

## **Brief 14: The Vaccine Market – Tiered Vaccine Pricing**

### **What is tiered pricing?**

Tiered pricing is a form of price differentiation: charging different prices, in different markets, for the same product. Generally, manufacturers charge higher vaccine prices in wealthier countries, while keeping prices lower for countries that cannot afford the price on the open market. In this manner, manufacturers can use the revenues generated in industrialized country markets to support the research and development costs that are required to bring new products to market.

### **How does tiered pricing work?**

The costs of vaccines can vary enormously. Costs are linked to production as well as to research and development. (See Brief 15: The Vaccine Market – Vaccine Production and the Market.) The cost of production is linked to volume. The production cost of a particular vaccine is a flat cost, therefore the higher the number of doses produced, the lower the cost. In the case of the traditional EPI vaccines, the technology is relatively simple and the required investment in research and development is not high. In the case of the newer vaccines, there is considerable new investment and the capitalization required is high. The costs of research and development are built into the price of the vaccine and lower-income countries are necessarily able to afford the open-market price. Tiered pricing allows for price differentiation based on ability to pay.

In the most common form of tiered pricing, low-income countries are able to purchase vaccines through the bulk procurement facility offered by UNICEF (See Brief 12: The Vaccine Market – Pooled Procurement.) For example, it is estimated that the price of the EPI vaccines in low-income countries through bulk procurement can be less than 10% of the price in wealthy countries. In the case of the EPI vaccines, there is a market in both high-income and low-income countries and manufacturers are able to recuperate the costs of production both through volume and the ability to charge higher prices in the wealthy countries. GAVI-eligible countries are able to introduce new vaccines at lower-than-market prices.

### **What are the challenges involved in tiered pricing?**

There is an inherent tension between vaccine manufacturers' accountability to their shareholders and profit-making, and the global public good benefits of immunizing populations in low-income countries. Because of this, the actual price of vaccines that should be set in different markets is unclear.

In general, the price of vaccines is high when a new product is introduced. New vaccines are often based on new production techniques that are complex and expensive. In addition, there is often only a single supplier, which limits supply and gives the manufacturer power to set the price. Over time, the cost of production may drop, new manufacturers may come on stream and the volume of supply may increase, thus lowering prices.

Historically, low-income countries have adopted newer vaccines at lower prices. This limits the market for the manufacturer and means that low-income countries do not have early access to the most recently developed vaccines. Tiered pricing may help alleviate the problem of access by allowing manufacturers to charge different prices in different markets. In addition, donor subsidies may bring the price down further for the poorest countries.

Pooled procurement is another strategy that low-income countries can use to bring down the price of their new vaccines. (See Brief 12: The Vaccine Market: Pooled Procurement.) Pooled procurement has been an effective tool, alongside tiered pricing, to increase the access of low-income countries to newer vaccines. Consolidating orders has increased the leverage of these countries by sending clear demand signals to suppliers.

Other challenges in tiered pricing include: re-importation; and the role of middle-income countries. In order for tiered pricing to work properly, the manufacturer will want to guard against having low-income country products sold in high-income countries (known as re-importation). Among the current issues under debate is how much middle-income countries should contribute to the cost of developing new vaccines.