How to leverage market intelligence for your vaccine procurement strategy – Discussion with Estonia, Georgia, North Macedonia and Uzbekistan

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"Market intelligence is all the work that we do as part of the pre-tender phase, before announcing the tender in our procurement registry. It covers researching the different vaccines available on the market and managing market research, including sharing information with marketing authorisations holders, as much as analysing data, such as vaccination coverage."

intelligence in regard to immunisation for you and what does it include?

What is market

"We divide market intelligence for preventive vaccines into various segments. These include vaccine types such as live/ attenuated vaccines, inactivated vaccines, subunit vaccines, toxoids, mRNA vaccines, and other types of vaccines. Disease types are also considered such as pneumococcal, poliovirus, hepatitis, influenza, measles, mumps and rubella (MMR), Covid-19, and others. Furthermore, geography is a crucial factor, with regions such as North America, South America, Europe, Asia-Pacific, Middle East, and Africa being considered. The market is valued in millions of USD for each of the above segments.

Several factors impact the market size of preventive vaccines. These include the prevalence of infectious diseases, innovative technologies, and the funding status from governments and international organisations."

What is market intelligence in regard to immunisation for you and what does it include?

ZBEKISTAN

"Financial stability is necessary to take strategic decisions for the immunisation programme. Vaccine demand determines the amount of funds needed to purchase vaccine products. It is necessary to analyse the cost of vaccines in the markets."

"Yes, we use quite a lot of market intelligence and don't ever announce a tender without any kind of knowledge about the market situation.

We treat every vaccine like a project and look at the specific marketing authorisation holders, problems, expiry dates, delivery schedules, etc. We consider all these aspects when launching a procurement and plan according to each vaccine's own features. We know these specific features thanks to our regular communication with industry representatives. They inform us of vaccines' availability, delivery schedules and conditions. We need to understand the way the industry works and look for the best possible option that is available. This is very important for vaccines because they often have limited expiry dates and are challenging to manage. So, the process can be very different according to each vaccine's specific features."

information into your procurement strategy? Could you share an example where market information played an important role in your procurement

strategy?

market

Do you integrate

"When introducing new vaccines, we take into account the vaccines" availability, which includes factors such as the price and supply stability. For instance, when introducing the hexavalent vaccine, we considered the longterm availability and cost of the vaccine. As a result, the government implemented the practice of multi-year procurement."

"The Ministry of Health prepares a 3-year open selection procedure for the procurement of all vaccines in the National Immunization Program (except the flu vaccine which is procured annually). The procurement is based on upto-date expert recommendations and data on cohort population/ percentage of coverage (e.g. the HPV vaccine)."

information into your procurement strategy? Could you share an example where market information played an important role in your procurement

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market

Do you integrate

"Yes, market information on the cost of vaccines is included in the procurement strategy. For example, when planning a request for vaccines, we prepare a comparative table showing the cost of vaccines in UNICEF, on the general market and in private companies."

What market resources do you usually use and how often do you review and update them?

"We use quite a lot of resources and do much information sourcing.

- ❖ We start with our **Estonian registry of medicines**, because we are allowed to only procure vaccines that have marketing authorisations in our country. The registry includes vaccines, specific brands or formulations, the validity periods for marketing authorizations and marketing authorization holders (MAH).
- ❖ Direct communication with MAH and early sharing of information are key. As we are a very small market, we mostly have 2 different MAH behind every large group of vaccines, very rarely 3. Industry representatives are well-known as they have usually been active for many years and we have regular, quick and straightforward communication with them.
  - We share information with MAH as early as possible. There is a common understanding that between signing a contract and the first delivery there should be a minimum of 6 to 9 months. If needed (higher competition level, procurement well in advance, etc), we announce the market research through a tool in our public procurement registry. This allows all potential suppliers to be notified at the same time and to comment on our needs. It is very useful to receive feedback before launching the tender, so that it can be adapted accordingly.
- ❖ Baltic cooperation is also part of MI because it allows us to share information with our neighbours, even on vaccines that are not procured jointly, and to harmonise our delivery schedules. It has been very helpful because it has brought prices down and secured the deliveries even more.
- Information sharing includes weekly meetings with all the relevant agencies involved in immunisation, namely the State Agency of Medicines, the Minister of Social Affairs, the Estonian Health Insurance Fund, the Health Board and communication people too. NITAGs meetings take place quarterly or more. Last year, we introduced regular meetings with MAH to allow them to talk about their portfolios, problems, needs, concerns about our market to all our 4 agencies at once. For example, the seasonal flu vaccine is a complicated case for us because we can never be sure of the interest for it. In crisis situations, information sharing between all agencies is key to coordinate and communicate the same messages.
- For data collection, we use the Estonian Statistics Registry, which gives us an overview of the population figures (our target groups in terms of age ranges). Vaccination coverage and stock data are available in-house in the Estonian Health Insurance Fund or collected from the Health Board and/ or healthcare providers directly. All data are available electronically. We also use WHO's MI4A platform for price indications.
- To hedge the delivery risks, we have a **central stock**, with up to 6-month resources for all major vaccines. Our central stock is important in terms of planning, as it enables us to remain flexible with the industry, in case of delivery delays.

With regard to reviewing our resources, the central stock and vaccination data are updated daily. National statistics about population are revised once a year."

- "Vaccine Product, Price and Procurement (V3P)/ Market Information
- MI4A Market Studies, MI4A Vaccine Purchase Data
- UNICEF Supply Division resources
- List of Prequalified Vaccines
- ❖ Meetings with vaccine manufacturers at UNICEF's Procurement Division"

A C E D O NI

"Market research is based on the Ministry of Health's data and/ or e-health database on immunisation."

Z B E KI ST A

"The need for vaccine products increases annually, depending on the increase in the number of vaccines received and the infectious diseases' status. Resources' requirements are therefore reviewed and updated annually."

"The rotavirus vaccine has been in our calendar for 10 years now and procured jointly through the Baltic Procurement Initiative since 2016. We use Glaxo Rotarix and MSD Rotateq, which have a different dosage. The difference in dosage does not matter for us because we look at the vaccine's price per one vaccination course per one child, and not per dose. Indeed, babies have anyway routine medical appointments at all the vaccination schedules required by both vaccines. Therefore, both vaccines compete as equal in that sense."

Can you share how market intelligence was used when you decided to introduce the Rotavirus vaccine? How did you use market information to assess and choose the products?

"Georgia introduced the rotavirus vaccine with the help of Gavi, which worked closely with WHO and UNICEF. In the decision-making process for choosing the vaccine, the country relied heavily on information provided by UNICEF and WHO. By signing a memorandum with Gavi, Georgia was able to secure a stable and affordable supply of the vaccine."

"In 2019, the Ministry of Health introduced 2 new vaccines, the Rotavirus and PCV vaccines, based on expert opinions and the epidemiological data from the Institute of Public Health, as well as regional access to the same vaccines (Serbia, Greece, etc.)."

Can you share how market intelligence was used when you decided to introduce the Rotavirus vaccine? How did you use market information to assess and choose the products?

"In order to introduce a vaccine against the rotavirus infection, the burden of the rotavirus incidence in the country was proved and the epidemiological and economic efficiency of the vaccine was calculated. To evaluate the different rotavirus products, a comparative table was prepared indicating the types of vaccine, the storage temperatures and the prices."

"For the HPV vaccine, we did a cost-effectiveness study to evaluate the vaccines" quality, as there are big differences between the 2 available vaccines. We calculated the quality criteria based on quality-adjusted life year (QALY). The system has pre-evaluations for each vaccine and gives points to every aspect of the vaccines. Our process for the HPV vaccine was quite unique. And at first, the industry didn't welcome the way that QALYs were calculated. When things are done differently, disagreements must be expected at every step of the way.

We also did a cost-effectiveness study for the pneumococcal vaccine and it concluded that it is not cost effective, so we don't have it in our calendar. We will renew the study and if it finds out that we should procure the vaccine, then we would probably follow a process similar to the one used for the HPV vaccine."

analyses, for example cost benefit, trade-off assessments, etc to choose the products?

Did you do any

"Yes, every time a new vaccine is introduced, we evaluate its costeffectiveness. For the rotavirus vaccine, we carried out a thorough assessment in collaboration with WHO experts."

Did you do any analyses, for example cost benefit, trade-off assessments, etc to choose the products?

"Yes, a cost-benefit analysis was carried out, i.e. cost-effectiveness."

Sometimes we need to find 100 doses of a vaccine, which usually goes unnoticed because unprofitable. We need to gather information first, through wholesalers or middlemen, and make sure a company is ready to bid. The flip side of working with wholesalers or middlemen is that we are limited to their specific networks and we probably don't see all the available options in the European market."

intelligence help you access the best products and if so, how?

Did market

"When selecting the rotavirus vaccine, we chose from WHO-prequalified options, on the basis of price guarantees and supply stability."

Did market intelligence help you access the best products and if so, how?

BEKISTA

"Market information provided us with access to WHO-qualified vaccines and to the best products delivered by UNICEF."

"We do it mainly through communication with the industry's representatives actively present in Estonia. They are usually interested in selling vaccines soon after obtaining marketing authorisations and therefore share information actively. They often have specific vaccines in mind for our market, but we talk about other vaccines as well. We also contact them if we have questions, before launching tenders, or when there is a problem. So, we are in contact with them regularly.

Another way to gather information is through different committees. I am indeed a member of the European Commission's Vaccine Steering Board and of other committees."

track of changes on vaccine markets?

How do you keep

"To keep track of changes on vaccine markets, specifically for vaccines purchased through a government tender such as the hexavalent, quadrivalent, influenza and rabies vaccines, we gather information about the demand, supply volumes, trends, and pricing policy of the specific vaccine on the world market from available resources.

Additionally, we establish contacts with manufacturers to stay up-to-date regarding any changes."

How do you keep track of changes on vaccine markets?

Z B E K I S T A

"With the help of the internet, UNICEF and vaccine manufacturers, we are able to keep up to date with changes on vaccine markets."

What are you missing to gain a better understanding of vaccine markets?

GEORGIA

"It can be challenging for smaller countries like Georgia to determine if they are an attractive market for vaccine producers by relying solely on global market trends. The introduction of the hexavalent vaccine was facilitated by the advice and support of WHO experts, who provided valuable information on pricing, supply stability, and market trends."

What are you missing to gain a better understanding of vaccine markets?

Z B E K I S T A

"Open and accessible information, knowledge, foreign language skills and logistical skills are not enough to better understand vaccine markets."



Can you share a recent experience where market intelligence led to a product switch? What were the outcomes of the switch and did it meet the expectations?

E O R

"We are currently in the process of switching from a 4-component HPV vaccine to a 9-component vaccine. To make an informed decision, we conducted research on vaccines, their prices, and procurement mechanisms. We wanted to ensure that we could obtain a stable and affordable supply of the vaccine in the long run. The prices of the vaccines we researched ranged from \$18 to \$170. After analysing this data, we decided to purchase the new vaccine through UNICEF's procurement mechanism."

A C E D O NI

"We got access to more valent vaccines that are also available in the countries in the region. And we reached better protection and higher acceptance by the population."

Z B E KI ST A

"Switching to Rota provided affordable prices as well as a cold chain. Our expectations were met as there are no deaths of children aged 5 years."

"As previously stated, we used resources from both UNICEF and WHO to introduce a 9-component vaccine against the human papillomavirus. We studied the information provided by WHO and the MI4A platform on prices and market trends. We also received guidance from UNICEF."

Do you use the resources provided by **UNICEF** and WHO? Could you share a specific example of how these resources have been beneficial?

"The resources provided by UNICEF and WHO help to assess the validity of vaccine introduction, monitoring and mentoring, as well as conduct workshops on safe immunisation practices, work with the media, provide outreach and handouts in the form of posters, brochures and other materials."

"Yes, for example following the 2023 seminar in Vienna where the HPV9 vaccine was presented, we decided to switch from HPV4 to HPV9."

We are also dependent on our suppliers' network and can't evaluate if we are missing out on something. It would be good to increase the competition in our market and thus have more MAHs registering their products. Maybe, some industry representatives are unaware of the opportunity the Estonian market represents (low-demanding delivery schedule thanks to central stock, 100% purchase commitment, possibility to offer vaccines in almost any EU language).

Finally, all our major procurements are in the EU procurement registry but no new vaccine offer has emerged from there."

EORGIA

"There is an opportunity to receive guidance from experts at organisations like WHO and UNICEF, also via chat using platforms like Technet-21. Attending meetings organized by UNICEF with vaccine manufacturers can also provide valuable insights and intelligence."

What additional market intelligence resources would be useful for you?

ZBEKISTA

"We need the experience of other developed countries, training to analyse the market."

## Q&A

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