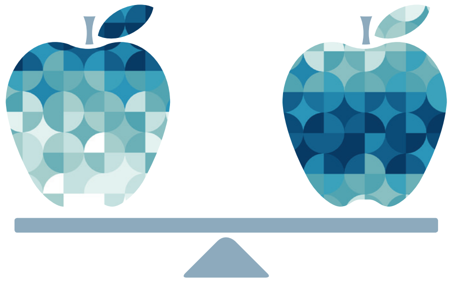
Factors to consider

WHEN COMPARING

VACCINE PRICES



There are a number of factors that can **influence vaccine prices, including but not limited to product characteristics, product maturity, level of competition, individual and specific contract terms, capacity to pay of the purchaser, and the volume procured.**

Self-procuring countries may also realize different prices for vaccines, depending on pricing policies enacted by individual manufacturers.

The published price of a vaccine might vary as well depending on whether it includes relevant components such as charges, fees and mark-ups that reflect its position in the supply chain. For example, the price of a vaccine delivered to the end user is going to be vastly different from the price of a vaccine before it has left the loading dock of the manufacturer. It is impossible to compare prices without knowing what's included in a published vaccine price and the point of delivery included in the price.

The MI4A vaccine purchase database was designed to make vaccine price comparisons possible. It collects enough information to disaggregate key price drivers into individual components. When all these factors are transparent, a more accurate, "apples-to-apples" comparison can be made between prices paid by multiple purchasers for similar vaccine products.

This document describes the individual price components captured by the vaccine purchase database and explains how each can affect the overall price per dose.

TABLE OF CONTENTS:

Building on existing efforts, MI4A provides a global perspective on vaccine markets, responding to WHA Resolutions and WHO SAGE requests for action. In particular, MI4A aims to identify and address affordability and shortage issues for self-funding and self-procuring countries that are mostly excluded from international support. MI4A leverages the success of the WHO Vaccine Product, Price and Procurement (V3P) project.

Which product and in what volume?

VACCINE TYPE AND PRESENTATION

When comparing vaccine prices, make sure you are comparing the same or similar products. Ideally, you will be comparing the exact same product or brand, however sometimes that may not be possible or desirable (e.g., when considering multiple presentation options). For example, there are two different brands of rotavirus currently available: Rotarix® from GSK and Rotateq® from Merck. Both are packaged in single dose presentations, but two doses of Rotarix versus three doses of Rotateq are recommended for full vaccination.

Comparing prices between the two products, then, might involve multiplying the per-dose price by the number of doses required for full vaccination. Further consideration might be given to the programmatic costs of different presentation choices. In some countries a two-dose schedule might be preferable and more cost-effective than a three-dose schedule even if the initial vaccine prices are higher.

Comparing different combinations of vaccines can also be difficult. For example, some middle-income countries are using combination measles-rubella or measles-mumps-rubella vaccines in place of single-antigen measles vaccines. Comparing the price of these different vaccines requires accounting for the additional health impacts from the added antigens and the programmatic effectiveness of delivering more than one antigen at a time.

Who purchased the vaccine?

INCOME LEVEL OF COUNTRY AND REGION

Consider the country that purchased the vaccine. Where are they located? What is the per-capita income level? What do you know about their procurement processes and practices? The income level and region of the country matters in vaccine procurement because certain countries are eligible for lower negotiated prices through UNICEF or PAHO when their income is below a certain threshold (UNICEF) or they are part of the Americas region (PAHO). Some manufacturers will partly adjust the vaccine price based on the income level of the country procuring the vaccine.

VOLUME PROCURED

Another major factor to consider when comparing vaccines is the volume purchased. Usually countries will try to compare prices paid by similarly-sized countries because the quantities ordered will be similar. Comparing prices paid by a country with a larger birth cohort like India with a country with a smaller birth cohort like Laos is more difficult because higher volumes are likely to yield lower prices. Being able to order large quantities is one major reason why pooled procurement mechanisms tend to yield lower prices overall.

How and when was the deal made?

PROCUREMENT MECHANISM USED (UNICEF, PAHO, OTHER POOLED OR SELF-PROCURED)

The type of procurement mechanism used will often affect the vaccine price. Pooled procurement mechanisms like UNICEF, PAHO, and others tend to yield lower prices because they are able to negotiate volume discounts. When comparing prices paid by two or more self-procuring countries, a closer investigation of the procurement mechanism is merited. (For example, is the procurement centralized or decentralized? Are countries using a procurement agent or not?)

What were the terms of the contract?

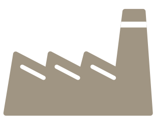
CONTRACT LENGTH

Increasingly, countries and procurement agencies are issuing multi-year contracts for vaccines. Multi-year contracts are preferable to manufacturers, as these agreements reduce demand uncertainties and reduce administrative costs of responding to tenders year after year. As a result, multi-year agreements will often result in lower prices. However, some countries cannot commit to long-term agreements and must order vaccines annually. Knowing the contract length can contextualize a major price factor.

INCOTERMS

Contractual details related to freight, port of entry, delivery point, storage, and insurance can vary. Often suppliers assume costs and insurance associated with international freight (transporting vaccines from the manufacturer to the port of entry), but it can vary whether manufacturers or purchaser assumes costs and insurance associated with domestic transport to the central or regional stores and storage at the port of entry.

Incoterms provide standardized definitions on the components included in a price. Published by the International Chamber of Commerce (ICC), Incoterms are a series of three-letter trade terms related to common contractual sales practices, intended to clearly communicate the tasks, costs, and risks associated with the transportation and delivery of goods.



Ex Works (EXW)

"Ex Works" means that the seller delivers the goods at the disposal of the buyer at the seller's premises or at another named place (i.e. factory, warehouse, etc.). The seller does not need to load the goods on any collecting vehicle, nor does it need to clear the goods for export, where such clearance is applicable. The buyer bears all costs and risks involved in taking the goods from the agreed point, if any, at the named place of delivery.

Free Carrier (FCA)

"Free Carrier" means that the seller delivers the goods to the carrier or another person nominated by the buyer at the seller's premises or another named place. FCA requires the seller to clear the goods for export, where applicable. However, the seller has no obligation to clear the goods for import, pay any import duty or carry out any import customs formalities.

Carriage Paid To (CPT)

“Carriage Paid To” means that the seller delivers the goods to the carrier or another person nominated by the seller at an agreed place (if any such place is agreed between the parties) and that the seller must contract for and pay the costs of carriage necessary to bring the goods to the named place of destination. CPT requires the seller to clear the goods for export, where applicable. However, the seller has no obligation to clear the goods for import, pay any import duty or carry out any import customs formalities.

Carriage and Insurance Paid To (CIP)

“Carriage and Insurance Paid To” means that the seller delivers the goods to the carrier or another person nominated by the seller at an agreed place (if any such place is agreed between the parties) and that the seller must contract for and pay the costs of carriage necessary to bring the goods to the named place of destination. The seller also contracts for insurance cover against the buyer’s risk of loss or damage to the goods during the carriage.

Delivered at Terminal (DAT)

“Delivered at Terminal” means that the seller delivers when the goods, once unloaded from the arriving means of transport, are placed at the disposal of the buyer at a terminal at the named port or place of destination. “Terminal” includes any place such as quay, warehouse, container yard or road, rail or air cargo terminal. The seller bears all risks involved in bringing the goods to and unloading them at the terminal at the named port or place of destination.

DAT requires the seller to clear the goods for export, where applicable. However, the seller has no obligation to clear the goods for import, pay any import duty or carry out any import customs formalities.

Delivered at Place (DAP)

“Delivered at Place” means that the seller delivers when the goods are placed at the disposal of the buyer on the arriving means of transport ready for unloading at the named place of destination. The seller bears all risks involved in bringing the goods to the named place.

DAP requires the seller to clear the goods for export, where applicable. However, the seller has no obligation to clear the goods for import, pay any import duty or carry out any import customs formalities.

Delivered Duty Paid (DDP)

“Delivered Duty Paid” means that the seller delivers the goods when the goods are placed at the disposal of the buyer, cleared for import on the arriving means of transport ready for unloading at the named place of destination. The seller bears all the costs and risks involved in bringing the goods to the place of destination and has an obligation to clear the goods not only for export but also for import, to pay any duty for both export and import and to carry out all customs formalities. DDP represents the maximum obligation for the seller. Any VAT or other taxes payable upon import are for the seller's account unless expressly agreed otherwise in the contract.

X

Delivered at Frontier (DAF) – 2000 Incoterms, abolished in 2010

"Delivered At Frontier" means that the seller pays for transportation to the named place of delivery at the frontier. The buyer arranges for customs clearance and pays for transportation from the frontier to the agreed delivery point. The passing of risk occurs at the frontier.

X

Delivered Duty Unpaid (DDU) – 2000 Incoterms, abolished in 2010

"Delivered Duty Unpaid" means that the seller delivers the goods to the buyer to the named delivery point. The seller is responsible for making a safe delivery of goods to a named destination, paying all transportation costs except the duty. The seller bears the risks and costs associated with supplying the goods to the delivery location, where the buyer becomes responsible for paying the duty and other customs clearing expenses.

TAXES, DUTIES, AND FEES

Different countries may levy different taxes, duties and fees associated with importing or buying vaccines (e.g., import taxes or value-added tax) inspecting (e.g., inspection fees), and clearing vaccines through customs (e.g., inspection fees, quarantine charges). These additional fees should be considered when comparing prices across multiple countries.

CURRENCY AND METHOD OF PAYMENT

Vaccines prices may be quoted in different currencies and the rate of exchange at time of purchase should be noted. The method of payment may be of interest, as some suppliers require advance payment or a letter of credit. Some countries have laws that do not allow for pre-payment of vaccines, which can put them at a disadvantage for procurement, as pre-payment is required for UNICEF-procured vaccines and can also be required for some suppliers.

What's included in the vaccine price?

REBATES, DISCOUNTS, AND IN-KIND DONATIONS

Increasingly, suppliers may offer discounts or rebates where a portion of the payment is returned to the buyer following the purchase of a specific quantity or value of vaccines within a certain period. Suppliers may also provide in-kind services (e.g., marketing support) or goods (e.g., syringes) that are either not stipulated in the contract or not covered by payments. These rebates and discounts are often difficult to account for in the price of the vaccines, but should be made visible as much as possible in order to allow for better comparison of different prices.

PROGRAMMATIC AND OTHER DELIVERY SPECIFICATIONS

Some countries include additional programmatic and delivery costs in their published vaccine prices. For example, if you check vaccine prices from Morocco, you get the price to hospital, Lebanon gives you the price with a pharmacist margin, Netherlands gives you the price to the end user, India gives you the maximum authorized retail price, and South Africa gives you the maximum price to the end user with or without taxes. Before comparing vaccine prices between one or more country, it is critical to understand the def nition of vaccine price and any inclusions that may be different between countries.

Conclusion

Each factor listed above can influence or contextualize the price of a vaccine. By taking each factor into consideration, it is possible to make more accurate price comparisons and get a clearer sense for what countries are paying for certain vaccines.

One of the advantages of the MI4A vaccine purchase database is that it collects the same price data from every country and makes each price component visible to users. This enables more accurate apples-to-apples comparisons between prices paid by multiple countries or procurement mechanisms.

To start comparing vaccines or to enter your vaccine information into the MI4A vaccine purchase database, please visit: http://www.who.int/immunization/v3p.

For further information please contact: MI4A@who.int