and investigation of intussusception cases and RVGE cases, so that risks and benefits of this vaccine can be further assessed.

A plan for monitoring of AEFIs and training of staff that will be responsible for AEFI monitoring should be in place before the vaccine is introduced.

2. Integrated disease prevention, control and linkage to existing health interventions
As highlighted in the WHO/UNICEF Integrated Global Action Plan for the Prevention and Control of Pneumonia and Diarrhoea (GAPPD), the use of rotavirus vaccines needs to be part of a comprehensive and integrated strategy alongside other related interventions such as oral rehydration therapy, exclusive breastfeeding, zinc treatment, improvements in water, sanitation, and hygiene, as well as proper nutrition. Countries are required to provide the following information in line with GAPPD objectives:
• A high-level description of any existing interventions for the prevention and treatment of pneumonia and diarrhoea and the status of implementation;
• A description of how pneumococcal or rotavirus vaccination could be used to strengthen joint delivery of services and communication about healthy actions such as exclusive breastfeeding and hand washing with soap, safe drinking water and sanitation, and guidance around care-seeking behaviours; and
• A description of potential barriers to the integration of activities (e.g. policy development, management and coordination, supply and data management, service delivery, financing, health worker training, communication and social mobilisation, monitoring and evaluation).

If a country would like to pursue GAPPD interventions, they should contact their Gavi SCM for how to leverage Gavi’s Health Systems Strengthening support.
5.3.7. Typhoid Conjugate Vaccine (TCV)

WHO recommendations

WHO recommends the introduction of typhoid conjugate vaccine (TCV) for infants and children over 6 months of age as a single dose in countries where the disease is endemic, and where feasible and supported by epidemiological data, a one-time single dose catch-up of children up to 15 years of age\(^43\). Countries are recommended to explore existing immunisation schedules to identify opportunities at 9 months of age or in the second year of life where TCV may be co-administered with other vaccines to ensure synergies and cost effectiveness, for example, giving TCV and measles first dose vaccine together at the 9 month visit.

Available Gavi support

Gavi provides support for nationwide introduction of TCV into the routine immunisation schedule and depending on country context, a targeted and tailored one-time catch-up immunisation of up to 15 years of age. Large countries (e.g. Nigeria, Pakistan, etc.) may choose to introduce the vaccine into their routine immunisation schedule via a phased introduction based on feasibility considerations or a subnational introduction based on risk (e.g. in certain geographical zones, districts, or provinces). However, these larger countries must at a minimum introduce in areas covered by a catch-up campaign.

Outbreak response: Gavi does not currently provide support for a TCV stockpile. However, TCV could be used to respond to a typhoid fever outbreak. Given the limited data on TCV use in emergency situations, countries should contact their Gavi Senior Country Manager who can liaise with appropriate technical experts, if there is need.

Introduction in routine systems with/without catch-up campaign

**Target population guidance**\(^44\)

- For routine: surviving infants 12 months of age.
- For the catch-up campaign: 9 months up to 15 years.

**Key aspects to consider**

a) Selection of immunisation strategy:

- In choosing a specific immunisation strategy (e.g. routine vs routine plus catch-up; national vs risk-based; or phased), countries are strongly encouraged to consider implementation feasibility.

\(^43\) Typhoid Vaccines: WHO Position Paper, Weekly Epidemiological Record, No 13, 2018, 93, 153-172

\(^44\) Guidance for dose calculations recommend using existing data points (e.g., surviving infants) rather than developing new data points even if the chosen immunisation strategy is different.
Countries must provide justification (e.g. epidemiologic / modelling data) for the selected strategy. At a minimum, countries should introduce TCV into the routine system in all areas targeted with one-time catch-up.

- If choosing a strategy of a catch-up campaign followed by introduction into the routine immunisation schedule:
  - The geographical areas identified for the introduction of TCV in routine schedule should be, at the minimum, the same areas as those in the catch-up campaign.
  - Countries will need to demonstrate plans to introduce TCV into the routine immunisation schedule following the completion of the catch-up campaign to ensure coordination between the two activities. These plans need to be reflected in the NVIP and/or PoA (these documents may be combined into one document to minimise duplication).

b) Target population:

- Countries must describe the target population for the catch-up and/or routine introduction and provide any available information on typhoid epidemiological situation.
- If already using the vaccine, evidence of such vaccine use, targets and coverage must be provided.
- Based on timing of routine vaccination, countries should reference their TCV target population against a relevant existing national reference (e.g. measles first dose) if TCV is co-administered at the same age. Countries should also consider integration of TCV catch-up immunisation with other planned supplemental immunisation activities.

WHO Guidance on Co-Administration of Typhoid Vaccine with Measles-containing vaccines


c) Alignment with cMYP and other interventions

- To ensure alignment with other EPI activities, it is important that the introduction of TCV is reflected in the country’s cMYP. If not included in the cMYP at the time of application, the introduction of TCV must be reflected in the new/updated cMYP as part of the annual vaccine support renewal process.

TCV guidance and requirements

1. Epidemiology and disease burden

Countries are required to provide the rationale for introducing TCV into the immunisation schedule (national or risk-based or phased) using available typhoid disease burden data. Such rationale is strengthened by providing national or sentinel typhoid fever data (e.g. records of laboratory-confirmed typhoid cases). If such data are not available, countries should consider using data from rapid assessments, modelling analyses, typhoid risk factors (e.g. access to sanitation or clean water), or environmental sampling. Countries should further consider the establishment of surveillance systems to estimate and/or monitor typhoid incidence. Countries should also assess the time and financial requirements and recognise the limitations in current typhoid surveillance and diagnostic tools. Gavi may support surveillance activities through technical assistance provided.

45 Please note that the WHO recommends that typhoid cases be confirmed by blood culture or molecular methods of S. Typhi or detection of S. Typhi DNA from a normally sterile site. Widal tests are not sufficient to confirm cases as typhoid fever.

43/57
through the PEF TCA or HSS support. Further guidance on appropriate data for Typhoid application is available in the tools & templates box at the end of this section.

Requests for TCV support must include:
- Any available data or modelling, an overview of the country’s epidemiological situation, including but not limited to disease burden, communities most at-risk, and geographic spread of typhoid disease and/or risk.
- Any reports on outbreaks or clustering of typhoid fever cases or other diseases with similar risk factors, such as cholera.
- Rationale for selected immunisation strategy (e.g. routine vs routine plus catch-up; national vs risk-based; and phased).

Other potential information could include:
- Data on inadequate sanitation and insecure access to water in an area.
- Antimicrobial resistance data and trends for Salmonella Typhi.
- Lab-confirmed disease burden data by age (years and/or months).

WHO Surveillance Standards for Typhoid and other invasive salmonellosis:
http://www.who.int/immunization/monitoring_surveillance/burden/vpd/standards/en/

3. **TCV-related key information to be captured in the NVIP and/or PoA**

Depending on the immunisation strategy chosen by the country, the New Vaccine Introduction Plan (NVIP) and/or Plan of Action (PoA) can be combined to avoid duplication and ensure strong coordination between the routine introduction and catch-up campaign. A comprehensive vaccination strategy (i.e. NVIP and/or PoA) for TCV introduction must include:

a) Routine immunisation:
- The implementation plan for the routine immunisation programme, which specifies geographical extent, timing of routine introduction, and projected coverage.
- Demonstration of understanding of challenges or opportunities for the introduction of TCV based on previous vaccine introductions to ensure appropriate measures are in place to avoid disruption or build on best practices.

b) Catch-up:
- If conducting a catch-up campaign, the following elements must be included:
  - The TCV catch-up plans and processes for specific populations where coverage is low or inequitable (e.g. districts with persistently lower coverage, groups or communities such as children of female caretakers with low socio-economic status or from ethnic religious minorities, nomads, urban slum dwellers, etc.).
  - Implementation plan for the smooth transition to the routine immunisation programme.
  - Please refer to “Outline for POA for campaigns” on general guidance to develop a robust PoA.

c) Surveillance:
- A description of the following surveillance activities:
  - Typhoid fever surveillance: status and scope of reporting system, existence of access to laboratory confirmation testing for typhoid fever and testing for antimicrobial resistance in typhoid fever cases, data management. If there is no surveillance in place, countries should provide plans to establish typhoid fever surveillance, but this is not mandatory to apply for Gavi support.
• Adverse event following immunisation (AEFI) surveillance: status of the reporting system, awareness of health care workers on AEFI reporting, AEFI data management, status of AEFI expert committee.
• Vaccine coverage monitoring and reporting including a description of plans to track individual vaccination status or updating of data capture tools for TCV.

d) Preparatory activities:
• Clear description of preparatory activities, such as social mobilisation and communication strategy, training of health workers, community resources persons, and coordination of activities.

e) Water, Sanitation and Hygiene (WASH):
• Description of country plans and process to improve WASH in identified high burden areas. Countries should consider approaches for integrated disease prevention, control and linkage of immunisation programmes to existing health interventions (e.g. WASH and/or leveraging opportunities across vaccine programmes).

TCV-related documents, tools and templates here:
• TCV Detailed Product Profile
• Data sources for Gavi Typhoid application
• Guidance post-campaign surveys
• Outline plan of action for campaigns
• Budgeting and planning template and guidance

5.3.8. Yellow Fever (YF) vaccine

WHO recommendations
Yellow Fever (YF) cannot be eradicated but epidemics can be eliminated if population immunity levels are raised through mass vaccination and sustained by routine infant immunisation. The risk of outbreaks can be substantially reduced through immunising a minimum of 80% of the population in at-risk areas. In order to achieve and maintain this high coverage rate the Global Strategy to Eliminate Yellow Fever Epidemics (EYE) recommends a three-pronged YF control strategy for at-risk countries (see “WHO classification of YF endemic countries in Africa" list):
• The nationwide integration of the YF vaccine in routine immunisation programmes for infants (9 months in Africa and 12 months in the Americas).
• The implementation of preventive mass vaccination campaigns designed to rapidly increase population immunity in high-risk areas.
• Rapid outbreak response, through rapid case detection, reactive vaccination, good case management, vector control and community mobilisation.

Rapid outbreak response for yellow fever: Gavi channels funds for outbreak response through the International Coordinating Group on Vaccine Provision for Yellow Fever. More details on accessing funding for outbreak response are found on: http://www.who.int/csr/disease/icg/ICG-request-form-EN.pdf

In November 2018, the Gavi Board approved support for yellow fever diagnostic capacity strengthening through provision of laboratory supplies, equipment and capacity building to countries through at least 2021. The aim of this support is to facilitate more reliable yellow fever laboratory testing, which in turn should allow more effective and efficient yellow fever vaccine usage, particularly in response to outbreaks and in addressing the gaps in routine immunization coverage identified through detection of yellow fever cases. The support is currently available to Gavi-eligible African countries classified as “high-risk” for yellow fever by WHO (see list above).
Countries wishing to apply for support should consult the ‘Yellow Fever Diagnostics Guidelines’ and contact their Gavi SCM.

All countries should note that YF virus circulation and risk can change and/or expand to additional countries or regions not currently considered high-risk. WHO therefore recommends that countries:

• Consult with the Elimination of Yellow Fever Epidemics (EYE) Secretariat at WHO.
• Refer to YF WHO guidance notes which are revised annually. These documents can be found on WHO YF webpage or from relevant WHO country offices.

Further YF information is available here: [www.who.int/csr/disease/yellowfev/en/](http://www.who.int/csr/disease/yellowfev/en/)

WHO Global Strategy to Eliminate Yellow fever Epidemics (EYE), 2016, available here: [www.who.int/entity/immunization/sage/meetings/2016/october/2_EYE_Strategy.pdf?ua=1](http://www.who.int/entity/immunization/sage/meetings/2016/october/2_EYE_Strategy.pdf?ua=1)

### Available Gavi support

Gavi provides support for the **introduction of YF vaccine** into the routine immunisation schedule, as well as for **YF preventive mass campaigns** for countries at risk of yellow fever.

Countries at moderate risk of YF virus circulation or at potential-risk that have not yet conducted risk assessments, are not expected to submit an application for support unless there is validation of identified risk in consultation with the EYE Secretariat. The WHO classification of YF endemic countries in Africa lists current endemic countries and will be updated depending on expansion of YF to other countries.

**Introduction in routine:**

**Target population guidance**

• WHO recommendation for countries in Sub-Saharan Africa: 9 months.
• WHO recommendation for countries in the Americas: 12 months.

**Key aspects to consider**

• High risk countries are recommended to:
  • introduce and sustain high YF vaccine coverage in their infant routine immunisation system.
  • **introduce YF into the routine immunisation schedule within 6 to 12 months of conducting a preventive mass campaign.**
  • Introduction of the vaccine into the routine immunisation schedule will generally be nationwide. However, large countries with relatively small hyperendemic areas may consider sub-national introduction depending on key findings and results of risk assessments.
  • Countries should also reference their target population for measles vaccine first dose in their request since YF is usually co-administered at the same age as measles first dose and other vaccines (e.g. MenA).

**Preventive mass campaigns:**

**Target population guidance**

• Population in high risk areas from 9 months and older, with a recommended upper limit of 60 years old. Exact target depends on the existing age specific immunity per country.

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46 See list of endemic YF countries in Africa.
Key aspects to consider

- Countries should focus on raising routine vaccine coverage as a top priority. Guidance is provided in section 5.2 on using campaigns to strengthen routine immunisation.
- To receive this support, countries must have already introduced YF into the national routine immunisation schedule.
- Countries that have not yet introduced YF prior to requesting support for a preventive mass campaign should provide a statement with timeframes committing to introduce YF into the routine immunisation schedule within 6 to 12 months after the campaign.

Yellow Fever guidance and requirements

1. Long term planning

- To support a more comprehensive approach to YF control over a longer time period, countries are encouraged to have long-term plans for yellow fever. For example, detailed planning of all activities related to YF for that year should be reflected in the annual EPI plan, where available or the 3-year EYE Strategy Implementation Plan.
- Countries are expected to maintain high routine coverage rates following preventive mass campaigns. This is important to ensure that the benefits of a preventive campaign are sustained through the subsequent protection of newer cohorts. Countries should contact WHO for further guidance on planning for preventive mass campaigns prior to requesting new Gavi support.

2. Risk Assessments

Countries are required to submit a risk assessment report when applying for Gavi support. In addition, countries are expected to consult with the EYE Secretariat at least 6 to 12 months prior to submitting a request for support to Gavi to receive technical assistance to:
- prioritise for new YF routine introduction plans;
- validate the level of country risk;
- prioritise preventive mass campaign introductions; and
- validate vaccine dose requirements per phase and per year.

3. Monitoring and evaluation

- The WHO SIA Readiness Assessment Tool allows countries to assess readiness and ensure that all preparatory activities have been conducted before the campaign. Countries must use the SIA Readiness Assessment Tool in their campaign planning and preparations and must indicate in their Campaign Plan of Action how the tool will be used. If required, technical assistance on the use of the tool can be requested from WHO.
- Following all Gavi-supported campaigns, countries must conduct an independent, statistically and technically sound post campaign coverage survey (PCCS) with probability sampling, to assess levels of vaccination coverage achieved during the campaign. Countries must include the budget for the PCCS in their request for support from Gavi, as part of the detailed budget for the operational costs support grant, even if funded by a third party. The survey should be completed as soon as it is feasible and no later than 3 months after completion of the campaign, so as to reduce recall bias. Please refer to the PCCS guidance in section 5.2 and the new WHO Vaccination Coverage Cluster Survey Reference Manual for additional information on conducting post campaign coverage surveys.
- The SIA technical report and the PCCS report must be submitted to Gavi upon completion and no later than 6 months after the campaign was implemented.

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47 The report should be endorsed by WHO and a consensus meeting report may be submitted together with the report.

The WHO SIA Planning and Implementation Guide and the accompanying SIA Readiness Assessment Tool and Dashboard can be accessed at:

For English version of guidelines (i.e. delete from French version):
- http://www.who.int/entity/immunization/diseases/measles/SIA-Field-Guide.pdf?ua=1
- http://www.who.int/entity/immunization/diseases/measles/SIA-Readiness-Dashboard.xlsx?ua=1
- http://www.who.int/entity/immunization/diseases/measles/SIA-Readiness-Assessment-Tool.xlsx?ua=1

For French version of guidelines (i.e. delete from English version):
- http://www.who.int/entity/immunization/diseases/tetanus/SIA_Field_Guide_FR.pdf?ua=1
- http://www.who.int/entity/immunization/diseases/measles/SIA-Readiness-Assessment-Tool-Fr.xlsx?ua=1
- http://www.who.int/entity/immunization/diseases/measles/SIA-readiness-dashboard-Fr.xlsx?ua=1

For more information on conducting a risk assessment, refer to the WHO annual guidance notes, which will be updated annually: www.who.int/csr/disease/yellowfev/risk_assessment/en/

For more information on WHO recommendations on the implementation of the Eliminating Yellow Fever Epidemics Strategy, please refer to the Country Toolkit. Reach out to your WHO focal point for further guidance.

YF-related documents, tools and templates here
- YF Detailed Product Profile
- Guidance post-campaign survey
- Outline plan of action for campaigns
- Budgeting and planning template and guidance

6. Cold Chain Equipment Optimisation Platform (CCEOP)

Cold chain equipment (CCE) is an essential component of the supply chain that ensures that life-saving vaccines reach every child. Gavi established CCEOP (“the platform”) to support countries to improve their cold chain systems, complement efforts to strengthen other supply chain strategy “fundamentals” (i.e. implementation of continuous improvement plans, data for management, cold chain equipment, leadership with appropriate competencies and the design of supply chain systems) and contribute to efforts to sustainably strengthen the coverage and equity of immunisation. In addition to the principles and requirements (see section 3) governing Gavi support to countries, joint-investments in the platform should lead to:

- Adoption of more reliable and efficient equipment
- Improved CCE management and accountability, from equipment selection, deployment planning, procurement, delivery, installation, distribution and maintenance processes
- Complementarity of investments in the other supply chain “fundamentals”. i.e., the targeted investments on CCE through the CCEOP should complement other investments on supply chain, data for management, etc.

6.1. Type of support provided through CCEOP

The platform jointly invests with countries in the purchase, deployment and installation of higher performing CCE, as well as the training of healthcare workers and technicians by suppliers or the suppliers’ in-country service providers. Similar to the co-financing model for vaccine support, the exact degree of joint investment for the full duration of support varies based on the country’s
transition phase (at the time of the independent review). This degree varies from up to 80% joint investment share from Gavi for countries in initial self-financing phase to up to 50% joint investment share from Gavi for countries in preparatory and accelerated transition phase. Detailed information on identifying the source of joint investment, including financing the joint investment share through a new or existing HSS grant; additional conditions for CCEOP support; and country information status by transition phase can be found in the “How to request new Gavi support” document.

Countries are to provide more details on the financing of the joint investment share to include donor contributions or other sources of funding.

Types of CCE equipment
All platform-eligible equipment are WHO pre-qualified, but not all WHO pre-qualified equipment are platform-eligible. For all platform-eligible equipment, countries may use the unit prices provided for such devices in the CCEOP guidelines, noting that the exact price may be different.

Figure 9: Overview of platform supported products and services

- Note 1: Voltage regulators will be bundled with newly purchased on-grid ILRs and freezers; and the Platform will support the purchase of voltage regulators for existing (in-country) on-grid ILRs and freezers. Temperature monitoring devices (including 30-day temperature recorders and/or remote technologies) will be bundled with newly purchased ILRs, SDDs and freezers; and the Platform will support the purchase of temperature monitoring devices for existing (in-country) ILRs, SDDs and freezers.
- Note 2: Spare parts are available for existing equipment, as well as newly (Platform) procured equipment.
- Note 3: Funding from the CCE Optimisation Platform cannot be utilised to procure these (non-Grade A) cold boxes and carriers as they do not protect against vaccine freezing.

Detailed listing of all platform-eligible equipment is provided in the Technology Guide available here. This list will evolve over time, so countries should keep checking to ensure they have the most up-to-date version.
Types of CCE services

- **Delivery, installation and training service**: this service is bundled with each Ice-Lined Refrigerator (ILR), Solar Direct Drive (SDD) refrigerators and freezers.
- **Delivery and training service**: this service is bundled with each long-term passive device.
- **Remote temperature monitoring (RTM)**: this is a device and also a service, since it provides greater visibility on data generated. Countries wishing to purchase such devices for refrigerators only are required to demonstrate how the recurrent costs, (e.g. HR, data transmission, analysis, etc.) will be covered.

| ! | **Non-platform eligible, but WHO-prequalified equipment can be purchased through health system strengthening resources.** These include walk-in cold and freezer rooms, ILRs, freezers, SDD refrigerators, non-freeze free vaccine carriers and cold boxes, etc. Consult with your Gavi SCM for more information on how to leverage your HSS support for this. |

6.2. How CCEOP works

Gavi provides support via a phased approach comprising of the initial support phase (approximately years 1-2) and the scale-up phase (approximately years 3 and beyond), consistent with the principles and requirements in section 3.

- **Initial support phase**: This phase is aimed at addressing the country’s most urgent CCE needs thus contributing to improvements coverage and equity and protecting vaccine stocks. It is also intended to complement and catalyse progress in other supply chain “fundamentals”, with the aim of contributing to the full scale-up of optimised, sustainable supply chains.

- **Scale-up support phase**: This phase is aimed at addressing additional, prioritised CCE needs as part of also optimising design and increasing the sustainability of the supply chain.
  - Provision of support for this phase (i.e. year 3 and beyond) will be contingent on reporting and performance of the activities implemented during the initial support phase. The review of this will take place during the Joint Appraisal process (see [Guidelines on reporting and renewal: Section 3.2](#)).

Countries requesting new support for CCEOP should demonstrate how planned activities will:

- address 1 to 2 year urgent, prioritised CCE needs;
- address remaining CCE needs in years 3 to 5;
- relate to planned activities around the other supply chain “fundamentals”; an
- sustainably contribute to the achievement of coverage and equity goals.

Countries cannot apply more than once for CCEOP funding, barring exceptional circumstances (as communicated by your Gavi Senior Country Manager (SCM)). Prior review and approval from Gavi are required in these cases.

| ! | **How the support phases translate in the application form**: Countries make a single request for both phases (i.e. initial and scale-up) from Gavi and are strongly encouraged to plan, implement and scale-up other supply chain activities in parallel to inform CCE needs. These urgent and additional CCE needs may be requested for support from Gavi through the platform for a maximum of five years. The planning and implementation (including funding and status) of activities related to other supply chain fundamentals (planned and/or ongoing) should be highlighted as part of the country’s request for new support. **Countries should inform in the CCEOP application form about their full CCE needs for the entire duration of the CCEOP application.** Countries are informed that there is a Board approved equitable amount per country. Therefore, countries are asked to fill in the CCEOP budget sheet for the amount that they are applying for. |
Prioritisation to fill the CCE gaps: In line with the HSIS framework, countries should reflect how the CCEOP will benefit identified (and specified) hard-to-reach or socio-economically marginalised populations, districts, or sites.

Linkage to other supply chain support: Countries must demonstrate the linkages between the requested CCEOP support and other ongoing Gavi investments (particularly investments through HSIS) and partner support in supply chain, particularly how it contributes to the country’s supply chain targets to improving coverage and equity in immunisation.

Complementarity with other sources of funding: Countries should demonstrate how funding from the platform will complement other funding sources (e.g. current/new Gavi HSS support, partner support, etc.) in supply chain to address the gaps identified through assessments, review, national documents, etc.

CCEOP guidance and requirements

CCEOP specific requirements are outlined in the table below. Detailed technical and target requirements can be found here.

<table>
<thead>
<tr>
<th>Application Component</th>
<th>Supporting information</th>
</tr>
</thead>
</table>
| Situation analysis of country’s supply chain and CCE (number, distribution, functionalities etc.) | • [WHO CCEI Tool/UNICEF IMT/PATH CCEM Tool/CHAI tool](see note 1) allowing reviewers to understand targeting of equipment to locations relative to contribution towards improving coverage and equity of immunisation.  
• CCE Inventory report (including Facilities segmentation). This report should contain pipeline and available not yet installed equipment (see note 2).  
• CCE coverage rates at sub-national, lowest distribution and service delivery levels ([reflected in the inventory report, see note 2]) |
| Country’s urgent and scale up CCE needs (number, distribution, functionalities etc.) | • Most recent EVM assessment, comprehensive operational improvement plans and status of implementation of these plans  
• A comprehensive document with the following chapters (see notes 3 and 4):  
  • Chapter 1: Rehabilitation and Expansion plan  
  • Chapter 2: Projected (sub-national) Coverage and Equity Improvements  
  • Chapter 3: Operational Deployment Plan, including the deviation plan and  
  • Chapter 4: CCEOP Equipment selection  
• Total cost of ownership analysis (if applicable) |

<table>
<thead>
<tr>
<th>Application Component</th>
<th>Supporting information</th>
</tr>
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</table>
| Expected immunisation coverage, equity and sustainability results | • Projected (sub-national) ‘Coverage and Equity Improvements’ document: Chapter 4 of above document  
• System redesign (optimisation) plans ([see note 6]) |
| Maintenance plan (and its source of funding) and equipment disposal | • Maintenance plan with financing (and source(s))  
• Decommissioning (disposal) plan for obsolete or irreparable equipment ([see note 5]) |
| Other implementation details | • Source of country joint investment, technical assistance (TA), commitment to obtain import tariff exemption |

*Note 1: Countries are required to use the WHO CCE/UNICEF IMT/PATH CCEM/CHAI tool which must be up to date as of no more than 1 year before the application.*
• Note 2: The CCE inventory report should summaries the country’s CCE assets. An annex should be included in the report that provides details of pipeline (tender made or shipped) or procured but uninstalled equipment. The cold chain equipment inventory report and facility segmentation can be combined into the same data file, provided that the file includes all required information for facilities that are not currently equipped with cold chain equipment. The Inventory report should also provide an overview of the sub-national, lowest distribution and service delivery levels’ CCE coverage rates. (See Table A.2 in “CCEOP technical and target requirements” for detailed information required in the facility segmentation.

• Note 3: The comprehensive, single document should have a table that summarises the types and quantities of planned procurements per year which must be linked with maintenance plans and budgets. Any WHO PQS pre-qualified Platform eligible equipment installed in the last (i.e. <3) years should not be planned for replacement. (See Table A.3 in “CCEOP technical and target requirements”). If planning to procure CCE for extension (i.e. new facilities), please provide information on the availability of skilled health workers.

• Note 4: The operational deployment plan can now be developed for multiple years. This is reflected in the template which enables countries to inform the year where the ODP applies and also to inform if the CCE is going for replacement, expansion or extension.

• Note 5: If a country plans to replace obsolete or irreparable equipment, a decommissioning (disposal) plan that details how these equipment will be disposed of from sites must be provided.

• Note 6: System redesign plans may vary from desk reviews to complex modelling of the country’s supply chain system and distribution. However, all plans should seek to identify ways to increase supply chain efficiencies, deliver more

Annex 1: Document checklist for requests for new Gavi support

This annex lists the mandatory and recommended documentation to support your request for new Gavi support. Countries should ensure that all mandatory documents are submitted as part of their application. Previously provided documents, that have not changed/ been updated do need not be re-submitted to Gavi.

For all applications

Country documents from library

• Multi-year national immunisation plan (e.g. nM/YP) including costing
• ICC functionality
• EVMe
• Data quality
• HR pay-scale

Application details

• Budget & planning template
• GPF
• Minutes of ICC and NITAGs
• Signatures of MoH/ MoF

Support specific

1. Health System Strengthening
   • National health plans (from document library)
   • Any existing contextual documents, as available and relevant for the support requested:
     • C&E assessment/analysis
     • Health sector review
     • Annual EPI operational plan...

2. Cold Chain Equipment Optimisation Platform
   • Comprehensive document on CCE needs
   • Inventory report
   • Maintenance plan
   • CCE tariff exemptions...

3. New Vaccine support
   • NVIP/ POA and target population
   • Measles, MCV1 financing, measles situation analysis & 5-year plan, annual EPI plan
   • HPV, HPV implementation plan incl. workplan, regional profile, MoE signature
   • YF/ MenA: risk assessment, areas for catch up (Men A only)

Figure 10: Overview of document requirements for 2020 applications
Country documents from library

These documents must be provided, unless they have been previously submitted to Gavi and remain unchanged (from the version previously submitted)

- **Multi-year national immunisation plan**: (e.g. comprehensive Multi-Year Plan (cMYP))\(^{48}\), including costing tool (e.g. cMYP costing tool)
  - **ICC functionality**: Terms of reference and meeting minutes\(^{49}\) of the national Coordination Forum (ICC or equivalent)
  - **Effective Vaccine Management** documents\(^{50}\). These include: EVM report, EVM improvement plan and Recent progress against the EVM improvement plan\(^{51}\)
  - **Data and Survey** documents\(^{52}\). These include: Nationally representative survey containing immunisation coverage indicators (conducted in the last five years); Periodic in-depth data quality review / assessment (conducted in the last five years); Annual immunisation data quality desk review; Immunisation data improvement plan to address data availability, quality and use; and Annual progress report on the implementation of the immunisation data improvement plan
  - **HR pay scale**: National document outlining existing country norms on salaries/per diems (e.g. national plan or policy/ HR pay scale/ directives from public service/health sector commissions)\(^{53}\)

Application details

These documents must be submitted with your request for new support

- Completed Gavi application form
- Updated Grant Performance Framework, as part of the competed application form
- Completed Gavi budgeting and planning template
- Signatures from the Minister of Health and Minister of Finance on the application form\(^{54}\)
- Meeting minutes and signatures of national Coordination Forum (ICC or equivalent) endorsing any request for new support and non-duplication of requested funding for salaries, salary top-ups/allowances, per diems and incentives

Support specific, application details:

1. **If requesting new HSS support, submit these relevant documents**
   - National Health Sector Plan / Strategy (or similar)
   - Any existing contextual documents, as available and relevant for the support requested. For instance:
     - Coverage and equity assessment/ analysis
     - Health sector review
     - Annual EPI operational plan

2. **If requesting new CCEOP support, submit these relevant documents**
   - Comprehensive document on CCE needs. This includes: Cold Chain rehabilitation and expansion plan; Projected C&E improvements; Operational deployment plan, including deviation plan; CCEOP equipment selection; and Inventory report and facility segmentation

\(^{48}\) The cMYP should be valid for at least one year from the proposed date of introduction or campaign.

\(^{49}\) These should be from the past 12 months.

\(^{50}\) The EVM report and improvement plan are valid for a maximum of five years from the date the EVM assessment was conducted.

\(^{51}\) Should not be older than six months prior to submission.

\(^{52}\) These are valid for five years.

\(^{53}\) Only if requesting support for salaries, top-ups, or allowances.

\(^{54}\) For vaccines, this signature sheet is part of the application form online.
• Maintenance plan with financing and sources
• WHO CCEI/UNICEF/IMT/PATH CCEM/CHAI tool
• Proof of status for CCE exemptions waiver
• If available, countries should also provide Health Facility Assessment reports, total cost of ownership analysis and/or CCEOP end to end process documents

3. If requesting new vaccine support, refer to table below and submit documents as appropriate

- New vaccine introduction plan (NVIP) and/or campaign plan of action (PoA), including checklist and activity list and chronogram
  - If support for a campaign and routine introduction is requested at the same time, the new vaccine introduction plan and campaign plan of action can be combined into one document to minimise duplication
  - Meeting minutes of NITAG (or equivalent) discussing the planned introduction/campaign
    - Where a NITAG does not exist, Gavi recommends that countries include plans to establish one and submit such plans with their request for new vaccine support.
  - Sources and justification of campaign target population estimates (if applicable)
  - Most recent assessment of burden of relevant disease (if not already included in detail in the Introduction Plan or Plan of Action)

<table>
<thead>
<tr>
<th>Vaccine specific documents</th>
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</tr>
</thead>
</table>
| **HPV** | • The HPV implementation plan and workplan replaces the NVIP  
          • HPV regional profile  
          • If requesting HPV support with a school-linked strategy, the signature of the Minister of Education is also required |
| **Measles or Measles Rubella** | • Situation analysis and 5-year plan captured in:  
    - Multi-year national immunisation plan (e.g. cMYP) or as an addendum to the cMYP  
    - Annual EPI plan detailing planning of all measles and rubella-related activities for the current year, including realistic timelines, designated responsible person(s) and a budget  
    - If requesting support for measles and rubella and not currently financing MCV1 with domestic funds:  
      - a signed letter from the Minister of Health and Minister of Finance committing to fund MCV1 from domestic funds; and  
      - the decision to commit to fund MCV1 from domestic funds should be mentioned in the submitted ICC meeting minutes endorsing the request |
| **MenA** | • Risk assessment report or District Prioritisation Tool report (if using DPT tool)  
          • Consensus meeting report (optional)  
          • For catch-up campaigns: the areas and the target population per district or region where the catch up will be conducted, including the source |
| **Yellow Fever** | • Risk assessment report  
                    • Consensus meeting report (optional)  
                    • Detailed planning of all activities related to YF for that year to be included, where available in either  
                      • Annual EPI plan or  
                      • 3-year EYE Strategy Implementation Plan |
Annex 2: Additional conditions for measles and rubella support

All Gavi-eligible countries may request new NVS support if the national WHO/UNICEF (WUENIC) estimate for DTP3\(^{55}\) coverage for 2018 (released in July 2019) is greater than or equal to 70%. This applies only to requests for Measles and Rubella catch-up campaign and introduction of MR.

Conditions to apply for measles and rubella support

To be eligible to receive Gavi measles or measles-rubella vaccine support, countries must co-finance the equivalent to the measles mono-valent vaccine component of MCV1 with domestic funds. Specifically in 2020, countries will be required to domestically co-finance at least US$ 0.287 from the total co-financing requirement (US$ 0.40 if using 2-dose measles schedule; US$ 0.30 if using a 1-dose MR schedule; US$ 0.60 if using a 2-dose MR schedule—for a fully immunised child) with the remaining co-financing amounts to be financed from domestic sources or by other partners or donors if needed. If at the time of application for Gavi support the country is not yet financing MCV1 with domestic funds, then the country must provide a written commitment to do so, with a letter signed by the Minister of Health and Minister of Finance. Gavi fragile countries do not have to meet this requirement prior to applying, as long as there is written commitment from another donor to continue financing the equivalent to MCV1 moving forward.

Gavi will consider providing measles and rubella support for countries that fall under Gavi’s Fragility, emergencies and refugees policy where MCV1 is being funded by a third party if:
- the funder continues financing MCV1; and
- based on discussions regarding the long-term vision for the financing of measles.

Such countries should contact their Gavi SCM for more information.

Specific conditions

a) Introduction of first dose of measles-rubella (i.e. MR1) and/or MR catch-up campaign:
- Routine MCV1 coverage must be ≥80% in 2018 (as determined by WUENIC 2019); or
- Coverage of most recent measles campaign must be ≥80% (as determined by high quality coverage survey).

b) Countries in accelerated transition phase in 2020:
- These countries may apply for any of the different types of Gavi support for measles and rubella depending on the country’s current immunisation schedule for MCV.

Co-financing conditions for measles and rubella support

As mentioned in section 5.1, countries are required to co-finance all Gavi-supported vaccines in the routine immunisation schedule. Countries are required to co-finance a portion of the vaccines for measles or measles-rubella follow-up campaigns.

| How is co-financing applied for measles and rubella?\(^1\) |
|-----------------|--------------------------------------------------|
| Initial self-financing phase | For **Measles-Rubella in routine**: US$0.30 per dose. |
| | For **Measles or Measles-Rubella follow-up campaigns**: country pays 2% of each dose of vaccine |

\(^{55}\) This is the same as Penta3 coverage rate.
| Preparatory transition phase | • For **Measles or Measles-Rubella routine introductions**: the country in the introduction year pays a co-financing of $0.20 and $0.30 per dose respectively. The co-financing per dose is increased by 15% (not the price fraction) every subsequent year as per the measles policy.  
• For **Measles or Measles-Rubella follow-up campaigns**: country pays 5% of each dose of vaccine |
| Countries in accelerated transition phase | • For **Measles or Measles-Rubella routine introductions**: the country in the introduction year pays $0.20 and $0.30 per dose respectively and ramps up linearly in the remaining years.  
• For **Measles or Measles-Rubella follow-up campaigns**: country pays 5% of each dose of vaccine. |

*Note 1: Gavi classifies all eligible countries into three transition phases (initial self-financing, preparatory and accelerated transition phase). See “How to request new Gavi support” for background on the three phases.*
<table>
<thead>
<tr>
<th>Possible country scenario</th>
<th>Anticipated transition: Current dose schedule→planned dose schedule</th>
<th>Initial self-financing</th>
<th>Preparatory Transition</th>
<th>Accelerated Transition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario 1: adding another dose of monovalent measles</td>
<td>M1 → M1, M2</td>
<td>$0.20 per dose of M = $0.40 in total per child. Gavi pays the rest. + VIG</td>
<td>Year of introduction: $0.20 per dose of M = $0.40 in total per child. Each subsequent year: 15% increase (i.e. $0.40 in 2nd year) + VIG</td>
<td>Starts at $0.20 per dose, then progressively increases up to 100% financed by the country in the fifth year of this phase. + VIG</td>
</tr>
<tr>
<td>Scenario 2: replacing one dose of monovalent measles with one dose of measles rubella vaccine</td>
<td>M1 → MR1</td>
<td>$0.30 per dose of MR = $0.36 in total per child. Gavi pays the rest. + VIG</td>
<td>Year of introduction: $0.30 in total per child. Each subsequent year: 15% increase (i.e.$0.36 in 2nd year) + VIG</td>
<td>Starts at $0.30 per dose, then progressively increases up to 100% financed by the country in the fifth year of this phase. + VIG</td>
</tr>
<tr>
<td>Scenario 3: replacing two doses of monovalent measles with two doses of measles rubella vaccine</td>
<td>M1 → M2 → MR1, MR2</td>
<td>$0.60 per dose of MR = $0.60 in total per child. Gavi pays the rest. + VIG</td>
<td>Year of introduction: $0.60 in total per child. Each subsequent year: 15% increase (i.e. $0.60 in 2nd year) + VIG</td>
<td>Starts at $0.30 per dose, then progressively increases up to 100% financed by the country in the fifth year of this phase. + VIG</td>
</tr>
<tr>
<td>Scenario 4: replacing one dose of monovalent measles with two doses of measles rubella vaccine</td>
<td>M1 → MR1, MR2</td>
<td>$0.60 per dose of MR = $0.60 in total per child. Gavi pays the rest. + VIG</td>
<td>Year of introduction: $0.60 in total per child. Each subsequent year: 15% increase (i.e. $0.60 in 2nd year) + VIG</td>
<td>Starts at $0.30 per dose, then progressively increases up to 100% financed by the country in the fifth year of this phase. + VIG</td>
</tr>
<tr>
<td>Scenario 5: adding a second dose of measles rubella</td>
<td>MR1 → MR1, MR2</td>
<td>$0.60 per dose of MR = $0.60 in total per child. Gavi pays the rest. + VIG</td>
<td>Year of introduction: $0.60 in total per child. Each subsequent year: 15% increase (i.e. $0.60 in 2nd year) + VIG</td>
<td>Starts at $0.30 per dose, then progressively increases up to 100% financed by the country in the fifth year of this phase. + VIG</td>
</tr>
</tbody>
</table>

Figure 11: Scenario projections for co-financing per transition phase