



**GLOBAL
VACCINE PROCUREMENT PRACTITIONERS
EXCHANGE FORUM (VPPEF)**

**20 & 21 JUNE 2023
COPENHAGEN, DENMARK**

FINAL REPORT

INTRODUCTION AND MAIN OBJECTIVE

UNICEF works in 190 countries and territories to protect the rights of every child, supporting governments to achieve a situation where no child dies from a preventable cause, and all children reach their full potential in health and wellbeing. To maximize results, UNICEF Supply Division partners with or acts as a procurement agency for over 100 countries and other organizations, procuring over 2 billion doses of vaccines, medicines and health products annually.

Strengthening the national procurement systems involves addressing gaps in its different components such as needs planning, forecasting, quantification, strategic procurement, financing, registration and legislation. Although, over the years, governments and the global health community have invested in improving the functionalities of essential medicines and vaccine procurement, and supply management systems, shortages of vaccines, medicines and related supplies are still happening globally.

To this end, UNICEF Supply Division has regularly been hosting the annual **Vaccine Procurement Practitioners Exchange Forum** ([VPPEF](#)) since 2015. This event is a unique opportunity to allow vaccine procurement practitioners from different countries/regions to network with and learn from peers and to catalyze momentum for future continuous exchanges. To further the aims of the VPPEF, UNICEF Supply Division established in 2016 the **Vaccine Procurement Practitioners Network** ([VPPN](#)) which has today more than 360 members from 98 countries.

In close collaboration with UNICEF's regional offices and Headquarters Programme Group, it was agreed that the Forum this year should focus on supporting Middle Income Countries (MICs) and those countries soon transitioning out of Gavi support.

The 2023 Forum leveraged the recently launched [e-course on strategic vaccine procurement](#) and focused on how to leverage market intelligence to best inform and strengthen governments procurement strategies when considering future introductions of new vaccines (i.e. PCV, HPV and Rotavirus). There was a deep dive into using HPV as an example.

The event was held in **Copenhagen, Denmark at UNICEF Supply Division on June 20 – 21, 2023.**

OBJECTIVES OF THE PRACTITIONERS FORUM

As part of its ethos, the Forum provided a venue for peer-to-peer cooperation among practitioners to exchange knowledge, practical experiences, challenges, and best practices to collectively strengthen their procurement processes and ensure timely, sustainable access to affordable supplies.

The specific objectives of this year's VPPEF were:

- To allow a space for countries to share their experiences in the region on vaccine procurement related topics;
- To provide participants with practical information and opportunities to ensure sustainable access to vaccines with a focus on introduction of new vaccines, and how to leverage market intelligence to inform this strategy;
- To review the current situation and challenges faced by countries in introducing and sustaining new vaccines and brainstorm on actions and implementation plans to address these challenges;
- To foster opportunities to engage with the Vaccine Procurement Practitioners Network (VPPN);
- To share relevant resources and tools available to support countries and identify any additional support needs.

METHODOLOGY

Since its inception in 2015, the philosophy of the VPPEF has been to put the countries in the driving seat and lead the sessions, while being supported by UNICEF and partners. Both days during the 2023 Forum delivered the material via a mix of methodologies, including plenary discussions, group work and short presentations to allow greater opportunities for meaningful exchanges among the participants.

This year's Forum was held face-to-face to allow more ample networking opportunities among the participants and organizers. Moderators facilitated the overall discussions, with several presenters supporting specific topics. Practical hands-on examples were leveraged for each sub-topic, highlighting key elements that contribute to procurement efficiencies, including relevant enabling factors for procurement optimization. The event hosted 16 countries with 65 participants. Further information on the breakdown of participants can be seen below.

TARGET PARTICIPANTS

- Ministry of Health and/or National Immunization/EPI programmes, NITAGs, the public health policy section, Public Procurement Agencies including vaccine and medicines procurement professionals, Ministry of Finance;
- UNICEF Country/ Regional Offices, Supply Division, Programme Group; and
- WHO, other UN agencies and partners, including Gavi, the Vaccine Alliance.

AGENDA AND KEY AREAS OF FOCUS

KEY OBJECTIVES

- To share experiences and lessons learnt around NVI;
- To provide practical information and opportunities to ensure sustainable access to vaccines;
- To review the current situation and identify challenges faced at global level during introductions and develop specific action plans to address some of these challenges;
- To foster opportunities to continue the conversations of the VPPN; and
- To share relevant resources and tools available to support countries and identify any additional needs.

DAY 1 | TUESDAY

OPENING & WELCOME

INTRODUCTIONS, OBJECTIVES &
SECURITY BRIEFING

OVERVIEW OF THE GLOBAL
IMMUNIZATION PROGRAMMATIC STATUS

GOVERNMENT UPDATES

DEEP DIVE ON M7: PROCUREMENT
PLANS

DEEP DIVE ON M4: LEVERAGING
MARKET INTELLIGENCE

UNICEF, Gavi & WHO TOOLS /
RESOURCES & HEXAVALENT UPDATE

DAY 2 | WEDNESDAY

OPENING & RECAP

OVERVIEW OF HPV SUPPLY &
PROGRAMMATIC IMPLICATIONS

PRACTICAL EXAMPLE: LEVERAGING
MARKET INTELLIGENCE

WAREHOUSE TOURS

PRACTICAL EXAMPLE: FORECASTING,
PLANNING & BUDGETING

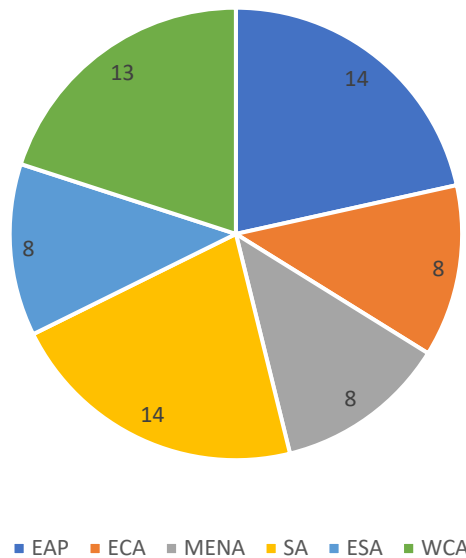
ROADMAPS: DEVELOPMENT OF
COUNTRY ACTION PLANS

NEXT STEPS & CLOSING

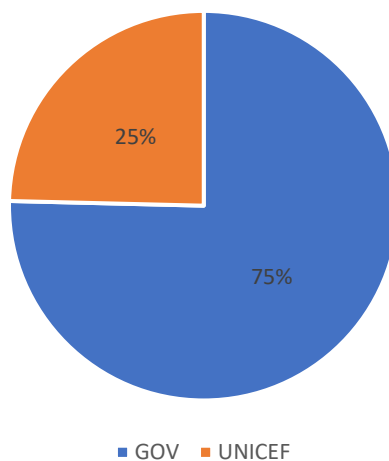
PARTICIPANTS

A total of 65 participants from MICs and partners, participated in the two-day event. Participants included government representatives (75%), UNICEF staff from HQ, RO & CO (24%) and other partners (1%). Colleagues from UNICEF Europe and Central Asia Regional Office (ECARO) and Supply Division (SD) develop, planned and facilitated the event, in collaboration with the UNICEF ROs and PG, as well as WHO.

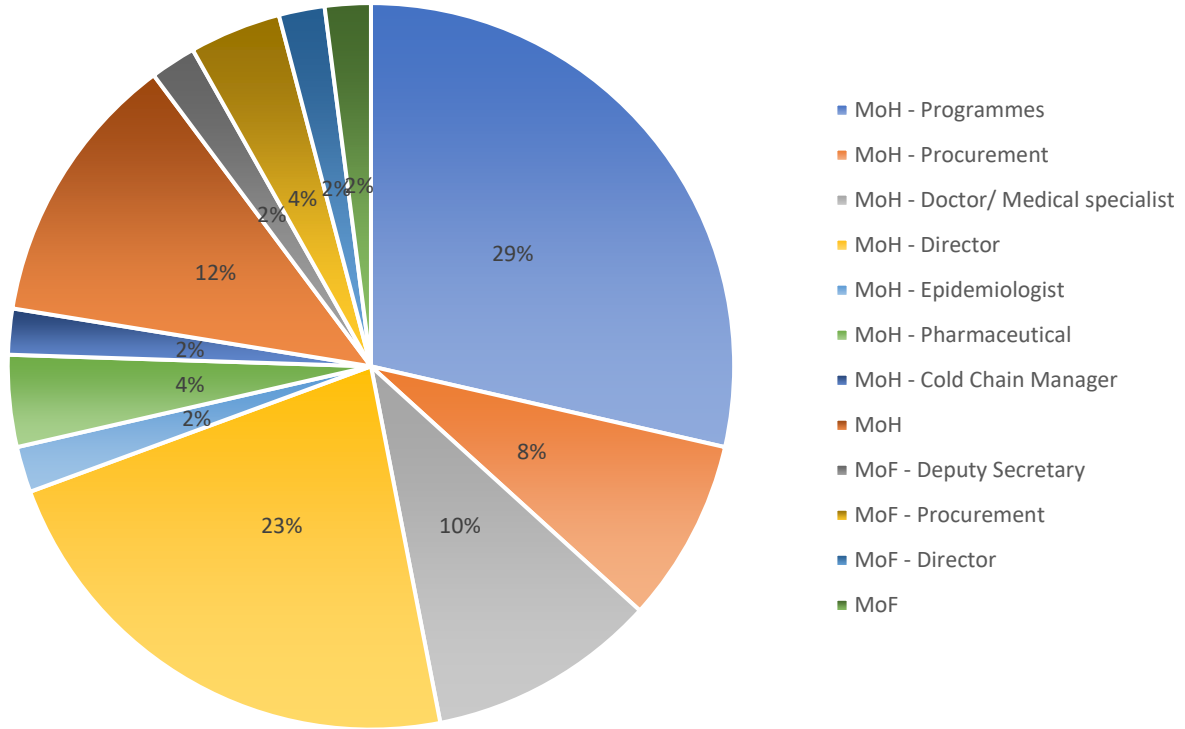
of participants based on UNICEF Regions



Government and UNICEF representation



Government participants' procurement roles



DAY 1

Overview of the global immunization programmatic status

Svetlana Stefanet, UNICEF Europe and Central Asia Regional Office

- The impacts of COVID-19 on immunization

The COVID-19 pandemic heavily influenced the immunization coverage, though to varying degrees across the globe. Globally, 67 million children missed out either entirely or partially on routine immunization between 2019 and 2021, setting back vaccination rates to levels not seen since 2008. DTP3 and the first dose of measles coverage dropped globally to 81% in 2021, leaving 25 million children vulnerable to vaccine preventable diseases, especially measles. The impact is so large that the World Bank estimates that a decade will be lost in immunization achievements in some parts of the world due to the pandemic.

- UNICEF's latest State of the World's Children Report

UNICEF produces the [State of the World's Children report](#), which is an annual report published by UNICEF that highlights specific challenges that children face and the work that UNICEF and its partners are doing to support children and their families grow, survive and develop. The 2023 report was dedicated to immunization, particularly in light of the significant impacts COVID-19 has had on immunization and reaching the world's children.

The report defines:

- **Zero-dose** as children who have not received any vaccinations, calculated as children who have not received their first DTP vaccine; and
- **Under-vaccinated** as children who have received some, but not all, of their recommended schedule of vaccinations, and calculated as children who have not received their third dose of DTP vaccine.

Definitions of zero and under vaccinated children has been discussed and agreed between several key immunization partners: WHO, UNICEF and Gavi.

While all regions have been affected by the pandemic, West and Central Africa has the largest number of zero dose and under vaccinated children, followed by Eastern and Southern Africa and South Asia, Middle East and North Africa and Europe and Central Asia that have been less affected by the pandemic. Details on inequities show that there are huge differences in proportions of zero-dose children, between low and middle-income countries, highest and lowest wealth decile, urban and rural

areas, etc. A lot of work is being done to ensure that catch-up and recovery plans are put in place to allow countries to reach these zero-dose and under-vaccinated children.

- The “big” catch-up and recovery plan

The catch-up and recovery plan has been an on-going discussion that was initiated in collaboration by WHO, UNICEF and Gavi for 2023-2025, to focus on those countries that have the most zero-dose children, as a means to support countries to immunize those children who were missed during Covid-19 and beyond. While the plan focuses on the top 20 countries that have the most zero-dose children, the discussion is for any country that wishes to implement such a plan. To note that if most of the zero-dose children are reached in the top 20 focus countries, it will account for 78% of zero-dose children globally currently. The plan is to:

- Catch-up all children who missed vaccination during the pandemic;
- Restore vaccination coverage rates to pre-pandemic levels; and
- Strengthen immunization systems within Primary Health Care systems in countries.

- What support can UNICEF provide?

UNICEF’s support is focused on supporting countries to:

- Strengthen the enabling environment for immunization programmes through improving evidence generation and use for decision making process and strengthening management and coordination and sustainable financing of immunization services;
- Address inequities within immunization services, starting from supply availability to more practical/logistical issues, such as ensuring healthcare centres opening times are relevant for the specific setting to allow as much access as possible for parents and their children to get vaccinated; and
- Improve demand for quality immunization, through developing responsive and effective social behaviour interventions and improving capacities of frontline workers to build trust and confidence in vaccination and address parents’ concerns.

Comments from the plenary session

- On *Zero-dose*:

- The definition of zero dose is unique and is used globally by everyone. The definition has been defined together with WHO, UNICEF and Gavi and refers to children who haven’t received a

first dose of DTP or Penta. This is the definition used also in the State of The World's Children report. Other definitions included are for under-vaccinated children, who may have received the first dose of the vaccine, but not the third dose of DTP/Penta.

- 20 countries have the most zero-dose children, which is based on absolute numbers, not proportions. It is important to mention that the source of information for presented data are [WUENIC data](#) for 2021, which are based on eJRF data submitted by governments. Data for 2022, which could be different, as many efforts have been done to catch up missed children, were released in Q3 2023.
- It is important to identify the zero-dose children, the minorities who are not vaccinated and engage with partners from these minorities. Working door-to-door is what is making a huge impact.
- Each country has its own approach and vision, and UNICEF always stands up to support the countries' goals.

Deep dive session on M7: Procurement plans

Andisheh Ghazieh, UNICEF Supply Division & Murod Ruziev UNICEF Uzbekistan Country Office

- Background was provided on the key building blocks for procurement, which include:
 - Programmatic considerations & decision-making processes
 - Understanding demand needs & ensuring accurate forecasting
 - Ensuring there is available funding & managing the fiscal space
 - Procurement issues (i.e. tenders, contract management, etc.)
- By ensuring these building blocks are in place, the overall goal is to strengthen all processes, leading to a more strategic procurement approach to ensure access to affordable, sustainable vaccine supply.
- This process comes with its own set of challenges. It is important to improve the communication between stakeholders, increase the evidence and coordination around programmatic choices and market trends, to procure the right product based on available products and use the most updated data to ensure accurate forecasting, etc.
- Uzbekistan presented on its procurement processes and decision-making processes to introduce HPV, which was introduced due to the high prevalence of the disease. There was a joint decision between various stakeholders, including the Ministry of Health and the Ministry of Public Education. After numerous discussions, a plan was developed to vaccinate girls via their schools. A study was completed

first to understand the public awareness around the disease, and thereafter a communication plan was developed that addressed public concerns identified during the study. During this process, the key stakeholders met with Moldovan health professionals in the Ministry of Health, to learn from their experience introducing HPV into their country's immunization schedule, to identify best practices that Uzbekistan could leverage for their own introduction planning.

Overall, Uzbekistan's best practices included:

- The need for careful planning is critical for success, for which it takes a lot of time and diligent preparation;
- It is critical to have intersectoral cooperation, to ensure the right stakeholders are engaged, as the introduction spans many Ministries; and
- Communication is key to ensuring a smooth process, particularly with the public (i.e. developing a targeted public awareness campaign).

Uzbekistan also shared some other key steps that needed to be completed before introducing a new vaccine, including the importance of accurate forecasting, to ensure the correct demand needed is understood and can be procured, as well as the corresponding budget needs to align to the demand (including all associated immunization costs). The country experienced some challenges but came up with mitigating strategies to try and address these issues.

Comments from the plenary session

- On the procurement mechanism (e.g., UNICEF procurement, WHO pre-qualification):
 - There are a few steps that need to be in place before a country can procure vaccines via UNICEF. This includes having a Memorandum of Understanding with UNICEF and a cost estimate (CE) request. If the request is not forecasted during UNICEF's annual forecasting exercise, then UNICEF will engage its suppliers to understand if the request can be accommodated. If the request has been forecasted, then this will move to a CE. Once the CE request is received, UNICEF will create the CE and issue it to the country within 10 business days for a standard CE. The various lead times per specific vaccine will be included in the CE, noting that procurement *only begins once funding* is received. This means that once the funding is transferred to UNICEF, the purchase order(s) will be issued and the lead times will be from that point. Usual lead time is between two to six months, depending on the vaccine.
 - UNICEF participates in the transparency initiative and its prices are online and available to the public.

Deep dive session on M4: Leveraging Market Intelligence

Johanna Fihman, World Health Organization

- Market intelligence is the result of collecting, analysing and interpreting relevant information to better understand the different market dynamics within an industry, to make more accurate and optimal procurement decisions.

Market intelligence can be leveraged to support a country that is considering a new vaccine introduction. This includes understanding where your country fits within the global environment, comparing the different products and formulations to understand what would fit your programmatic needs best, understanding any upcoming innovative or pipeline products, key global players in the various vaccine market(s), assessing the potential risks that may exist, anticipating potential supply shortages etc.

- Understanding your context and the global market landscape will inform your procurement strategy. Some factors to take into consideration to differentiate your country from others are:
 - Income level & tiered pricing impact (in some cases where relevant this would be Gavi price vs. Gavi MICs vs. Gavi transitioning);
 - Production level & impact on cost available to your country;
 - Product lifecycle, as well as any research and development cost impacts;
 - Procurement channel used within the country & product options/prices;
 - Multi-year tendering & potential cost efficiencies if used; and
 - Legislation & regulatory considerations.
- Some of the key results that can be achieved through leveraging market intelligence include:
 - Access to lower prices by comparing the different products and prices paid;
 - Potential access to alternative sources for portfolio optimisation;
 - Support decision makers to engage on country priorities; and
 - Gain visibility into the products in the pipeline, which can help to plan the timelines of potential tenders.

Feedback from group discussions on questions posed about how country's leverage market intelligence currently

- **Group A:**

All countries in Group A procure via UNICEF and use UNICEF's catalogue as a main source for information on vaccines and vaccine equipment. They compare with neighbouring countries the types of vaccines a country has in its EPI programme, as well as accompanying prices, looking at local marketing when the vaccines are not available via UNICEF. Most countries from Group A are satisfied with using the UNICEF procurement mechanism, which many procure through due to their challenge of economies of scale. Sometimes, the challenge is that the prices are similar to each other, hence, countries need to focus more on the vaccine dosage, the vaccine wastage, etc.

Countries in Group A noted that as a smaller economy, whenever these countries go out on tenders, the quantities offered to manufacturers are not always attractive, so prices offered are higher. These countries feel there is a general need to find a pooled procurement platform.
- **Group B:**

The countries in Group B procure through UNICEF and get information mainly from UNICEF, WHO or Gavi. They noted that most of them did not have many problems with vaccine procurement and felt they had received enough information. Viet Nam is, however, different: they procure domestic vaccines on their own, except for pentavalent. However, they cannot procure by UNICEF and must do open tendering. After this conference, they will try to change the policy because the procurement by UNICEF is much cheaper than what they have experienced via open tendering. For new vaccines, countries rely on the information provided by international partners. This group of countries plans to work with UNICEF to achieve the best prices possible for the future introduction of HPV, to ensure its sustainability.
- **Group C:**

For market intelligence, the countries in Group C consider their own procurement capacity to understand the market, such as cold chain, transport, economy, size of population, future plan for vaccine introduction. All the countries in the group also use UNICEF to procure vaccines. They also use UNICEF tools for forecasting, as well as leverage resources from Gavi.
- **Group D:**

The main source of information from countries in Group D, included internal data groups, such as the Department of Disease Control and Immunization, that provides overall the data on consumption and supports information around demand needs. Other sources of information come from UNICEF, such as the [Visibility for Vaccines](#) (ViVa) tool, as well as other online resources.



Update on UNICEF, Gavi and WHO tools and resources

Krista Hund & Mathias Thomann-Arenhorst, UNICEF Supply Division

Meredith Shirey, Gavi, the Vaccine Alliance

Johanna Fihman, World Health Organization

- UNICEF provided an overview on the tools available for countries when considering new vaccine introductions. These include the (1) Strategic vaccine procurement assessment toolbox (*publicly available on [unicef.org here](#)*), (2) the strategic vaccine procurement e-learning course (*publicly available on [Agora here](#)*), (3) future Vaccine Procurement Practitioners Exchange Forums, both regional and global (*more information publicly available on [unicef.org here](#)*), and (4) the Vaccine Procurement Practitioners Network, an online peer-to-peer learning platform for vaccine procurement practitioners (*specialized group for procurement practitioners available online [here](#)*). Each tool provides information and support on the different procurement processes. Further information can be found in the links here, or by reaching out to Krista Hund (khund@unicef.org) or Suhwa Seo (sseo@unicef.org). Other available resources include information on [contracts awards](#), [emergency stockpile availability](#) (OCV/Meningococcal/Yellow fever vaccine), UNICEF's [strategic tender calendar](#), UNICEF [market notes](#) & [product menu](#), [pricing data](#), and an upcoming forecast toolbox and recently released [cervical cancer toolkit](#). All links are also included in the shared presentation decks.

UNICEF also presented on its financing mechanisms that are available to support countries procuring through UNICEF. These include the standard pre-financing “VII subscription”, more ad-hoc pre-financing and financial backing for special contracts. All three options provide support in different ways for country's facing financial challenges in procuring vaccines for their NIPs through UNICEF. There is also the Middle Income Country (MIC) Financing Facility (MFF), which is targeted at MICs that do not typically receive donor support and have lagged in the introduction and scale-up of vaccines and other essential health supplies. For any information or questions, participants can reach out to Mathias (mthomannarenhorst@unicef.org).

- Gavi presented on its MICs approach as well, which was developed to address key threats to equity and sustainability. Overall, the main objectives are to drive the “sustainable introduction of PCV, rotavirus, and HPV vaccines in former- and select never-Gavi eligible countries” and to prevent and mitigate backsliding in vaccine coverage in former-Gavi eligible countries. The Gavi MICs approach focuses on (1) providing regional and multi-country technical assistance, flexible funding to cover time-limited, one-off costs related to new vaccine introductions, catalytic financing and assistance accessing pooled procurement. For more information, participants can check out Gavi's website [here](#).

- WHO presented on their market intelligence resources, which includes their MI4A platform. Participants can access the MI4A vaccine purchase database [here](#). The platform contains information on vaccines purchased, volumes, price and procurement mechanisms. It is anonymized to respect confidentiality. The MI4A full product list contains a list of all available vaccines available for procurement, regardless of their prequalification status. For more information on WHO's MI4A platform, reach out directly to WHO via their website.

Update on Hexavalent

Andisheh Ghazieh, UNICEF Supply Division

- The whole-cell Pertussis Hexavalent vaccine is a combination of whole cell Pentavalent and IPV vaccine, based on a 4-dose immunization schedule versus a combination schedule of 3-dose Penta + 1-dose DTwP booster + 2-dose IPV.
- In November 2018, the Gavi Board approved in-principle support for Hexavalent, subject to (i) a vaccine being licensed, (ii) recommended for use by WHO, (iii) WHO prequalified, and (iv) with met market attributes met that support its successful implementation.
- In 2022, considering that the above conditions were met or expected to be met, Gavi was planning to request the Board to open a funding window for Hexavalent. However, Gavi Board postponed such decision to June 2023.
- In Q1 2022, UNICEF launched a multi-phase DTwP-containing tender to proceed with awards for DTwP, Pentavalent and Hexavalent for the period 2023-2027, while allowing management of cross-antigen demand development during the introduction and supply transition towards hexavalent.
- Gavi Board approval of Hexavalent expected in June 2023:
 - Followed by program implementation and update of demand scenarios
 - First country applications expected in Q3/Q4 2023
 - Commencement of supply expected in 2024
- Hexavalent vaccine pipeline:
 - Manufacturer A achieved WHO PQ in Q4 2022 but decided to discontinue production plans and vaccine was delisted
 - Manufacturer B expected to achieve WHO PQ in Q3/Q4 2023, available for supply in 2024
 - Manufacturer C and D expected to achieve WHO PQ in 2024, available for supply in 2025
 - Manufacturer E and F expected to achieve WHO PQ by end 2026, available for supply in 2027

- UNICEF considering awards for supply in 2024 -2025 based on WHO PQ of commercially viable vaccines aligned with tender objectives for:
 - Gavi demand
 - Non-Gavi demand (MICs)
- Phase II award strategy considering Gavi decision, timing of WHO PQ and demand scenarios.
- Publication of DTwP-containing market note in advance of phase II of the tender.

Recap of Day 1

- Overall, the global immunization coverage was significantly impacted by the Covid-19 pandemic. However, there are plans in motion to have a catch-up and recovery implemented, to reach those children that missed their vaccination schedules. Partners are also available to support.
- Looking at the procurement overviews of country's in the room, there are many similarities of the main challenges faced by countries, particularly around sustainable financing options.
- Background was then provided on the key building blocks for procurement, which include programmatic considerations & decision-making processes, the need for accurate forecasting to support planning processes and ensuring there is available funding, as well as managing overall procurement issues (i.e. tenders, contract management, etc). These building blocks are critical in order to reach the overall goal of strengthening processes, leading to a more strategic vaccine procurement approach to ensure access to affordable, sustainable vaccine supply.
- Uzbekistan spoke to their procurement planning for HPV introduction, providing several key lessons learned including: (1) importance of careful planning, (2) that it is critical to have intersectoral cooperation, to ensure the right people are engaged as the introduction spans many Ministries & (3) communication is key to ensuring a smooth process.
- The session on MI was quite fruitful, with all groups providing feedback on how they currently leverage MI to inform their procurement. There were key themes mentioned, including the availability of information to use, considerations of procurement modality, whether via UNICEF or self-procurement, as well as information on pricing and how to negotiate the best prices.
- Finally, there were presentations on the various partner tools available, including the VPPEF & VPPN, the ecourse on strategic procurement, UNICEF's financing opportunities (i.e., VII, pre-financing and the MFF), Gavi's MICs approach and WHO's MI4A and other market resources.

DAY 2

Overview of HPV supply & programmatic implications

Andisheh Ghazieh, UNICEF SD, Svetlana Stefanet, UNICEF ECARO

The strategic importance of vaccination against cervical cancer: while mostly preventable, HPV is the fourth most common form of cancer among women worldwide and claimed the lives of 300,000 women in 2018.

With the pandemic, there has been a significant decrease in HPV coverage since 2019 due to school closures, delayed vaccination, but also product stockouts. In 2021, there was a further decrease in coverage, with dropout continuing to be a specific challenge for HPV vaccination programmes, particularly in L&MIC. While 116 countries worldwide introduced HPV vaccination, only 12% of girls globally are protected from the deadly disease.

SAGE recommends updating dose schedules for HPV as follows:

- One or two-dose schedule for the primary target of girls aged 9-14;
- One or two-dose schedule for young women aged 15-20; and
- Two doses with a 6-month interval for women older than 21.

With the SAGE review of the efficacy of the one-dose, WHO has recommended consideration of HPV one-dose schedule, to support countries to reach a higher vaccination coverage.

While supply availability had been a key challenge for access, the global HPV supply is improving and anticipated to meet demand depending on product preference. There are also new products in the pipeline/under development.

Comments from the plenary session

- Target group are girls in order to reduce cervical cancer, while some countries also choose to vaccinate boys. The decision on the target population for vaccination is of course to be taken by a country, based on their possibilities to procure additional doses of vaccines to vaccinate boys. In addition, it is important to take into consideration that there is a global campaign to ensure 90% of girls aged 15 are fully vaccinated with the HPV vaccine by 2030 and thus, in this respect, girls are prioritized.
- Gavi has introduced a new MICs approach, in which they will provide some catalytic funding for new vaccine introductions, including for HPV. An overview of this support can be found in the PPTs from the Forum on Day 1. While this support is still being defined in some cases, it does apply to specific Gavi, former Gavi and never Gavi countries.

Practical example: Leveraging market intelligence

Panel with Johanna Fihman, WHO facilitating and panellists including representatives from the government of Maldives, Eswatini, and Nigeria

- Experiences from countries:
 - **Maldives:** Unfortunately, due to funding issues and supply constraints, the country did not yet introduce the HPV vaccine yet in 2018. However, in 2019, there was a change in government and one of the new regimes key priorities was immunization. At that point in time, and though the government engaged with the supplier directly, Gardasil 9 was unavailable, so instead the country introduced the Cervarix product, targeting girls between the ages of ten and fourteen in schools. Finally in 2020, the government was able to switch to the Gardasil product. With the recent SAGE recommendation of using a single dose presentation, the country is now able to target both boys and girls via its' campaigns. Another key strategy included developing and implementing a strong advocacy campaign to reach the target population and promote HPV's importance in protecting against cervical cancer. For this communication campaign, one of the key strategies was to engage religious leaders in the communities, who have been involved in and supported the community outreach communication campaign.
 - **Eswatini:** The country introduced HPV in 2020. There was a catch-up campaign associated with a multi-country study led by ICAP. Gardasil 9 was the product selected, though unfortunately at that point in time, the product was not available in the country. Instead, only the prefilled syringed were available, which are not PQ by WHO. Given this, the country shifted to the quaternary vaccine (Gardasil 4) targeting ages nine to fourteen. The country would still prefer the Gardasil 9 product, but as this is not yet available via UNICEF, they have elected to continue with the Gardasil 4 and once Gardasil 9 is available via UNICEF, the country plans to switch, though currently the HPV9 price is not available, so this will need to be considered as well. The country has never received Gavi support but is currently in discussion with Gavi to discuss if the country could benefit under Gavi's new MIC strategy. For now, the country only has access to government funding for procuring and introducing new vaccines such as HPV.
 - **Nigeria:** The country has undergone preparations for the introduction of HPV recently, and part of the funding was requested from Gavi to support a single dose product and associated campaign costs. To prepare for the introduction, the country underwent an initial data collection from different regions to understand the needs across the country. This research has been published in peer review journals and shows there is a prevalence in the country for cervical cancer and a need for this introduction. Analysis has also been done around pricing, from which the country understood the most effective vaccine for their needs was the Gardasil 4 product,



which is expected to arrive in-country by the end of June 2023. Overall, 8 million doses have been secured for 2023 and will be used for the introduction campaign.

Summary of group work

- It is crucial to have clear communication strategies for different cohorts in order to advocate for the need and ensure the population is aware of the ongoing campaigns;
- School-based vaccination for HPV was seen as a successful campaign, which could thus be leveraged for introducing other vaccines that target similar populations (i.e. school-aged children), while other vaccine delivery strategies may be via primary healthcare (i.e. for newborns, etc.) and it is therefore critical to understand the target population to decide which delivery strategy would make the most sense and reach the largest cohort of the target population;
- Comprehensive engagement for multi-stakeholders is important, particularly between different Ministries (i.e. Ministry of Health and Ministry of Finance, etc.);
- Sustainable financing, particularly for non-Gavi countries, as well as awareness of financial transparency is important. There were common concerns across countries regarding higher price of HPV and limited supply options;
- Information about upcoming products in the pipeline (i.e. leveraging market intelligence) can help to anticipate any potential products that may better support a country's immunization needs; understanding what is available and what will become available in the near future can support a country to find better pricing/products for their NIPs & to this end WHO has updates on the status for submission of the dossier on their website;
- Accurate data and its' availability is important for informing introduction implementation plans and can be used to provide concrete evidence as to why the introduction are needed (i.e. cancer prevalence in-country, etc.); and
- It is important to understand the various products available in order to determine if a switch is beneficial for a country's NIP. It is also important to have the right technical capacity. Partner tools from UNICEF, WHO, etc., are available and can be leveraged, as relevant.

Practical example: Forecasting, planning & budgeting

Shahira Malm, UNICEF PG: Kenya, Kosovo & Ghana

- Sustainable financing is critical for ensuring access to vaccines and in particular for a new vaccine introduction. Key considerations look at how well countries can mobilise, allocate and use adequate resources, in ways that support immunization services, ideally through public spending and a healthy mix of internal and external resources.

- When considering sustainable financing, countries need to consider three key drivers: (1) the levels of public spending on health (i.e. how to increase domestic public health expenditure or reallocating of the budget towards health, etc), (2) the prioritization of the health and immunization budget (i.e. advocating for the benefits that come from investing in immunization could support prioritizing the budget), and (3) the efficient use of resources within the immunization programme. Taking these three key drivers into consideration can help support sustainable funding availability for a country's NIP and with that for the new vaccine introductions.
- To support the global ambition to “leave no child behind”, the Immunization Agenda 2030 has also identified four focus areas needed for sustainable financing. These areas consist of: (1) ensuring there are sufficient, predictable resources to procure and deliver recommended vaccines universally, (2) making optimal use of those resources, (3) aligning partnerships (i.e., donors can improve alignment to ensure greater aid effectiveness, etc) and (4) supporting sustainable transitions from external assistance. These are areas that global health partners can strengthen a country's capacity to move towards more sustainable financing models. Comprehensive engagement at all levels is critical to this success.
- Accurate forecasting and planning is also critical when considering sustainable financing, as without accurate forecasting, it is impossible to estimate the budget needs. Once the immunization needs are understood, a costing exercise can be done to do an estimation of overall budget needs, which should also include not only an estimation of procurement costs, but also delivery costs, including wastage and buffer stocks. It should also take into consideration any supplemental costs, including any necessary devices, cold chain equipment, human resource needs, etc.
- When focusing specifically on HPV introductions, some of the components to be considered include: whether introducing one or two doses, programmatic needs/implications, procurement costs (i.e., vaccine prices), delivery costs, options available, public perception (i.e., HPV), and which is the most effective method to reach more cohorts of the target population.

Comments from the plenary session

- The timeliness of payment could have a significant impact on reducing the risks of stockout. UNICEF report shows that delays in mobilizing domestic resources is the biggest reason for stockouts. Gavi also shared recommended dates of payments for Gavi eligible countries, based on programmatic needs, to minimise the risks of stockouts.
- One country noted that they introduced HPV in 2019. However, there was a low uptake of the HPV vaccine, due to the lack of awareness about the benefits and safety of the vaccine. Also, collaboration with other stakeholders, such as the Ministry of Education, was not efficient at that time. The country noted that the strength of the introduction campaign was from having strong HPV school health

programmes, outreach programmes, as well as key community influencers supporting to demystify misconceptions in the country, which helped strengthen the campaign.

- Another country noted that to make the decision on whether to introduce HPV, they worked with UNICEF to analyze the financial sustainability for the introduction of new vaccines: PCV, Rota and HPV. It was determined that the yearly cost for new vaccines was, on average, USD 2 million more than vaccine procurement prior to these new vaccine introductions. This was helpful to plan, and the country was able to work with key stakeholders to try and ensure there was sufficient budget available.
- A third country discussed the process of gathering information on HPV, including disease burden in the country, prevalence rate, incidence, mortality rate, etc., in order to decide the need to introduce the HPV vaccine. This research has been ongoing since 2012. The research revealed that HPV prevalence was high in women between ages 40 and 44, with the incidence rate was 28.9 per 100,000 population in the country. Gavi supported the country to conduct a pilot for the HPV vaccine in two different regions (out of 16 regions nationally) in 2014. The country has had challenges with securing sustainable funding for the vaccine, and discussions on how to ensure sustainable financing has been ongoing.

LINK TO FORUM'S MATERIALS

- [VPPN page for 2023 VPPEF materials \(including agenda, presentations, etc.\)](#)

ANNEX II: LESSONS LEARNED & BEST PRACTICES

Please describe how the lessons learned & best practices shared at the VPPEF will support vaccine security & new vaccine introductions in your country

26 Answers

Sharing experience with others helps a lot	Sharing experiencesMarket intelligence	Very well done and preparation for meeting. Congratulation
It is great and very useful conference	.	Very informative. Would be using the resources I have become aware of through this meeting after I am back at the NIP. It was also great to hear from colleagues from countries from different regions
Mobilize budget for NVI and procure vaccines through UNICEF	Budget and price vaccin	The lesson has improved our knowledge and has capacitated us to do better
Budget and price vaccin	Mobilize budget and procure vaccine through UNICEF	Forecasting of vaccines and devices both for RI and new vaccines
Mobilize budget for NVI	Perhaps it is good to organise next forum in the country where the successful implementation of new vaccine is done.	We have been capacitated with additional knowledge
Это уже помогает, а бюджет еще лучше	The experiences shared with other countries make it practical for introduction of vaccines. There is also a pool of experts to consult from the forum.	By the knowledge we gained
The forum brings everyone together and the inclusion of finance personnel makes it practical to have the necessary support at country government level.	Assist in improvement of demand creation for new vaccine introductionForecastingMarket intelligence	Risk analysis for vaccine procurement
Sustainable financing and political will	Marketing intelligences	Technical assistant
This forum served to make other government agencies aware of the need for a vaccine acquisition plan.	Amazing conference	

ANNEX II: POST EVENT UPDATE

- A brief overview of the VPPEF 2023 outcomes is published on [UNICEF Supply Division website](#).
- The Forum provided the opportunity for peer-to-peer cooperation and co-learning among practitioners. Sixteen different countries exchanged their knowledge and lessons learned regarding how to strengthen their vaccine procurement processes and ensure sustainable access to vaccines. The practitioners reviewed current situations and challenges in their respective countries and discussed the way forward together.
- More information on most recent VPPEF event is publicly available [here](#).

