Witness Name:

Katherine Bennett

Statement No.: 1

Dated: 18/12/24

UK COVID-19 INQUIRY

WITNESS STATEMENT OF KATHERINE BENNETT

I, Katherine Bennett will say as follows: -

1 This letter responds to Module 5 of the UK Covid-19 Inquiry following the request for evidence under Rule 9 of the Inquiry Rules 2006 Reference for Request - M5/HVMC/01 in a letter to HVM Catapult from the Module Lead Solicitor (Barrister) dated 5 November 2024. It has been prepared for me as the Chief Executive Officer (CEO) of High Value Manufacturing (HVM) Catapult by Elizabeth Kanter, who is Interim Director of Public Affairs and Partnerships at the HVM Catapult with input from colleagues from across the HVM Catapult network.

2 I have read the statement of Richard Elsy dated 24 May 2024 who was the then CEO of HVM Catapult at the time of the Covid Pandemic and agree with its contents. As such, I can confirm that HMV Catapult has reviewed Mr Elsy's statement and has nothing further to add to the Inquiry's questions to him.

3 HVM Catapult is a network of research, development, and innovation centres designed to promote and support high-value manufacturing industries. It was established by the UK government in 2011 as part of the Catapult network, which consists of specialized centres aimed at fostering innovation in key sectors. The HVM Catapult is supported by Innovate UK, the national innovation agency.

Industrial Strategy

4 The below details HVM Catapult's opinion and insights focusing specifically on matters to be addressed found in Annex A to the letter from the Module Lead Solicitor under the sub-heading "Industrial Strategy" matters 6-9.

5 Matter 6 asks HVM Catapult to provide an opinion as to what the key features and policies of an industrial strategy for emergencies, such as pandemics, should be so far as the procurement and/or manufacturing of key healthcare equipment and supplies is concerned. Points 6 to 25 below contain our response to this matter .

6 *General reflections :* There is a clear role for industrial strategy institutions such as the wider catapult network [including HVM Catapult's Warwick Manufacturing Group (WMG), the Manufacturing Technology Centre (MTC) and the Advanced Manufacturing Research Centre (AMRC)], Challenge Funds, research and development institutions, business support bodies and skills organisations in ensuring that the existing UK manufacturing base can respond to national emergency level industry needs.

7 In an emergency, government will be seeking expertise, capability, production capability and supply chain knowledge. Industrial strategy institutions are well placed to highlight opportunities to contribute to relevant businesses and highlight UK capabilities to government-led teams seeking rapid solutions to emergency challenges.

8 Using market and industry knowledge to adapt existing innovation work to emergency challenges, requirements for an at pace response to pressing needs will require adapting existing capabilities and work programmes to new challenges. Industrial Strategy institutions are equipped to do this by adapting existing work programmes to meet new challenges. For example, materials scientists can work on integrating anti-microbial properties into materials, design engineers can be tasked to develop rapid protypes of needed new medical devices, software engineers can develop new apps/alert systems, autonomous transport developers can be applied to freight/medicine delivery models and so on. Industrial strategy bodies can use existing models for innovation – such as challenges, collaborative R&D support, industrialisation centres, or knowledge exchange to drive this work forward.

9 It is important that effort be made to identify matches between needs and existing/potential capabilities. The UK has strong existing industrial capability, which can be adapted to the needs of emergencies. Through understanding the needs of a specific emergency, industrial strategy institutions can ensure those capabilities are utilised. An example of this

would be packaging companies switching to PPE production like the Penlon ventilator challenge. We would also point to another case study underscoring this reflection.

10 Ramfoam: The COVID-19 pandemic drove a sharp increase in demand for PPE. Black Country-based Ramfoam secured a contract to supply the UK Government with 3.5 million face visors per week to help protect workers across the public sector. To achieve this, they had to scale their output by 300 times in a matter of weeks; the pandemic-related supply chain disruptions made this task seem insurmountable, but they achieved their goal.

11 With digital manufacturing and supply chain support from WMG, they were able to reach this target within five weeks, becoming the largest UK supplier of PPE to the NHS. This created 550 new jobs for the local economy and secured a further 750 in the supply chain, with the company now having produced 55 million visors for the NHS to protect vital keyworkers.

12 *The relationship and communication between the UK and devolved administrations' governments and industry:* To strengthen the UK's preparedness for a future health emergency, fostering better communication and collaboration between the UK government, devolved administrations, industry, and academia is crucial. A centralised taskforce should be established to streamline decision-making and ensure alignment between all parties. This taskforce could act as a single point of coordination, setting clear priorities and maintaining consistency in policies and actions across the UK. They should outline how information is shared during a crisis to avoid mixed messages and ensure that all members can respond quickly and effectively. This could include dedicated communication channels and agreed processes and procedures for sharing updates and direction.

13 Strengthening these relationships will create a more cohesive approach to managing emergencies, ensuring that resources are utilised effectively and that all regions and industries are working towards a common goal.

14 *The UK's domestic manufacturing capability:* Building a strong and versatile domestic manufacturing base is essential to ensure the UK can respond faster and more effectively in a future health emergency. This includes:

14.1 setting clear targets to produce key items such as PPE, as observed during COVID-19, to reduce our reliance on international suppliers.

14.2 ensuring we have an end-to-end supply chain solution e.g. fill finish and analytical testing capabilities.

14.3 Investing in adaptable manufacturing facilities that can quickly switch to producing critical supplies during a crisis.

14.4 Collaborating closely with industry through long-term agreements will help keep production lines ready, even during quieter periods.

14.5 Embracing advanced technologies like robotics, automation, digital and 3D printing will further boost efficiency, allowing manufacturers to scale up production rapidly when required.

14.6 Ensuring the UK has the diversity in drug manufacturing capacity for the growing new modalities that are emerging is also critical.

15 Putting this into context, our Centre for Process Innovation (CPI), a founding member of HVM Catapult, is accelerating and leading the development of new modalities of medicines such as RNA. CPI's RNA Centre of Excellence, based in Darlington, is currently the UK's only open-access GMP accredited facility for RNA/LNP supply for clinical trials. The Government has priority access to this facility for 10 years as part of pandemic preparedness plans.

16 Together, these steps will create a more resilient and self-reliant system to protect public health.

17 *The skills, expertise and experience of the UK workforce:* To ensure the UK can respond effectively to future health emergencies, it is essential to build a skilled and adaptable workforce through targeted training in key areas like biomanufacturing and advanced technologies. Regularly assessing skill gaps, with reports such as the Cell and Gene Therapy Catapult (CGTC) annual report, providing opportunities for upskilling and reskilling, preserving and sharing lessons from past crises, and working closely with educational institutions to tailor training to industry needs are all vital steps in building a workforce ready to respond to future emergencies.

18 Additionally, and as part of future pandemic preparation, workforce capability and availability has to be central. Alongside activities to scale up of technologies and products there needs to be a systematised workforce approach that can identify, plan and deliver the skills needed for long term resilience and growth and a training system that can provide a rapid response to industry and UK need. Research and technology organisations (RTOs) including Catapults can play a lead role in convening partners (at a UK, national and local level) researchers, technologists, industry and training providers to foresight the roles, standards and training that will be required, to train the trainers (providing access to catapult experts and specialist equipment) and to provide the specialist training provision to industry in areas of specialism.

19 As a case in point, HVM Catapult's CPI RNA Training Academy stands as a testament to the UK Government Vaccine Taskforce's investment, showcasing its lasting impact by equipping professionals with the skills needed to advance RNA technology and healthcare innovation.

20 *The support (whether financial or otherwise) available to strategic industries relevant to preparing for and responding to a pandemic:* To be better prepared for future health emergencies, the UK needs an industrial strategy that focuses on resilience, rapid response, and strong collaboration between the public and private sectors. During COVID-19, it became clear that relying heavily on global supply chains left the country vulnerable when demand for key items like PPE and ventilators escalated. Moving forward, a key component of the strategy should be to build a national stockpile of essential healthcare supplies that is regularly updated and maintained to ensure readiness.

21 Another fundamental aspect is setting up collaborative networks between various industries, including pharmaceuticals and engineering, to quickly pivot production in an emergency. The UK Ventilator Challenge was a great example where companies from different sectors came together to produce life-saving equipment. During COVID-19 industry associations supported the effort, such as Bio Industry Association, bringing together industry, academia and government. Establishing a more comprehensive network in advance would ensure a faster, coordinated response in the future.

22 *Domestic and international supply chain resilience:* To be better prepared for future pandemics, the UK needs a strategy focused on securing and producing essential healthcare supplies quickly and reliably. COVID-19 demonstrated that the UK depended too much on international supply chains and left the country vulnerable. The UK should invest in strengthening domestic manufacturing capabilities for critical items like PPE, testing kits and vaccines manufacturing including fill finish capacity.

23 Improving procurement processes is also essential. The traditional methods used during COVID-19 were cumbersome, leading to delays in provision of crucial supplies to frontline workers. Investing in real-time supply chain monitoring and supporting innovation in healthcare technology will help the UK respond more effectively to future health emergencies. A digital platform for tracking inventory and forecasting demand would provide the visibility needed to anticipate and prevent shortages. Financial support for key industries, such as grants for R&D in medical devices and PPE, will encourage innovation and ensure the country can quickly scale up production during a crisis. With these measures, the UK can build a more resilient, adaptable system ready to meet the challenges of future emergencies.

24 The UK should invest more in domestic manufacturing of critical supplies and provide financial incentives for companies to boost their capability and capacity. By offering grants, tax breaks, and subsidies for R&D in healthcare technologies, the government can help ensure that key industries are ready to respond rapidly. By focusing on these areas, the UK can build a stronger, more resilient supply chain that is well-prepared for any future health emergency.

25 *Investment in research, development, infrastructure and technology:* To future-proof the UK's healthcare system it is essential to increase funding for diagnostics, medical devices, and advanced manufacturing technologies. Emerging technologies such as AI, robotics, and 3D printing have the potential to revolutionize the sector. By prioritizing these areas, the UK can build a more innovative and responsive healthcare infrastructure. Investing in healthcare research and development (R&D) is a key step in this process.

26 Increased funding for R&D, particularly in areas such as diagnostics and medical devices, will drive innovation and ensure that the UK is prepared to meet new and evolving healthcare challenges. Alongside this, modernising, expanding and retaining healthcare infrastructure is crucial to handling surges in demand. Upgraded facilities equipped with cutting-edge technology can streamline manufacturing, ensuring a reliable supply during emergencies.

27 The continued fast evolution of our clinical trials processes and capabilities is essential, ensuring the triple helix approach between NHS, Regulator and Industry/Academics.

28 Advanced manufacturing technologies must also play a central role in this transformation. Supporting the adoption of robotics, AI, and 3D printing in healthcare manufacturing will not only enhance efficiency and scalability but also create a more adaptable system capable of meeting unexpected needs. By combining increased investment in R&D with infrastructure upgrades and advanced manufacturing capabilities, the UK can create a healthcare system that is resilient, innovative, and better prepared for the future.

29 Paragraphs 30 – 32 below provide our insights on international comparisons and approaches to (emergency) industrial strategy relevant to the Module 5 Scope.

30 Emergency industrial strategies are essential for helping countries respond to crises like health emergencies or natural disasters. Different countries have different approaches to these situations, to reflect their unique strengths. For example, the United States often partners with private companies during emergencies, as seen with the Defence Production Act, which prioritizes the production of essential goods. This approach allows for rapid response and government support for businesses. Germany, however, seems to prefer

to lean on its network of small- to medium-sized businesses (Mittelstand), which keeps supply chains resilient and nimble but may struggle with scale.

31 Other countries highlight additional ways to handle emergencies. China's centralised economy allows it to mobilise resources quickly and efficiently, as demonstrated by its swift response during COVID-19, building hospitals very swiftly. South Korea focuses on technology and flexible regulations, supporting rapid R&D, especially in high-tech sectors like biotech, which proved effective during the pandemic. However, this approach is heavily dependent on exports and may lack industry diversity. Nordic countries like Sweden and Finland emphasise social stability and inclusive decision-making, drawing on strong collaboration between government, businesses, and workers. This model protects the workforce but can be costly and slows down decision-making, where immediate action is required.

32 These international examples suggest that an effective emergency industrial strategy might blend the strengths of each approach. Agility and innovation, like that found in South Korea, can be balanced with the resilience and adaptability seen in Germany's SME-driven model. Large-scale mobilisation, as in the U.S. and China, is key for immediate, critical emergencies, while Nordic-style collaboration can build trust and stability for long-term resilience. Ultimately, the ideal strategy should combine technological innovation with strong local supply chains bringing in aspects of all examples to address the short-term crisis and longer-term challenges.

33 *We believe the UK has several comparative advantages in procurement and/or manufacturing of key healthcare equipment and supplies, largely due to its strong foundation in research and innovation:* Oxford and Cambridge and other leading universities play a critical role in driving advancements, particularly in the pharmaceuticals sector. Large pharma companies, such as AstraZeneca and GSK, work alongside a large network of smaller biotech firms, creating a productive environment for new drug development and breakthrough therapies. The UK's expertise in biopharmaceuticals, especially in vaccine production, has gained international recognition, showcasing its ability to rapidly respond to global health challenges.

34 In medical devices and diagnostics, the UK has made great progress by blending traditional manufacturing expertise with modern digital health technologies. UK firms are at the forefront of developing solutions that improve patient care. The country's ambition to integrate technology into healthcare is bolstered by its highly skilled workforce and supportive regulatory network, which together help and support driving innovation.

35 The catapult network plays an important and unique translational capability to accelerate medicines and advanced technologies through the clinic, regulatory pathways and ultimately to the patient.

36 *When reflecting on and assessing the UK's procurement and manufacturing response in relation to the procurement and/or manufacturing of key healthcare equipment and supplies to the pandemic, we observe critical areas in need of improvement, particularly in the supply chain and provision of essential items e.g. PPE*. At the start of the crisis, the UK struggled with delays and inefficiencies, driven by an over-reliance on global supply chains and a lack of preparedness for such a large-scale emergency. These challenges highlighted the risks of outsourcing key manufacturing capabilities and depending on "just-in-time" systems during global disruptions. While initiatives like the Ventilator Challenge UK demonstrated the ability to mobilize domestic production, these efforts were very welcome but very reactive.

37 A significant lesson from COVID-19 is the importance of building domestic capacity for critical manufacturing. The establishment of centres such as CPI's RNA Centre of Excellence is a positive step in this direction. CPI, which supports innovation in healthcare manufacturing, played a key role in accelerating the development and production of RNA-based vaccines and therapies during the pandemic and the GMP manufacturing facility is a legacy of the investment by the UK Government Vaccine Taskforce. By fostering advanced capabilities in RNA technology, the centre not only addressed immediate needs but also laid the foundation for a stronger, more resilient life sciences sector. This kind of investment in cutting-edge manufacturing can help reduce reliance on global supply chains and position the UK as a leader in critical medicine manufacturing and healthcare technologies.

38 Moving forward, the UK needs to build on these successes by embedding them into a broader industrial strategy for healthcare resilience. This should include diversifying supply chains, scaling domestic production, and enabling frameworks for rapid public-private collaboration. By integrating innovation hubs like the Catapult network into this strategy, the UK can strengthen its preparedness, enhance the economic resilience, and ensure that critical healthcare needs are met effectively and timely in the case of another health emergency.

39 *Developing rapid innovation/production/supply chain programmes to meet emergency demand needs:* A key role for industrial strategy institutions in an emergency response is in commissioning new industrial innovation/industrialisation programmes in response to emergent needs. Here, the existing experience of industrial strategy institutions in developing and running such challenges is vital. It is clear that the ventilator challenge is

a good example but there are other examples to be considered. For example, WMG used its 3D printing capability and networks to design and distribute production of face masks, while its digital manufacturing team helped businesses redesign workplaces to meet critical safety/distancing needs.

Statement of Truth

I believe that the facts stated in this witness statement are true. I understand that proceedings may be brought against anyone who makes, or causes to be made, a false statement in a document verified by a statement of truth without an honest belief of its truth.

Signed PD

KS Bennett

CEO, High Value Manufacturing Catapult

Dated: 18/12/24