



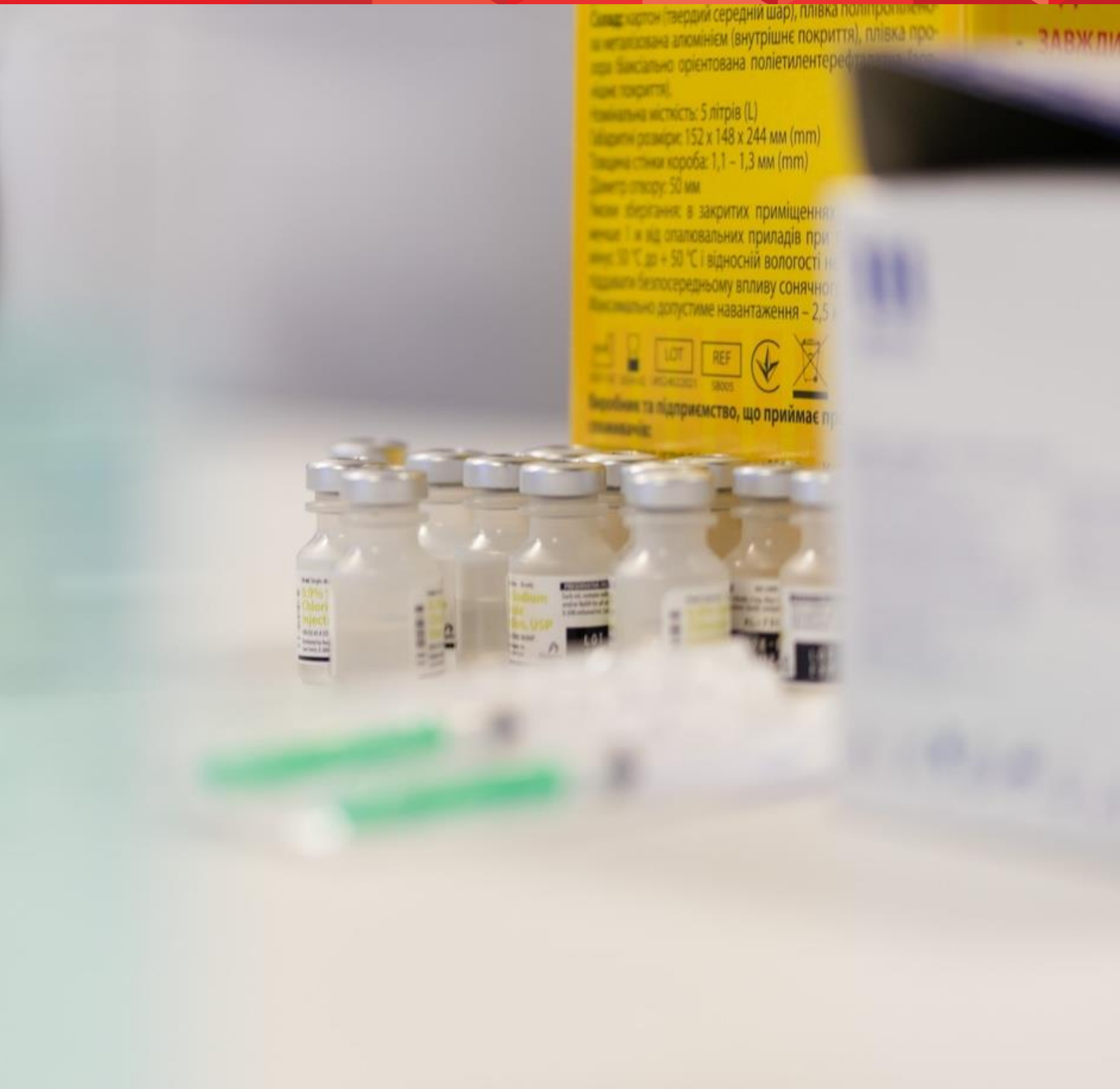
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Mission Possible

Putting purpose back into policy

Discussion Paper

Author: Tony Hockley PhD; Foreword: Rt Hon Greg Clark MP | October 2023



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Foreword

Rt Hon Greg Clark MP

Chair, House of Commons Science Innovation & Technology Select Committee



Strategy is about being best prepared to survive and prosper in an uncertain future.

During the years before the COVID pandemic struck in 2020, the UK had begun to take a strategic approach to life sciences.

In 2017, Professor Sir John Bell proposed a Life Sciences Industrial Strategy which convened government, universities and research bodies and commercial companies to collaboratively invest in preparing the UK to leverage the opportunities arising from discovery research and its applications in medicine and healthcare.

Adopted by the Government as part of a national Industrial Strategy, this strategic approach provided the basis of the successful and rapid development and deployment of vaccines which proved decisive in turning the tide of the pandemic. More funding for research and development to be deployed with agility and speed. Close partnership between Government, the NHS, researchers and companies that became the Vaccines Taskforce. A focus on manufacturing, as well as discovery, that informed the creation of the VMIC – the Vaccines Manufacturing Innovation Centre.

Yet what followed a public vindication of strategy has been, extraordinarily, a dismantling of many of the elements that contributed to that success. Dame Kate Bingham has lamented that the Vaccines Taskforce approach has been replaced by a more insular, civil servant dominated alternative. The VMIC has been sold and mothballed. Sir John Bell has described the clinical research environment as having gone from producing a vaccine in record time against COVID to being the worst in his professional life.

Yet there is an awakening sense that these bewildering collapses in strategy can still be halted. The Government is substantially increasing the budget for research and development. The Vaccines Taskforce approach, whilst having been dismantled for vaccines, has been adopted as a model for Government initiatives on cancer, obesity, mental health and addiction. The Government has set out a vision for the future of clinical research.

This important report shows that, despite the setbacks of the last two years, it is still possible to apply the positive lessons learned from the pandemic and use them to be better prepared to take advantage of a future just as uncertain, but just as full of opportunity, as before 2020.

1. Introduction

In 2022, the new UK Prime Minister announced that four healthcare “missions” would be pursued by “using the Vaccines Task Force model”¹. Given that the Vaccine Task Force for COVID-19 had produced a model worth copying, this raises the question of “*what happened to the Vaccines Task Force?*”. After all, its remit was not completed with the delivery of vaccines, but included responsibilities to ensure that the UK is better prepared for the future in prevention and preparedness. This paper assesses the situation in which the UK now finds itself three years after the declaration of the COVID-19 pandemic.

The spring of 2020 brought a realisation that the UK could not evade COVID-19, as had happened very fortunately with other epidemics. COVID-19 became a genuine pandemic that would hit the UK, testing health and clinical research to their limits. Once the reality of the pandemic was acknowledged, new and innovative partnerships to tackle it emerged. The Vaccine Task Force is the most obvious example. The public and private sectors drew together, and the general public volunteered to take part in clinical research and to deliver vaccinations. They were drawn together by a singular mission to defeat COVID-19.

It seemed possible that this experience would generate lasting change, with new levels of productive co-operation between people, government agencies, the NHS, and the life sciences industry. Cooperatively combatting COVID-19 became a mission to ensure that any future pandemic threat faces a country that is more ready to meet the challenge. This includes a population with less vulnerability and health inequality, a public health system that is fit to respond, a deeper and more agile public-private partnership in life sciences, and wider public engagement and trust in science.

The COVID-19 virus will never be “over” even though the global emergency is over. **The UK political and economic turmoil of 2022 seem, however, to have disrupted the heightened sense of mission for the delivery of an ambitious life sciences policy** in general and an enhanced vaccines policy emerging from a devastating pandemic. This has diminished the impact of the most obvious and urgent lessons from the UK experience of the COVID-19 pandemic. The mission-based rhetoric remains, but the determination to deliver against the mission seems to have been lost amidst the turmoil. In the foreword to the Life Sciences Industrial Strategy of 2017, Professor Sir John Bell argued that: “*to deliver the potential for economic growth through the projects and programmes outlined in this strategy, there will need to be oversight of this programme over the next five years*”.² Five years later Sir John Bell said: “*Now our clinical research environment is much worse than it has ever been in my memory*”.³

The pandemic placed the life sciences ecosystem in the spotlight. Appreciation of its value and potential was unusually high in public consciousness. At the same time, however, the **policy** response to the pandemic appears to have harmed several aspects of this ecosystem, whilst the COVID-19 virus ruthlessly exploited perennial weaknesses in UK systems for ill-health **prevention** and exposed the multiple gaps in **preparedness** for infectious disease outbreaks.

These three themes of policy, prevention and preparedness form the basis for this short discussion paper, reflecting on the pandemic and the need to improve UK performance in each of these areas.

I am extremely grateful to the expert participants in a roundtable held at LSE in early December 2022, whose contributions were invaluable in shaping the content of this paper, particularly Rt Hon Greg Clark MP, our keynote speaker at the event.

The roundtable discussion drew attention to concerns that, in 2022, the UK appeared to be in reverse in relation to vaccines policy, prevention and preparedness. This followed dramatic achievements in 2020-21 in vaccine development and delivery. This regression seems not to have been the result of an intentional shift away from

a determined “after COVID” mission, but as the collateral damage of many small events, decisions, and shifting priorities. If this analysis is correct, it is entirely plausible that restoring the sense of mission remains possible. As more time passes this becomes a bigger political challenge. The critical juncture for change presented by the pandemic is already fading in the collective memory. In the politics of 2023, dominated by macroeconomics, public sector pay policy, and cultural divisions, memories of the pandemic and the problems revealed by it have fallen from the media and political headlines.

Nonetheless, behind the headlines, substantive work is underway to learn the lessons of COVID-19, not least in the important work of the UK COVID-19 Inquiry chaired by Baroness Hallett⁴ and in the House of Commons “Coronavirus: lessons learnt” joint select committee inquiry.⁵ These will, undoubtedly, be valuable and detailed guides for the future, and the parliamentary inquiry has already produced an important report on its initial findings.⁶ This paper offers a much more focused review of how the pandemic has diverted the UK from a path of progress, with particular focus on vaccines and vaccination. This seems the right moment for this discussion. It is important that it remains on the political agenda, led from the top, and without a reversion to “business as usual” where new ways of working have proven their worth.

This paper offers encouragement in three domains:

1) **Policy**

The “science superpower” rhetoric needs to be matched in daily decision-making. The slowing pace of action on vaccines sector policy since the effective dissolution of the Vaccine Task Force needs to be corrected. Given the pressures on the NHS and the prioritisation of elective activity, this action will require dedicated and careful leadership. In May 2023, the independent review of commercial clinical trials made 27 recommendations to reverse the recent fall in UK-based trials.⁷

2) **Prevention**

COVID-19 exploited the UK’s poor health and health disparities. Trust in government and in the NHS can be lowest in some of the most vulnerable populations, often based on past experience. This distrust has an impact on vaccination, thus putting these people at even greater risk. They are also the least likely to be included in clinical research which creates a dangerous cycle of exclusion that needs to be broken. Although it is not unique to the UK, the pandemic has hit routine childhood immunisation. This has huge implications for health in general and for the NHS in particular if it is not addressed as an urgent priority.

3) **Preparedness**

In the crisis of the pandemic, the Government experimented with new ways of working and new approaches to risk, embodied in the Vaccine Task Force. The best of these novel approaches should be incorporated into the government processes, including the HM Treasury Green Book. Pandemic risks are on the rise, making it increasingly logical to have a minister with “pandemic preparedness” explicit within their responsibilities. The pandemic brought new levels of direct communication between ministers, scientists, clinicians, and the public. As trust is central to the effectiveness of communication, particularly around vaccination and health behaviours, trust in science should be given a central role in a strategy for future preparedness, perhaps by including the IPPR proposal for a “long-term plan for trust”.

2. Policy

During the COVID-19 pandemic, a clarity of purpose to accelerate the development and distribution of effective vaccines was reflected in clarity of policy. The pandemic served as a harsh reminder that innovation in life sciences and a fit-for-purpose infrastructure are much more than a “nice to have” in public policy. It is also a reminder that pandemic threats are constant and growing⁸, with climate change playing an important role in this increasing risk⁹. As the 2020 peak of the pandemic becomes more distant in time, it will require real determination to ensure that the high-level of policy leadership around vaccines is not lost as the public policy focus shifts to post-pandemic economic recovery and the battleground issues for the next General Election.

2.1 The rise and fall of the VMIC

The short story of the Vaccines Manufacturing Innovation Centre (VMIC) provides a powerful example of how a policy bias towards present needs can easily subvert strategic ambitions. With the advantage of hindsight in 2023, the Government announcement of December 2018 to make a £66m investment in a VMIC looks extraordinarily prescient. At the time, ministers believed that the Centre would help tackle Ebola and Lassa Fever. This was two years before COVID-19 emerged from China.

A year before the COVID-19 pandemic, the Business Secretary Greg Clark¹⁰ said:

“The UK’s world-leading research and innovation expertise is ideally placed to create new, cost-effective ways of developing and manufacturing vaccines for global distribution, as well as ensuring the UK’s own preparedness in the event of a pandemic. The centre is expected to open in 2022, with the first products from the centre expected later that year.”

The Director of the Jenner Institute (which would lead the VMIC) Professor Adrian Hill added¹¹:

“This is an exceptional opportunity for the UK to lead in the provision of vaccines against a wide range of outbreak pathogens which threaten to cause major epidemics. The lack of commercial incentive to develop these has now led to this exceptional partnership of major academic and industrial players in the vaccine field, to accelerate a range of vaccines towards large-scale manufacture and stockpile provision for vulnerable populations. In parallel, the Centre will develop innovative manufacturing technologies with UK companies and universities to support the next generation of life-saving preventive and therapeutic vaccines.”

During the pandemic, the VMIC construction was accelerated, albeit solely as a potential manufacturing site amidst a global vaccine supply challenge. It was never brought into operation, and in November 2021 the VMIC Board decided to sell the (incomplete) facility¹² on the Harwell Science and Innovation Campus near Oxford after £215m of public investment¹³. The sale was concluded in April 2022. The purchaser, Catalent, subsequently halted development of the site whilst the company restructured¹⁴ and confronted financial “headwinds”¹⁵. The then Science Minister, George Freeman, sought to reassure that the sale would not undermine UK commitment to vaccine innovation, citing new investments in the Cell and Gene Therapy Catapult (CGTC) founded in 2016 and the Centre for Process Innovation founded in 2004. *“Both facilities are*

*well-placed to address many of the original innovation objectives of VMIC*¹⁶, he argued. Both existed prior to the creation of the VMIC.

It had been concluded in 2018 that a new centre focused on vaccines was needed. It seems unlikely that this reversion to the pre-pandemic arrangement could, therefore, be helpful to the cause of UK vaccine innovation. The purchaser of the VMIC building in 2022 estimated that a further £120m investment was required to bring the VMIC on stream, which suggests that exchequer costs were the primary driver in the decision to sell rather than any revision of future vaccines needs and strategy. Pandemic plans to adapt the facility as a surge manufacturing site during the pandemic had already tripled the initial state investment, albeit for a different purpose, and it looks as if the Treasury simply decided to invest no more.

The Biotech Industry Association (BIA) has argued that the tale of the VMIC offers a *“lesson in industrial strategy”*. Even though it was never completed, the BIA nonetheless argues that having VMIC staff at the *“virtual table”* did support *“manufacturing, scale up, knowledge sharing for COVID-19 vaccines”*, but that keeping the momentum going is now a *“key task”*.¹⁷

2.2 Slowly, but surely?

In part, some of the momentum in this work may have been redirected into bilateral arrangements with individual vaccine businesses. During 2022, the Government announced an agreement with Moderna for a UK-based “Innovation and Technology Centre”. The deal would give NHS patients access to Moderna COVID-19 vaccines, manufactured in the UK. The agreement was initiated by the Vaccines Task Force immediately before the Task Force was merged into the UK Health Security Agency. The conclusion of the agreement was, therefore, left to the more usual civil service processes. These lasted a further six months. This timeline compares very unfavourably with anything initiated and concluded by the Vaccines Task Force.

The agreement with Moderna was first reported in the media in February 2022¹⁸, and formally announced in June 2022, with the government press release then claiming that *“construction is expected to commence as early as this year”*¹⁹. Whilst agreement of the 10-year partnership did take another six months, the Government stated in December 2022 that the expectation for the first vaccines to be produced from the new mRNA facility in 2025 remained unchanged²⁰. In March 2023, the next announcement was that Harwell (the location of the former VMIC) had been selected as the site for the new Innovation and Technology Centre, which would be built by 2025.²¹

Figure 1: Launch of work on the Moderna Innovation & Technology Centre, Harwell, April 2023
(Credit: Tom Weller Photography)



In January 2023, the UK Government began a similar process towards an mRNA research partnership with BioNTech SE. This committed the company to the creation of a new R&D hub and establishing offices in the UK, with an aim of accelerating clinical trials and recruiting 10,000 NHS cancer patients for immunotherapy treatment by 2030²². Formal agreement on the January MOU was signed six months later. At present, the Cancer Vaccine Launch Pad, designed to identify suitable patients for clinical trials as initially introduced in the MOU, is still in the development phase by NHS England.²³

Interestingly, whilst the June 2022 initial agreement with Moderna was announced jointly by the UK Prime Minister, Boris Johnson, and the Health and Social Care Secretary, most subsequent announcements have been made solely by the health minister. This may seem a small point, but the direct authority of the Prime Minister has been cited as an important reason for the early successes of the Vaccine Task Force, particularly the speed of decision-making. Such authority sends signals both within government and beyond. In the latter half of 2022, the UK Government experienced unprecedented instability, resulting in three changes of Prime Minister within a mere two months. These transitions led to significant reshuffling among senior ministers and triggered an economic shock, as markets responded unfavourably to abrupt changes in fiscal policy. Given the central role of the Prime Minister in vaccines policy during the pandemic, the relationships that were built, and the direct link to the Vaccine Task Force it seems unlikely that these changes would not have an impact on policy momentum.

The UK is, of course, not alone in learning lessons from the Vaccines Task Force. In February 2021, the European Commission agreed that it too should have a Vaccines Task Force to establish a new European Health Emergency Preparedness and Response Authority (HERA), initially to address future COVID-19 variants but later to guarantee that the EU is able “to anticipate and tackle future pandemics”²⁴.

At some points during the pandemic, it seemed that the Vaccine Task Force might be a competitor in a zero-sum game for vaccines, with heated post-Brexit rhetoric flowing back and forth between UK ministers and their European Union and EU Member State counterparts. In the longer term, the question is not so much which Task Force or other institution can procure vaccines first, but which best addresses any market failures.

The approach taken by the Vaccine Task Force was novel, particularly in its ‘portfolio’ approach of making advance agreements across multiple candidate vaccine platforms²⁵. This provided an important boost to research. At the same time, a new review system for clinical studies was established in March 2020. A policy decision was taken that the Clinical Research Network would select and prioritise COVID-19 studies. The RECOVERY platform study began almost immediately and has since produced results of global significance. The Novavax study launched later in 2020, became the UK’s largest ever double-blind, placebo-controlled vaccine trial.²⁶ The concentrated effort in 2020 naturally had adverse spillover effects on trials outside the COVID-19 priority.

2.3 Clinical research in recovery

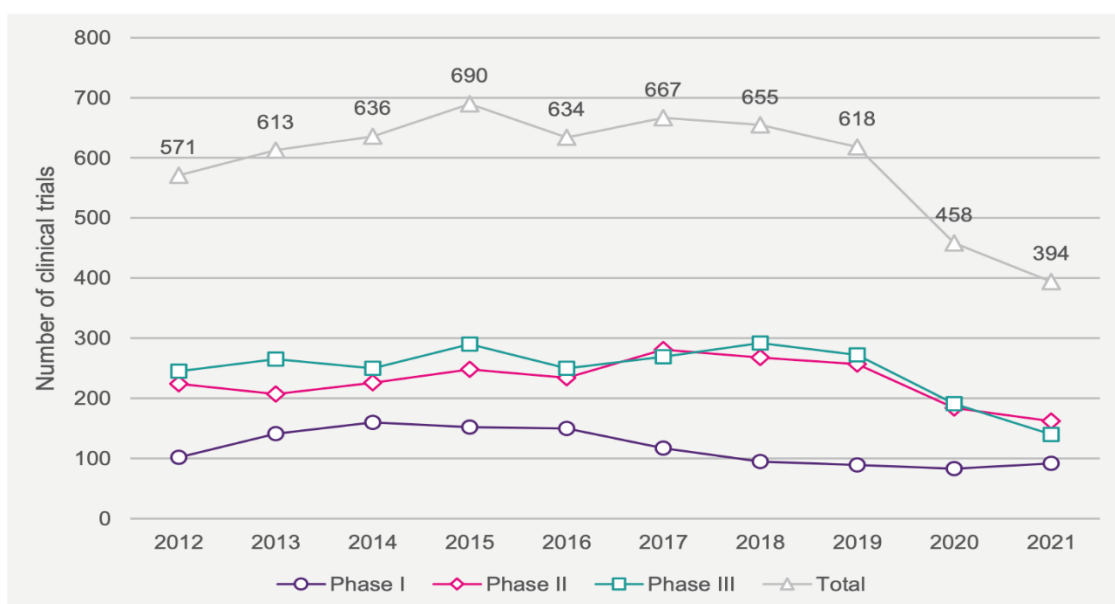
There have been clear political efforts to rebuild and develop clinical research. In March 2021, a vision for UK clinical research delivery²⁷ was agreed across the four UK countries. In June 2021, their health ministers launched a joint “implementation plan” for 2021 to 2022²⁸.

Nonetheless, the UK has been sliding down the global league table for clinical trials. In 2017-18 the NIHR Clinical Research Network had more than 50,000 participants registered on commercial clinical trials. In 2021-22, there were fewer than 30,000. The 2022 report “Rescuing patient access to industry clinical trials in the UK” by the Association of the British Pharmaceutical Industry (ABPI) presented recent data on the number of trials initiated annually during the previous decade, showing declines in every phase of trial since the 2015 peak.

Figure 2: Industry-sponsored clinical trial starts (ABPI)



Graph 2: Number of industry clinical trials initiated in the UK per year, by phase (2012-2021)



The 2022 Autumn Statement reasserted government ambitions for the UK to be a global “science superpower”.²⁹ It was notable that the target of 2.4% of GDP to be spent on R&D was retained, despite exceptional fiscal pressures and a widespread belief that it would be suspended. The “science superpower” ambition was, however, already facing some challenging realities in the life sciences: In contrast to its major competitors, the UK accounts for both a declining share of pharmaceutical exports *and* a declining value of exports. The latest data suggest not only that Italy has passed the UK in exports, but also that China will soon do likewise.³⁰

Data from the ABPI highlights the UK’s reduced clinical trial activity, representing a loss of research activity within the NHS and a direct loss to patients in terms of access to trials. There seems a significant opportunity to build on the exceptional integration of trials into clinical practice during the pandemic. NHS workload pressures may be preventing the embedding of this culture shift beyond COVID-19. These challenges have been highlighted repeatedly. The CEO of GSKplc, Dame Emma Walmsley has warned that: “We are at a tipping point if we don’t make the right decisions now”.³¹ AstraZeneca CEO Pascal Soriot has highlighted the problem of clinical trial delays within an overwhelmed NHS. He explained the decision to move a manufacturing plant from the UK to Ireland saying: “It’s a problem of can we execute our clinical trials, do we want to invest and are we going to get the appropriate returns?”.³²

2.4 A near miss: The National Vaccine Research Registry

The NIHR decision in July 2022 to seek additional consents from people who had opted to join the National Vaccine Research Registry appeared to bring the UK very close to the permanent loss of this incredible resource. Ironically, the Life Sciences Vision was published in the same month, highlighting the Registry as having: “Unique long term research potential”.³³ According to media reports, the Registry was saved only by the determined action of a government minister to seek independent legal advice. The

Figure 3: Be Part of Research
(NIHR)



fact that this came so close to such a catastrophic outcome and without apparent alarm across government is surprising given the unique value of the Registry. This feeds an impression that the cohesion of policy and sense of mission across government and its agencies could be giving way to pre-COVID norms of practice. There are genuine questions as to how the unprecedented tactics adopted in 2020 might inform lasting practice, balancing the need to break through against major policy challenges with appropriate use of finite public resources.

Concerns regarding both the absolute and relative decline in clinical trial activity prompted the Government to commission a rapid review of the clinical trials environment in February 2023, with the results being reported in May 2023.³⁴ The rhetoric of building resilience into the vaccine ecosystem remains strong. The Life Sciences Vision, the repeated ambitions for the UK to be a “life sciences superpower”, and the creation of a government department with “science” in its title for the first time since 1992, all suggest that the sense of mission still exists in spirit, if not in delivery.

3. Prevention

The UK population have been comparatively supportive of vaccination³⁵. From engagement with clinical trials to eventual vaccination, widespread enthusiasm for vaccination as the route back to freedom was very evident. Worryingly, however, this engagement was far from universal³⁶, but broadly matched the ethnicity-based pattern of health inequalities in general and, more specifically, the pattern of COVID-19 vulnerability. A strategy to tackle these harmful variations needs to be prioritised within the mission to improve pandemic preparedness. There is little that can be done once a pandemic has hit except for direct behavioural interventions³⁷ to support vaccine uptake. This is an important moment to widen support for vaccination in general, not only to tackle today's health inequalities and limit avoidable treatment demands on the NHS, but also to prepare the ground for future viral emergencies.

Disasters reveal social vulnerabilities. From heatwaves³⁸ to epidemics, mortality tends to be concentrated amongst the most deprived and precarious in society. In early evidence to the COVID-19 Inquiry, the former Chief Scientific Adviser to the UK Government Sir Patrick Vallance said that:

*“There is a terrible, terrible truth, and it’s something we all need to reflect off, is that all pandemics feed inequality and drive inequality”.*³⁹

COVID-19 mortality rates in the most deprived areas have been three or four times higher than those in the least deprived, but they have also been two or three times higher amongst Bangladeshi and Pakistani adults than amongst white British men and women⁴⁰. Despite these alarming mortality rates, people in these communities are amongst those most likely to not be fully vaccinated.⁴¹

The gain of confidence and reputation during the pandemic may present a critical juncture within which this variability might be addressed, based on careful analysis of its driving forces. Analysis of policy communications and the public responses to these will offer important insights for the future to support confidence in vaccination and other preventative actions amongst the most vulnerable in society.

The pandemic has also fuelled interest in the potential to use mRNA technology more widely in preventative care, for example in developing cancer vaccines. To coincide with a meeting of the Life Sciences Council on 28 November 2022, the Government announced that it would adopt the “Vaccine Taskforce Model” as a blueprint for investing £22.5m in research for cancer immune therapies and vaccines, as one of four selected “missions”, alongside a £30m fund for associated work in the Biomedical Catalyst programme. The mission will be led by an “independent chair”. The extent to which the Vaccine Taskforce Model, conceived as a 'nimble private-sector team of experts' with a chair reporting directly to the Prime Minister, has been fully embraced will depend on the specifics of the mission. In May 2023, the NHS National Clinical Director for Oncology, Professor Peter Johnson CBE, was appointed as the mission Chair, as part of a Treasury announcement regarding the £650 million 'Life Sci for Growth' initiative.⁴²

In light of the pandemic experience and away from pandemic pressures these missions might usefully have particular regard to widening engagement in the science in order to maximise their future preventative potential.

3.1 Vaccination in crisis

In challenging times for public spending, when NHS elective waiting lists are again given the highest political priority, public health budgets are squeezed. Not for the first time. Despite its preventative importance and value-for-money, routine vaccination falls victim to this squeeze. A study by Policy Exchange analysed the extent to which the pandemic hit routine vaccination rates across the UK. It also looked specifically at what the

reductions in English vaccination rates for measles, mumps and rubella (MMR) and for shingles implied for subsequent increases in infections, hospitalisations and mortality.⁴³ Meeting and maintaining the WHO recommended level of coverage for routine vaccinations is an important factor in maintaining preparedness for other health emergencies, limiting avoidable demands on the health service during a pandemic. The apparent behavioural shift in attitudes to vaccination, particularly routine childhood vaccination after the pandemic is a matter of great urgency. Far from building on the exceptional momentum for vaccination achieved in 2021, it appears that the high levels of fear of COVID-19 that motivated vaccine uptake may have demotivated uptake vaccination for diseases associated with lower levels of public concern. This is a global phenomenon, but the UK is better placed than many countries to recover from a situation. UNICEF have described the global situation saying that: *“In the past three years, more than a decade of hard-earned gains in routine childhood immunization have been eroded”*.

4. Preparedness

Issues already discussed relating to **policy**, particularly the maintenance of domestic capacity for life sciences innovation and manufacturing, are not only of benefit to industrial strategy but also act as a core element of preparedness for similar future crises. The Government needs to be certain that the loss of any “innovation” role within the (now sold) Vaccines Manufacturing and Innovation Centre, for which a strong need had been identified just a few years earlier, is offset by other developments within the domestic life sciences ecosystem.

4.1 Inclusive and trusted science

In February 2023, government prevarication over the “value for money” of UK association with the Horizon Europe research platform (after the “political conditions” in the overall EU-UK relationship were met) caused considerable concern within the research community. Up until this point there was a widespread belief that the EU’s “political conditions” were the sole barrier. Whilst the UK was covering the funding gap for UK-based researchers joining programmes, EU-based researchers seemed hesitant to invite them to join.⁴⁴ The harm from the delay in agreeing UK association with Horizon was widespread. Leaders of the major science academies across the UK and Europe argued that association is “widely recognised as a win for the UK and the EU”⁴⁵. UK hesitancy over the direct costs involved⁴⁶, and willingness to continue with the disruption until September 2023 in pursuit of a “better deal” seemed another marker of a gap between the “science superpower” rhetoric and day-to-day policy practice.

Benefitting from science and engagement in science are interrelated. The unequal impact of disease is not reflected in clinical research activity.

“For instance, in the UK, type 2 diabetes is disproportionately prevalent in South Asians, and they have poorer long-term outcomes, but in a review of 12 trials, the mean South Asian involvement was 5.5% despite South Asians representing 11.2% of the UK type 2 diabetes population.”⁴⁷

Research has suggested that the NHS has a role in improving trust amongst UK ethnic minority groups. One study of ethnic discrimination and vaccination decisions found, amongst other forms of discrimination found that:

“The proportion having experienced racial/ethnic discrimination in a medical setting was nearly seven times higher in the vaccine refusal group than in the vaccine acceptance group.”⁴⁸

Research suggests that “trust in science” has powerful effects on behaviour: low trust in science has a significantly adverse effect on willingness to be vaccinated, much more so than low trust in government ministers.⁴⁹ The IPPR Commission on Health and Prosperity has called for “a long-term plan for trust”⁵⁰. This study reflects on inequalities of experience between black and white people revealed in the NHS Cancer Patient Experience Survey^{51,52}, including in the receipt of health information. Those who deliver NHS care need to prioritise clear and effective communication on treatment, realising that every interaction is an opportunity to support trust in medicine.

Figure 4: Coronavirus headlines

(Credit: Adrian Hillman, iStock)



Research in 2021 by Traverse⁵³ for Healthwatch amongst people of African, Bangladeshi, Caribbean and Pakistani ethnicity produced interesting results: whilst participants generally trust the NHS, this is limited to when the NHS is “independent of government”, and they have more trust in frontline healthcare workers than in very senior representatives. It also differentiated between “conscious” and “unconscious” trust, as people may be less aware of the influence their community leaders (e.g. religious leaders) have on their decisions than the more obvious influence of doctors and scientists. Additionally, it highlighted the importance of respecting individual agency, avoiding the language of compulsion around vaccination.

The report of the Sense About Science inquiry into the role of policy evidence during the COVID-19 pandemic noted that the Ministerial Code requires all ministers to explain the reasons for policy decisions, but that in this case:

“There was a presumption that confidence in the reasoning could be earned retrospectively after a crisis, rather than realising it is integral to managing it.”⁵⁴

The absence of reasoning for the implicit but obvious trade-offs between tackling COVID-19 transmission and other health and wellbeing needs leaves a dangerous gap for others to fill. Such gaps provide fertile ground for distrust to spread. The Ministerial Code requirement for explanation of the reasons behind policy decisions should be restated and prioritised, particularly in relation to decisions around health and the life sciences and in relation to emergencies. The IPPR proposal for a long-term plan for trust should be adopted.

4.2 A Pandemic Playbook

Given the credible claims that pandemic risks are growing,⁵⁵ it seems appropriate that lessons from the operation of the Vaccine Task Force and other aspects of the COVID-19 response are incorporated into core policy processes. The window of opportunity for such a unique, but unplanned, response may not appear in any future pandemic. At the time, the UK was led by a Prime Minister renowned for acting outside of the usual protocols, which would soon be the cause for his early removal from office. After several months in which UK policy followed an emergency protocol based on influenza risks, unprecedented and unscripted decisions in 2020, particularly to create a powerful Vaccine Task Force, served to mitigate initial accusations of sloth. This unique experience should now inform future emergency responses.

An important part of this revised “playbook” for emergencies would be an update to the Treasury “Green Book”⁵⁶ guiding the appraisal and evaluation of policy options. At the very least the Green Book should incorporate a specific chapter for public health emergencies, with guidance towards appropriate approaches when faced with greater uncertainty in policy choices than is tolerated outside of an emergency. The permanent addition of an “emergencies” section in the Green Book could be combined with assurance that “*pandemic preparedness*” is made a permanent and explicit ministerial responsibility within the Department of Health and Social Care, in the same way that other government departments have ministers responsible for energy security, food security, floods, or defence resilience.

Whilst the Vaccine Task Force (VTF) stands out as a model that worked in this pandemic, similar approaches in other aspects of the pandemic response seemed less successful in achievement of their objectives and in value-for-money. It would be unwise to believe that the success of the VTF, and critiques of other initiatives are wholly down to issues of design and leadership. It was, perhaps, fortuitous that the pandemic was identified at a time when the considerable research effort into mRNA vaccines was at a stage in which multiple initiatives could be adapted towards COVID-19 alongside more traditional technologies. Problems in testing and tracing the virus or in securing PPE in the beginning of the pandemic starkly separated countries with an existing infrastructure and appropriate stocks for a surge in demand from those without. The need was immediate, facing grave logistical challenges and participation in a global scramble for limited supplies. Messenger RNA was not a sudden discovery in the pandemic but a field of research that had been growing since the 1960s and which had already been used to target the Ebola virus.

Professor Chris Beyrer noted that:

“Thanks to decades of research and innovation, mRNA vaccine technology was ready.”⁵⁷

The World’s first COVID-19 vaccine to receive an Emergency Use Authorisation (EUA) was an mRNA vaccine, which the UK Medicines and Healthcare products Regulatory Agency authorised on this basis on 2 December 2020.⁵⁸ This was within ten months of the WHO declaring a pandemic. The leap in vaccine technology achieved during 2020 should facilitate an even faster response in a future pandemic. If so, then this would also require faster action on scaling up the supply chain, with a shorter lead time. The time pressures that any future VTF could, therefore, be quite different.

Given the successes and failures of the COVID-19 response and ongoing concerns around the probity of some contracts, the development of a “Pandemic Playbook” could replace ‘ad hoc’ decision-making. In relation to vaccines, this could form an additional chapter in the Green Book on immunisation,⁵⁹ but more generally, lessons from COVID-19 could be applied in the Treasury’s own Green Book⁶⁰ for policy appraisal and evaluation.

5. Conclusion

The three years from early 2020 to the end of 2022 were a period of unprecedented crisis management. The UK started struggling to complete the Brexit process and adapt to this new situation, was hit particularly badly by the arrival of COVID-19 (with severe effects on routine NHS services and clinical research), and it suffered unprecedented political and economic instability during 2022. The systems of government will need to readapt after a long period devoted to crisis management even though none of the crises will be entirely settled for some time.

Figure 5: Rainbow after the storm.
(Credit: K Mitch Hodge, Unsplash)



The global and domestic political and economic turmoil of 2022 drew attention away from the COVID-19 pandemic. By the start of 2023 it seemed to many that COVID-19 had almost been forgotten amidst the plethora of other headline demands and due to rising political awareness of an approaching UK general election, most probably in 2024.⁶¹ This sentiment was reinforced when the Prime Minister started the year, and presumably the next election platform, with “five key priorities for 2023”⁶², on inflation, jobs, national debt, and NHS waiting lists. The alarming

persistence of excess mortality and the evident challenges of the life sciences sector in recovering from the pandemic and adapting to the experience appeared to be second-tier priorities. Another government reorganisation took place in February 2023, breaking up the Department for Business, Energy and Industrial Strategy. This latest arrangement of Whitehall offices included a new “Department for Science, Innovation and Technology”. This is the first time since 1992 that the UK has had a “science” departmental Cabinet minister. Only time will tell whether this strengthens or dilutes science, and the life sciences within this, as a national policy priority. It is possible that a focused department could make a difference, as happened with the creation of the Department for International Development in the 1990s⁶³, although this is dependent upon current political priorities.

Acting on the obvious and painful lessons of the COVID-19 pandemic is a question of political priority, whatever infrastructure and other arrangements are in place. In politics, the collective memory can be short and a critical juncture in which to make a tangible difference in policy, prevention and preparedness is slipping away after the disruptions of 2022.

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