

# Financing future vaccines which lack ‘commercial markets’



The most pivotal challenge for the development of vaccines to meet key infectious disease threats is the opportunity cost of late-stage development. This goes beyond the basic financing question of whether the money is available to cover late-stage development, to whether that money will realistically be put forward for that purpose given the level of potential profit or incentives. Whether or not a vaccine is financed for Phase 3 trials is not a decision taken in isolation, it is part of a wider question for pharmaceutical companies on which products to invest in. There are almost always more profitable options to pursue other than vaccines whether cancer treatments, or products to treat ailments like ulcers.

**The measures highlighted in our briefings on clinical development, improving regulatory capacity, and enabling manufacturing innovation could all help reduce the cost and time it takes to develop vaccines. However, to enable the vaccines of the future we will need to grapple with the complex problem of how we fund vaccines as global public goods, by looking outside of their individual profit margins and potentially beyond the standard modes of commercialisation.**

## Why now?

Despite being widely acknowledged as one of the most cost-effective health interventions available, there are a range of factors which make the case for funding vaccines, challenging. These are:

- Lack of data on disease prevalence especially in low and middle-income settings due to poor surveillance systems can make it difficult to establish business cases for some vaccines.

- Poor models for quantifying economic value of vaccines can also be a factor e.g., only considering direct outcomes rather than broader ones such as labour productivity, income, educational achievement.
- Political difficulty at government level in making the case to fund preventative activity.
- Insufficient budgets for health spending with multiple conflicting priorities within the health system.

These barriers also apply to existing vaccines already on the market. For those yet to be developed, they can make investments in vaccine development a very risky proposition. Further detailed analysis on these factors can be found in the full report.

The global health community has so far focused on solving these challenges on a vaccine-by-vaccine basis applying a range of solutions:

- Funding of full public health value propositions to support the economic case for the use of a given vaccine.
- Mechanisms to pool demand such as GAVI's Advance Market Commitment (AMC)<sup>1</sup> model to tackle weak market demand (used for PCV vaccine to tackle childhood pneumonia).
- Support for intensive efforts at country level to build political backing for vaccines.
- Direct push funding from philanthropic and multilateral initiatives including the use of public private partnerships (which enabled MenAfriVac<sup>2</sup> vaccine which has successfully prevented deadly outbreaks of Meningitis A).
- Initiatives to support better incentives for development in the face of pricing pressure such as BMGF Grand Challenges, GAVI's

<sup>1</sup> <https://www.gavi.org/investing-gavi/innovative-financing/pneumococcal-amc>

<sup>2</sup> <https://www.path.org/articles/lining-up-for-hopeand-a-meningitis-vaccine/>

## Vaccine Investment Prioritisation Strategy (VIPS).<sup>3</sup>

These diverse methods to improve the data and business case to underpin vaccine demand will remain important, as will initiatives which seek to pool demand or provide purchase commitments. But the assessment made in this research is that these will not be sufficient. Many vaccine candidates will remain stalled and are unlikely to progress beyond Phase 2 without a more systemic approach and, without looking at the wider issue of 'opportunity cost'. This is particularly true for the development of vaccines to which have outbreak or epidemic potential such as those within the portfolio of CEPI<sup>4</sup>.

### What are the potential solutions?

As the most pivotal issue in relation to future vaccine development, future financing models are also an area where solutions are more nascent and challenging. New paradigms are required for vaccines with low market predictability. Think tanks and other consortia are needed to develop consensus on alternatives to market-based development, manufacturing and roll-out of vaccines that will serve those most in need.

We have included some potential areas for solution development below:

- **New models for government and multilateral investment** – For example, Global Public Investment (GPI)<sup>5</sup> is a new approach being proposed by a broad group of experts to replace outdated aid funding modalities. At the heart of the idea is the principle of universal contributions towards global public goods with representative control of the funding rather than donors giving to recipient countries. During the Covid-19 pandemic the ACT Accelerator<sup>6</sup> has been a critical multilateral method to mobilise funds for vaccines, tests and treatments, however, it has faced difficulties in securing full investment against national initiatives.
- **Innovative financial products** – Products with an associated social impact are a growth area within financial services with new forms of climate bonds and green

financing emerging. For vaccines the International Finance Facility for Immunisation (IFFIM)<sup>7</sup> model enabled GAVI to issue bonds on international markets against promised commitments from donor governments. This enabled GAVI to access promised commitments as immediate funds. The potential for alternate financial instruments which might adjust the risk of investment for developers offers real promise. This is a critical area for further work between relevant stakeholders.

- **Rethinking how we value public health and preparedness** – The impact of Covid-19 has led to a range of commissions and expert groups exploring how we can invest in future pandemic preparedness. Similar questions are in play around how we generate investment to avoid future antimicrobial resistance and antibiotic failure. Finding ways to place appropriate financial value on preventing catastrophic outcomes will be critical if we are to meet a range of future threats, including those posed by infectious disease.

### What needs to happen?

The challenge of how to create new funding models is a cross-sectoral one involving those within the vaccine ecosystem, the financial and investment community and policy makers.

**Continued work is needed to bring together policy makers, the financial and investment community and vaccine developers to explore new financing instruments and funding models for future vaccines.**

The models and instruments needed may be unfamiliar and may represent a profound challenge to established ways of working for all stakeholders involved. But if we allow a continuation of misalignment between financial incentives and global health impact, the products needed to meet the challenges posed by infectious disease including future pandemics will not be developed. Just as we need scientific breakthroughs to achieve the seemingly impossible, we also need to see breakthroughs in how we approach financing for the future.

<sup>3</sup> <https://www.gavi.org/our-alliance/market-shaping/vaccine-innovation-prioritisation-strategy>

<sup>4</sup> <https://cepi.net/>

<sup>5</sup> <https://globalpublicinvestment.org/>

<sup>6</sup> <https://www.who.int/initiatives/act-accelerator>

<sup>7</sup> <https://iffim.org/>