Market shaping: access to low and sustainable vaccine prices
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Achieving low and sustainable vaccine prices for GAVI-eligible countries is one way of making donor money go further and increases the ability of countries to fund vaccines in the long-term. Lower vaccine prices allow more children to be immunised with a given amount of resources. An active approach to market shaping is essential to achieve this objective.

As part of its 2011-2015 strategic plan implementation, the Alliance is redesigning its supply and procurement strategy and market shaping activities. The specific ambitions are to minimise the vaccine cost to GAVI and countries, while providing a sufficient and uninterrupted supply of quality vaccines and fostering an environment for innovation.

Various factors influence the price of a vaccine

While prices of traditional childhood vaccines are as low as a few cents per dose, the prices of new and underused vaccines supported by GAVI currently tend to be higher. Several factors influence the vaccine price including:

- **Vaccine production**: The technology used to make some vaccines (including pneumococcal conjugate vaccines) can be very complex and therefore expensive. Products containing multiple antigens or serotypes require sophisticated manufacturing processes, which add to costs. Strict regulatory requirements that ensure the quality and safety of vaccines further increase production costs.

- **Market environment**: The number of suppliers producing a quality vaccine suitable for use in developing countries, production capacity and the willingness or ability to supply influence the prices offered to GAVI.

- **GAVI’s relative market power**: Relative market power is how GAVI’s engagement can influence the market. This can be measured, for example, in terms of volumes, revenues and profits relative to other purchasers/markets or products.

GAVI’s approach to ensuring low and sustainable prices

Ensuring a lasting impact on the vaccine market to the benefit of the low- and lower middle-income countries underlies the GAVI business model. In the first ten years of operation, the GAVI Alliance influenced vaccine prices using several strategies:

- **Aggregating demand and procurement**: Pooling demand and purchasing activities have been effective mechanisms to reduce prices through increasing demand certainty and placing larger order purchases. The creation of a strategic demand forecasting platform and the use of long-term commitments have increased the certainty of demand, enabling manufacturers to plan production more effectively, which in turn reduces the risk of supply shortages and allows GAVI to obtain prices lower than for contracts spanning only one year.

- **Encouraging new suppliers to enter the market**: GAVI’s initial impact is evidenced by the changing production and supply base, in particular with pentavalent and tetravalent vaccines, and accelerated price decreases. As Hib- and hepatitis B-containing vaccines have shown, the entrance of new suppliers (including from emerging markets) can increase competition and drive down prices. GAVI and its partners are also actively engaged in a

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1 microorganisms determined by their constituent antigens
range of push and pull funding mechanisms to ensure that new suppliers will enter the market in the medium to long-term.

- **Encouraging tiered pricing:** The significant volume and value of aggregated demand from GAVI countries have created sufficient incentives for the pharmaceutical industry to establish a low-pricing tier, allowing GAVI-eligible countries\(^2\) to access the same product at a fraction of the price charged in high-income countries.

- **Access to sustainable prices for graduating countries:** In order to sustain immunisation programmes in countries that graduate from GAVI support, it is important to ensure that these countries continue to have access to low vaccine prices. Some vaccines including pentavalent, measles, polio, yellow fever and meningococcal vaccines are already available to graduating countries at a price similar or equal to the price UNICEF pays for GAVI-eligible countries. Under the pneumococcal Advance Market Commitment (AMC), graduating countries will be able to access pneumococcal vaccines at the same low, long-term price paid by GAVI. The GAVI Alliance partners will continue their efforts to ensure affordable prices for graduating countries where this is not currently the case.

- **Ensuring increased price transparency:** GAVI strongly believes in timely, transparent and accurate information on vaccine demand, supply dynamics and pricing. UNICEF approached manufacturers in 2010 to make public the historical vaccine prices. Most of this information is now available on the GAVI and UNICEF websites. Since January this year, UNICEF has included a clause in vaccine tenders whereby it reserves the right to disclose awarded prices. Clauses around price transparency will be included in future tenders and prices will be published on the GAVI and UNICEF websites.

**Progress to date**

Price declines have been observed in a number of GAVI-supported vaccines:

- **Hepatitis B vaccine prices** have declined from US$ 0.59 to US$ 0.20 per dose, a fall of 66% since 2000.

- **Tetravalent vaccines** fell 43% from a peak of US$ 1.26 in 2006 to US$ 0.71 in 2009. Pentavalent vaccines (DTP-hep B-Hib) have had a more modest decline from US$ 3.62 to US$ 2.96 between 2007 and 2010, a drop of 18%. This was enabled by three new market entrants in just two years. Further price decreases are projected in years ahead.

- **The AMC for pneumococcal vaccines** accelerated the production of more appropriate and affordable vaccines for low-income countries. GAVI will pay a price of US$ 7 per dose for the initial vaccines procured from each supplier and a price of US$ 3.50 or lower for the majority of doses procured thereafter. This represents a price reduction of more than 90% compared with the same vaccines sold in high-income countries. The price is expected to decline further with increased competition.

- **Measles, polio and meningitis A vaccines** are all available for between a few cents and less than US$ 1.

\(^2\) countries with a Gross National Income (GNI) per capita below or equal to US$1,500 (according to World Bank data for the latest available year)
Challenges ahead
GAVI’s achievements in rapid and strong price reductions have been lower than originally envisioned. There is clearly room to achieve greater efficiencies in all areas of work while recognising that some life-saving vaccines may never be a few cents a dose, and that reducing vaccine prices takes time.

Moving forward, GAVI has adopted market shaping as one of the pillars of its new strategy for 2011-2015. The new supply and procurement strategy (to be reviewed by the Board in 2011) aims to achieve a more efficient match of supply with demand through more intense and targeted competition, the entrance of new suppliers, increased bargaining power for purchasers, and strong advocacy support.

A successful market shaping strategy will involve taking short, medium and long-term views of balancing supply to meet the totality of GAVI’s demand. It will be done in a way that ensures an uninterrupted supply of vaccines to GAVI countries, minimises the cost per course to both GAVI and countries, ensures that new and appropriate vaccines of high quality are purchased, and communicates in a timely and transparent manner on the supply and demand dynamics. These factors need to be appropriately tailored to each vaccine to reflect its stage in the product life cycle, breadth of suppliers, complexity of manufacture and relevance to the disease burden of industrialised and developing countries. Further progress can then be made to address the market failures inherent to the vaccine market, so that more vaccines can be delivered in a sustainable manner and at a price that is ultimately affordable to developing countries.