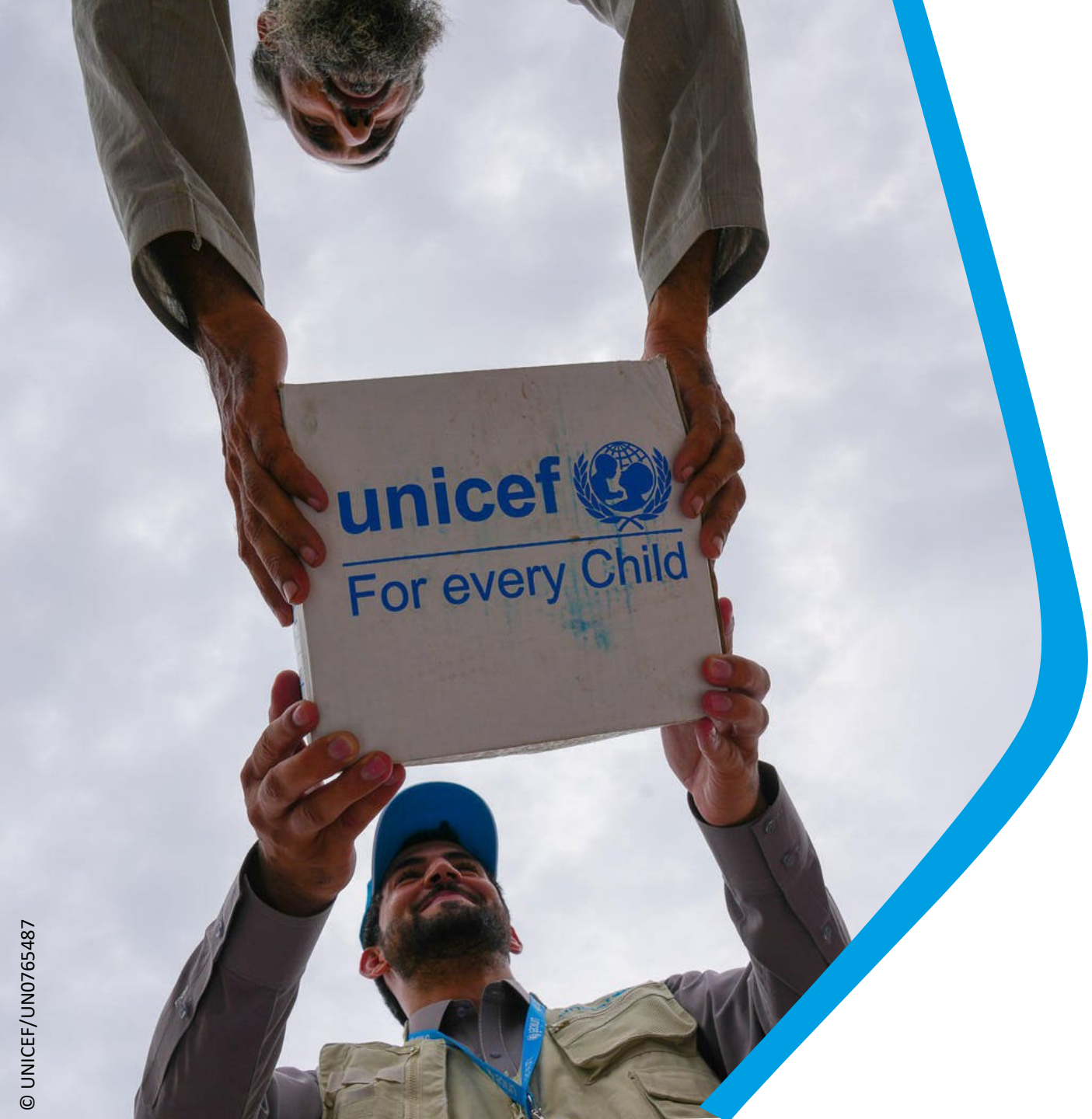

VACCINE PROCUREMENT
Pratictioners Network (VPPN)

Q&A SERIES

Strategic vaccine procurement

DISCUSSION WITH

GEORGIA

LIBERIA

unicef | for every child

VACCINE PROCUREMENT
Pratictioners Network (VPPN)

Q&A SERIES

1

What is your approach to planning and demand forecasting for routine immunisation programmes? Could you please describe your processes, including the timing, demand forecast period, data used for demand forecast, etc.?

2

How do you secure funding for your vaccine requirements? What is the cycle for budgeting, and what is the timing of availability of funds?

3

How do you keep an overview of your forecasting, planning and budgeting processes, their steps, relative timelines and interdependency?

4

What is your approach to vaccine inventory management? What measures do you take to reduce the risk of stock outs? How do you deal with stock outs that are not due to your internal processes, but to production issues with suppliers?

5

Do you think that better aligning forecasting, planning and budgeting could help you avoid stock outs? What lessons learnt could you share about dealing with stock outs?

6

How do you manage coordination across planning, forecasting, budgeting and procurement, particularly the tensions between long-term procurement commitments and evolving epidemiological needs or budget constraints?

7

How do you ensure strong coordination between all stakeholders involved in the various processes tied with the procurement cycle?

8

How does your country integrate legal and regulatory processes into the procurement cycle to ensure they don't create bottlenecks or delays that undermine supply security, while maintaining the necessary quality assurance standards?

9

Do you develop a procurement strategy before initiating procurement? If yes, do you outline possible risks in your procurement approach, and risk mitigation strategies to assure procurement objectives are achieved?

GEORGIA

Vladimer Getia
Head of State Public Health Programs and Regional Management Department, National Center for Disease Control and Public Health

LIBERIA

Adolphus Trokon Clarke
Programme Manager, Expanded Programme on Immunisation, Ministry of Health

VACCINE PROCUREMENT
Pratictioners Network (VPPN)

Q&A SERIES

1

What is your approach to planning and demand forecasting for routine immunisation programmes? Could you please describe your processes, including the timing, demand forecast period, data used for demand forecast, etc.?

Vladimer Getia

GEORGIA

- **Timing:** The determination of vaccine quantities needed for the following year begins in July-August. The forecast for vaccines procured through UNICEF is finalised by early September. Requests for quotations are issued in November, and payments processed in December. For vaccines not supplied by UNICEF (e.g., Hexaxim, Tetraxim), multi-year tenders are used, based on local legislation.
- **Demand forecast period:** Planning for UNICEF-procured vaccines is done annually, with deliveries split into one or two stages to optimise inventory management and shelf life. For non-UNICEF vaccines, a two-year schedule of needs and deliveries is established.
- **Data used for demand forecast:**
  - National Statistics Office data (population by age group),
  - vaccine wastage rates (calculated by municipality),

Adolphus Trokon Clarke

LIBERIA

- **Timing:** In Liberia, all vaccines are procured through UNICEF. The forecasting process starts in August every year and by September, an official submission is sent to UNICEF Supply Division. It also includes stock balances and an estimate of how long they can last, as well as a shipment plan, which defines delivery schedules based on stock levels.
- **Demand forecast period:** Our forecast is annual, based on the consumption pattern of the first eight months of the year and pre-empting the remaining four months. To that, we add a 25% adjustment factor or buffer stock, as we do not expect to see a greater consumption change.
- **Data used for demand forecast:**
  - population data from the Liberia Institute of Statistics and Geo-Information Services to derive the target population,

VACCINE PROCUREMENT
Pratictioners Network (VPPN)

Q&A SERIES

1

What is your approach to planning and demand forecasting for routine immunisation programmes? Could you please describe your processes, including the timing, demand forecast period, data used for demand forecast, etc.?

Vladimer Getia

GEORGIA

- projected immunisation coverage rates,
- Previous year's number of missed vaccinations (drop-outs),
- performed vaccination data records,
- municipal primary healthcare centres' registration data,
- coverage rates and trends,
- 25% strategic buffer stock,
- vaccine stock balance.

Adolphus Trokon Clarke

LIBERIA

- surviving infant rate and birth cohort,
- vaccine stock balances, that are subtracted from quantities to be procured to avoid overstocking.

2

How do you secure funding for your vaccine requirements? What is the cycle for budgeting, and what is the timing of availability of funds?

Vladimer Getia

GEORGIA

Vaccine procurement is **fully funded by the state budget** via a dedicated line item, ensuring funds are exclusively used for this purpose.

The budget is planned for a **four-year cycle**, based on a projection of vaccine demand over four years.

The **process** runs from March to December and includes the following stages:

1. priority setting,
2. parliamentary consultation,
3. strategy approval,
4. preparation of the Basic Data and Directions document (spending ceilings),
5. submission of budget request,
6. parliamentary approval of the budget,
7. Government decree approving specific health programmes' components.

Adolphus Trokon Clarke

LIBERIA

Currently and **until the end of 2026**, traditional vaccines in Liberia are **funded by the World Bank**. New vaccines are **co-financed together with Gavi**.

For 2027, **sustained advocacy** with the Ministry of Finance and Development Planning (MFDP) has been undertaken to increase the immunization budget and take over the costs of traditional vaccine, while ensuring the domestic part of co-financed vaccines. At the same time, the government is looking for **new funding opportunities** for co-financed vaccines. Bilateral agreements are leveraged, for example the MoU signed with the USA, to see if co-financing costs can be considered for the next five years.

Since 2024, the **budget cycle** runs from January to December, following the calendar year, whereas before the fiscal year used to start in July.

3

How do you keep an overview of your forecasting, planning and budgeting processes, their steps, relative timelines and inter-dependency?

Vladimer Getia

GEORGIA

Active advocacy is necessary to secure a sufficient budget for immunisation. In Georgia, healthcare, including immunisation, enjoy strong political support. A striking example of this is the nearly eightfold increase in the immunisation budget over the past 10 years, which has ensured financial sustainability.

During the advocacy process, it is crucial to ensure the **active participation of key decision-makers**. For example, in 2015, the parliamentary health committee advocated for the introduction of a new vaccine, which led the immunisation budget to nearly double.

Furthermore, it is key to **involve decision-makers in joint commissions**; for example, representatives of the Ministry of Finance participate in the work of the National Immunisation Council.

Adolphus Trokon Clarke

LIBERIA

We have a **tracking system** to ensure that our share of co-financed vaccine costs are reflected in our budget projections for the year. This allows us to advocate for any budget increase with the Ministry of Finance.

We also **monitor consumption and vaccine stock** to reevaluate vaccine needs according to remaining stock. This helps us avoid overburdening the state budget, by readjusting budget requests according to remaining stock.

Additionally, we review our **shipment plan** to track vaccine delivery schedules. We can then initiate emergency requests in case of changing conditions, to avoid stock outs.

Finally, our **National Logistic Working Group**, which consists of all immunisation stakeholders as well as international partners, oversees the different procurement processes. It serves as a coordination platform where immunisation issues are discussed. Thanks to it, relevant partners are involved in the processes from the start, which helps with clarity, transparency and confidence.

4

What is your approach to vaccine inventory management? What measures do you take to reduce the risk of stock outs? How do you deal with stock outs that are not due to your internal processes, but to production issues with suppliers?

Vladimer Getia

GEORGIA

We keep a 25% emergency buffer stock. Our goal is to maintain an eight-month supply before a new delivery arrives (five-month supply for current consumption + three-month safety buffer). In practice, the country keeps a 65% **buffer stock** rather than the standard 25%.

Furthermore, **funds are transferred the year preceding the deliveries** to provides an additional safeguard against supply chain disruptions.

To mitigate supplier-side issues, we use **multi-year contracts** (minimum 2 years). In the event of a vaccine supply delay due to production issues, our buffer stock gives us time to find another supplier, **temporarily switch** to its product, and return to the previous antigen once the issue is solved.

Adolphus Trokon Clarke

LIBERIA

During stock outs due to manufacturing challenges, notification timing is critical, because it determines what can be done, especially with counties having poor stock management practices. With timely warning from manufacturers, we can provide satellite and in-person support to the relevant counties to improve stock management practices, while **using buffer stock** to compensate the gap.

In case of internal stock mismanagement or wrong forecasting, we also **provide coaching and training to transfer the appropriate skill set**. And if the stock out is a result of not respecting lead times, then we do a **time series analysis**, which looks at how vaccine data changes over time to monitor and improve procurement decisions, so that we can then understand and fix the bottlenecks that prevented the order from being delivered in time.

5

Do you think that better aligning forecasting, planning and budgeting could help you avoid stock outs? What lessons learnt could you share about dealing with stock outs?

Vladimer Getia

GEORGIA

Coordination is vital. Planned volumes must accurately reflect existing needs, and delivery times must be clearly defined. Furthermore, proper planning should allow sufficient time to find alternative suppliers. We have built up sufficient buffer stocks to deal with such unforeseen circumstances.

A **recent example** involved the MMR vaccine (Jeryl Lynn strain). When GSK suspended its production, our existing buffer stock allowed us to cover the gap while we switched to Merck's vaccine via the UNICEF mechanism. We temporarily procured a different strain until the supply chain was stabilised and then contracted another manufacturer who was able to provide us with the Jeryl Lynn strain of the MMR vaccine.

Adolphus Trokon Clarke

LIBERIA

Better panning, forecasting and budgeting as well as better aligning these processes effectively help solve supply chain challenges. But it must **start at the service delivery level**, in this case the healthcare facilities.

Indeed, they play a critical role in forecasting population estimates and managing vaccine stocks. Healthcare facilities do monthly paper-based **reporting** to counties, which then use web-based stock management platforms to further report to the national level.

If there are issues at the service delivery level, risks of over stock or stock outs appear. It is therefore crucial to make sure that **planning information from healthcare facilities** is taken into account.

6

How do you manage coordination across planning, forecasting, budgeting and procurement, particularly the tensions between long-term procurement commitments and evolving epidemiological needs or budget constraints?

Vladimer Getia

GEORGIA

In Georgia, the **National Center for Disease Control** manages all these functions centrally.

If budget constraints arise, **funds can be reallocated from other health programmes** with the approval from the Ministry and the Government. Immunisation is a top national priority, which facilitates effective advocacy for additional resources.

It's also important to **have sufficient time to respond to emerging issues**. This can be facilitated by mechanisms such as advance purchasing, inventory management, supply chain management, and so on.

Adolphus Trokon Clarke

LIBERIA

Planning, forecasting and procurement are all critical to ensure an effective and robust supply chain system. Quality planning helps to forecast the vaccine needs, which in turn rely on a responsive procurement system. They should all be treated with equal priority.

The budgeting process is a risk that can limit the procurement. For example, timely domestic funds mobilisation for co-financing can be challenging, without early engagement with the Ministry of Finance. We therefore try to remain two steps ahead and request vaccine cost estimates from UNICEF by the end of the year, so that we can present the total amount needed for vaccines to the Ministry of Finance well in advance.

7

How do you ensure strong coordination between all stakeholders involved in the various processes tied with the procurement cycle?

Vladimer Getia

GEORGIA

The key is **unified management**, a clearly defined plan for implementing procedures, and the distribution of responsibilities. Equally important is the existence of an **immunisation commission**, which brings together relevant stakeholders, from the Ministry of Finance and the Ministry of Health to procurement agencies, etc. This is essential to discuss problematic issues together and make decisions promptly. Mutually coordinated actions save time and improve the effectiveness of decisions.

Although various departments perform specific tasks, the Department of Public Health State Programs is solely responsible for managing the entire procurement and implementation cycle. This **centralised structure** ensures unified oversight and good communication.

Adolphus Trokon Clarke

LIBERIA

The **National Logistic Working Group** serves as our coordination mechanism for immunisation supply chain, as it brings together all relevant stakeholders. It meets quarterly, and on an ad hoc basis in case of emergencies. During these meetings, stakeholders are informed of what is taking place regarding the supply chain, from planning, forecasting, stock balances to wastage rates, which ensure transparency.

For stakeholders who are not into supply chain, we have two other platforms – the **EPI Technical Working Group** and the **Interagency Coordination Committee** – which keep them informed.

8

How does your country integrate legal and regulatory processes into the procurement cycle to ensure they don't create bottlenecks or delays that undermine supply security, while maintaining the necessary quality assurance standards?

Vladimer Getia

GEORGIA

1. We purchase only **WHO-prequalified vaccines**.
2. **Procurement** is done **through UNICEF** mostly, ensuring quality products and competitive pricing.
3. For vaccines that are not registered locally, WHO prequalification and full documentation (Certificate of Analysis, Quality Certificate, etc.) allow a commission of the Ministry of Health to grant a **one-time import permit**.
4. Purchases are made in accordance with **Incoterm CIP conditions**, which facilitate the access to our market for suppliers.

Adolphus Trokon Clarke

LIBERIA

As we procure our vaccines through **UNICEF**, we rely on them for **quality assurance and control**.

Between October and December each year, we notify the **Liberia Medicines & Health Products Regulatory Authority** (LMHRA) of the vaccines that will be brought into the country. We also share any relevant documentation, including the product safety report and lot manufacturing certificate, and then request a waiver. Once the products arrive at the airport, the LMHRA ensures Good Manufacturing Practice with a **visual inspection and check** of the manufacturer's name, manufacturing date, lot number, etc, before releasing the vaccines. The process with the LMHRA is seamless.

Ongoing efforts are taking place in Liberia to **strengthen the regulatory capacity** and create a laboratory that will be able to test vaccines.

9

Do you develop a procurement strategy before initiating procurement? If yes, do you outline possible risks in your procurement approach, and risk mitigation strategies to assure procurement objectives are achieved?

Vladimer Getia

GEORGIA

We have a procurement strategy and an annual procurement plan that are approved in the previous reporting year.

There are several factors that can delay vaccine deliveries and are mitigated through strategic measures implemented in the country:

- **Multi-year procurement** and increasing the quantity of vaccines purchased reduce the problem of finding a supplier due to the country's small market size;
- **Simplifying the import** of unregistered vaccines into the country;
- Fixing the **price** of the purchased vaccine **in the national currency** to ensure that exchange rate changes do not affect the immunisation programme's budget;
- Tender **documentation in Georgian and English**;
- **INCOTERMS-2010 CIP** as stated delivery term.

Adolphus Trokon Clarke

LIBERIA

We have an **overall procurement plan** for health commodities in which vaccines are a part. This procurement plan is reviewed every year for the whole sector, which helps refining the system.

Risks considered include:

- delays with establishing the procurement plan, which can create delayed approval by the Public Procurement & Concessions Commission;
- failing disbursements;
- under or over forecast leading to stock outs or overstocking;
- transportation issues for distribution.

UNICEF Supply Division
Oceanvej 10–12, 2150 Nordhavn Copenhagen, Denmark

unicef.org/supply
/unicefsupply
@unicefsupply
/unicefsupply
@unicefsupply
@unicefsupply

For more information please contact:
Dyuti Laura Schuwey-Daeppen
Community of Practice Manager
Vaccine Procurement Practitioners Network
dschuwey@unicef.org

unicef | for every child