

## **A baffling decision: the UK government is selling its Vaccine Manufacturing Innovation Centre**

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Amidst the Omicron coronavirus variant, revelations about high profile breaches of pandemic restrictions, and deepening tensions between Ukraine and Russia, a puzzling announcement has escaped the attention of many commentators—the UK government has put its Vaccine Manufacturing Innovation Centre (VMIC) up for sale.

Launched in 2018 and only just completed, the VMIC is the jewel in the crown of the UK's COVID-19 vaccine response. (1,2) The UK taxpayer spent over £200 million on the VMIC, a joint venture between the University of Oxford, the London School of Hygiene and Tropical Medicine, Imperial College London, and industry partners.(3) The non-profit Centre was meant to help UK researchers and small and medium enterprises move promising vaccines to production and provide a bulwark against future pandemics, vaccine shortages, and price wars.(4)

The wisdom of this investment became obvious in April 2020, when funding for the VMIC and other public initiatives was ramped up, and construction of a 74,000m<sup>2</sup> facility began as scientists raced to develop the ChAdOx1 nCoV-19 COVID-19 vaccine.(5) As recently as March 2021, the government described its VMIC as a “highly specialist facility” that can “respond to pandemics by producing millions of doses quickly.”(3)

So why is this key UK vaccine infrastructure being sold off?

According to the government, industry has effectively taken over production of COVID-19 vaccines, and ‘the need for VMIC’s surge capacity has passed’.(1) While availability remains a major problem globally, it is true that large pharmaceutical companies are now producing billions of vaccine doses and that these same companies should be able to update vaccines to respond to emerging variants. Meanwhile, selling off the VMIC will generate treasury revenue at a time of fiscal pressure.

However, is this really making the best use of public money? Or is it another case of what the former head of the UK Vaccine Task Force, Dame Kate Bingham, only recently described as the government's neglect of biological threats and lack of strategic scientific expertise when it comes to decision-making?

As highlighted by numerous commentators, including Bingham (6), maintaining robust vaccine research, development, and manufacturing capabilities should be a cornerstone of any national security strategy.

Cultivating such a complex infrastructure requires long-term funding and political backing. The development of the technologies underlying current adenovirus and mRNA vaccines took decades – and future pandemics may well require different technological solutions. Expecting industry to make the necessary long-term investments is naïve. The history of vaccination includes numerous examples where a mix of short-term industrial priorities and lack of long-term political planning compromised the ability of research, development, and manufacturing hubs to attract private and public investment, retain skilled workers, and respond to emerging and re-emerging disease threats.(7) The UK experienced a significant loss of vaccine capabilities during the 1980s and 1990s for example after leading players such as the Wellcome Foundation and Glaxo pulled out of or relocated centres of vaccine expertise to other countries.(8)

The VMIC, which was conceived before the pandemic, was a sign of renewed political confidence and ambition in the UK's vaccine infrastructure. Situated at the intersection of public and private research and providing a vital bridging function for both, the centre offers a cost-effective way to retain and adapt staff and skills to meet current and future threats. Its ability to rapidly produce enough promising products for phase two and three clinical trials without lengthy negotiations with external investors and manufacturers could dramatically accelerate vaccine development in the UK and serve as a model for public infrastructure investment to target other global health challenges such as antibiotic innovation. (9)

Worryingly, statements by the Department of Business, Energy and Industrial Strategy (BEIS), which only recently oversaw over £200 million of public investment in the VMIC, indicate that the UK government is distancing itself from the centre, and its sale, with little explanation or transparency.(1,10) Meanwhile, bidders – who include Oxford Biomedica, Fuji Film, and the Lonza Group - are relative unknowns in the field of vaccine development. The loss of VMIC at this time is arguably akin to defunding fire brigades after extinguishing a major blaze.

Economically, selling the VMIC without parallel improvements to strengthen the upstream innovation that led to much of the UK's early COVID-19 immunisation successes makes little

sense. Revenues from the sale of VMIC will have little or no impact on the biggest rise of national debt since World War II.

Reputationally and strategically, the damage may be even worse. Coming just after a U-turn regarding a 100 million-dose inactivated whole-virus vaccine contract with French-Austrian company Valneva, which resulted in the relocation of production from Scotland to Germany, the abandonment of VMIC represents a lack of confidence and commitment by the government in the eyes of investors who may wish to build British biomedical capacity – a key goal of post-Brexit strategic planning.(1,11)

Since the decision to sell-off the VMIC during an ongoing pandemic seems difficult to justify on strategic, public health, economic, or reputational grounds, it would be foolhardy to proceed with it. The government is entertaining offers for the VMIC, but it has not yet accepted any, to our knowledge. Until it is sold, there remains an opportunity for the UK public and their elected Members of Parliament to convince those in charge to protect what could well become a corner stone of British pandemic preparedness and bioindustrial infrastructure.

**Competing interests: REG is affiliated with LSHTM, and LSHTM is a partner in the VMIC. REG has no involvement in the VMIC.**

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