



 GIG CYMRU NHS WALES Iechyd Cyhoeddus Cymru Public Health Wales	Name of Meeting Board Date of Meeting 24 September 2026 Agenda item: 4.5
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A summary of the UK Covid-19 Inquiry Module 4: Vaccines and Therapeutics	
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Approval/Scrutiny route:	Public Health Wales Business Executive Team Tom Fowler, Deputy National Director of Health Protection and Screening Services, Paul Veysey, Board Secretary and Head of Board Business Unit, Cross-organisation peer review.
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Purpose
This paper provides the Board with a summary of the UK Covid 19 Inquiry Module 4: Vaccines and Therapeutics, outlining the key findings, conclusions and recommendations relevant to Public Health Wales.

Recommendation:				
APPROVE ☐	CONSIDER ☒	RECOMMEND ☐	ADOPT ☐	ASSURANCE ☒

The Board is asked to:
• NOTE this report and CONSIDER the summary of the UK Covid-19 Inquiry Module 4: <i>Vaccines and Therapeutics</i>. • TAKE ASSURANCE in relation to organisational activity contributing to the mitigation of the Module 4 recommendations, particularly in relation to vaccine equity, vaccine confidence, research preparedness, surveillance, data linkage and public engagement. • TAKE ASSURANCE on the continued use of existing PHW groups and governance structures to address identified recommendations, embed learning and facilitate a programme of continuous improvement in pandemic vaccine and therapeutics preparedness, resilience and response.

Link to Public Health Wales [Strategic Plan](#)

Public Health Wales has an agreed strategic plan, which has identified seven strategic priorities and well-being objectives.

This report contributes to the following:

Strategic Priority / Wellbeing Objective	4 - Delivering excellent public health services
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Summary impact analysis

Equality and Health Impact Assessment	An Equality or Health Impact Assessment has not been undertaken.
Risk and Assurance	High level of organisational risk if an adequate response to the inquiry is not implemented
Health and Social Care (Quality and Engagement) (Wales) Act	This report supports and/or takes into account the Health and Care Standards for NHS Wales Quality Themes, and in particular, Theme 02.
Financial implications	Dependent on the final agreed approach with Welsh government and cannot currently be assessed
People implications	May require training, upskilling and change in practice

1. Purpose / Situation

This paper provides the Board with a summary of the UK Covid-19 Inquiry Module 4: Vaccines and Therapeutics, published in April 2026, which examined the development, authorisation, procurement and delivery of Covid-19 vaccines and therapeutics across the United Kingdom, and the systems that underpinned vaccine safety, equity of access and post-vaccination support.

Module 4 considers how the UK was able to authorise and deliver effective vaccines and therapeutics within a year of the first Covid-19 cases, the extent to which this represented an exceptional scientific and public health achievement, and where weaknesses in preparedness, equity, manufacturing capability and governance were exposed.

The Inquiry also examined vaccine confidence and hesitancy, disparities in uptake, post-authorisation safety monitoring, and the operation of the Vaccine Damage Payment Scheme.

The purpose of this paper is to:

- Summarise the key findings and recommendations of Module 4 that are relevant to population health, pandemic preparedness and response;
- Highlight strategic learning for future pandemics, particularly in relation to vaccines, therapeutics, data, safety surveillance, and equity;
- Provide assurance to the Board on the relevance of the Module 4 findings to Public Health Wales' remit and ongoing preparedness activity; and
- Support Board oversight of how learning from Module 4 will be considered alongside other UK Covid-19 Inquiry modules to inform future system resilience and improvement.

This paper is intended to support Board awareness and assurance, rather than to seek approval for specific actions at this stage. It should be read in the context of previously considered Inquiry modules and the organisation's wider emergency preparedness and response responsibilities.

2. Background

The UK Covid-19 Inquiry was established to examine the UK's response to, and impact of, the Covid-19 pandemic and to identify lessons for the future. Given the scale and complexity of the pandemic, the Chair divided the Inquiry into themed modules.

Module 4 focused on the development, authorisation, procurement and delivery of vaccines and therapeutics, alongside vaccine safety, public confidence, equity of access, and redress for those harmed.

It examined evidence from across the four nations of the UK, including central government, devolved administrations, public health systems, regulators, scientists, clinicians, industry and communities.

Public hearings took place in January 2025, with the Module 4 report published in April 2026.

Key findings

- **Speed and effectiveness of delivery**

The UK authorised and delivered effective vaccines to the public within a year of the first recorded cases of Covid-19. Therapeutics were introduced rapidly, including the early adoption of dexamethasone, which saved a significant number of lives. The vaccination programme exceeded population coverage targets, with one vaccine developed in the UK.

- **Scientific and system strengths**

The Inquiry highlighted the UK's strengths in biomedical science, clinical trial infrastructure, regulatory agility, and the establishment of specialist vaccine and therapeutics taskforces. An 'at-risk' procurement approach enabled rapid access to vaccines and drugs before efficacy was fully established, increasing resilience under extreme uncertainty.

- **Preparedness gaps**

Despite these achievements, the UK entered the pandemic without sufficient vaccine and therapeutics manufacturing capability and with preparedness largely focused on influenza rather than novel pathogens. Sustained investment and end-to-end strategic oversight were identified as necessary to avoid repeating these weaknesses.

- **Vaccine uptake and inequalities**

Overall uptake was high; however, significant disparities were observed. Lower uptake was seen in communities experiencing socio-economic deprivation, some ethnic minority groups, disabled people, migrants and other underserved populations. These disparities were predictable and reflected pre-existing structural inequalities and barriers to access.

- **Vaccine confidence and misinformation**

Vaccine hesitancy increased during the pandemic, driven by misinformation and declining trust in institutions. The Inquiry concluded that future pandemic planning must embed targeted, locally informed engagement strategies and proactive counter-misinformation approaches.

- **Safety and surveillance**

Regulatory processes and safety standards were not compromised despite the speed of vaccine development. However, the Inquiry found that post-authorisation surveillance would benefit from improved access to linked, UK-wide health data to allow faster detection and assessment of safety signals.

- **Vaccine Damage Payment Scheme**

A small number of individuals suffered serious injury or bereavement following vaccination. The Inquiry heard powerful evidence that the existing Vaccine Damage Payment Scheme is not sufficiently supportive, is slow to operate, and requires urgent reform.

Key themes

- **Preparedness and resilience:** Sustained investment in research, manufacturing and data infrastructure is critical for future pandemics.
- **Equity:** Vaccine and therapeutics strategies must be designed from the outset to address predictable inequalities.
- **Trust and transparency:** Public confidence depends on clear communication, accessible information, and visible fairness in decision-making and redress.
- **System learning:** The relationships, expertise and delivery mechanisms that were effective during Covid-19 must be retained and strengthened rather than allowed to dissipate.

Recommendations

Module 4 made a focused set of recommendations aimed at strengthening future preparedness, including:

- Establishing a pharmaceutical expert advisory panel to provide strategic oversight of vaccines and therapeutics preparedness;
- Developing targeted vaccination strategies and communications to reduce inequalities and improve uptake;
- Improving monitoring and evaluation of vaccine delivery and uptake;
- Enabling regulatory access to linked healthcare records for post-authorisation safety monitoring; and
- Reforming the Vaccine Damage Payment Scheme to better support those affected by serious vaccine injury.

These recommendations complement earlier Inquiry modules, particularly those relating to preparedness, governance and health inequalities, and collectively highlight the need for a whole-system, long-term approach to pandemic readiness.

For a details 'synopsis by chapter' of the Module 4 report, please refer to Appendix 01.

3. Assessment

3.1 *Implications for Public Health Wales and the Wider System*

Public Health Wales and the wider system in Wales played a critical role in the successful delivery of vaccines and therapeutics during Covid-19, underpinned by existing scientific capability, partnerships and preparedness arrangements.

Module 4 reinforces the importance of sustaining these capabilities outside of crisis periods, including strong links between surveillance, data, research, health protection and emergency preparedness, so that Wales remains ready to respond rapidly and proportionately in future pandemics.

The Inquiry also highlights that inequalities in vaccine uptake were predictable and that public trust is central to programme effectiveness.

For Wales, this emphasises the need to embed equity, high-quality data, accessible communication and community engagement into vaccination and therapeutics planning from the outset, alongside clear system oversight to ensure that learning from Covid-19 results in durable improvements in preparedness, confidence and population health outcomes.

3.2 PHW position in relation to the recommendations

None of the recommendations within Module 4 are directed specifically at Public Health Wales (PHW). They are addressed to the UK Government, devolved administrations, public health agencies and relevant delivery organisations.

For a detailed summary of the Module 4 recommendations, please refer to Appendix 02.

This section summarises the relevance of each recommendation to PHW and outlines actions already undertaken, current gaps and constraints, and areas where PHW can support Welsh Government and wider system partners in strengthening pandemic vaccine and therapeutics preparedness.

NB. The recommendations primarily relate to pharmaceutical preparedness, vaccine development and manufacture, vaccine equity, vaccine uptake, vaccine safety surveillance, and compensation arrangements.

In most cases, PHW's role is advisory, research-focused, surveillance-based or supportive rather than one of policy ownership. Where national policy, funding, governance or legislative change is required, responsibility rests principally with Welsh Government, UK Government and relevant UK-wide bodies.

Recommendation 1: Establish a Pharmaceutical Expert Advisory Panel

This recommendation is relevant to PHW through its research, scientific advice, clinical trials and partnership functions, particularly in relation to vaccine and therapeutics preparedness.

PHW has previously demonstrated its ability to coordinate research activity at a national level. During the COVID-19 pandemic, PHW acted as the lead organisation for COVID-19 vaccine trial activity in Wales, operating on a once-for-Wales basis. The PHW Research and Development Office established governance arrangements, oversight processes and reporting mechanisms that enabled research delivery at pace.

Elements of this capability remain in place and could be reactivated during a future health emergency. In addition, PHW has established and continues to strengthen relationships with academic partners, including Cardiff University through a recently agreed Memorandum of Understanding.

Further work is required to formalise preparedness arrangements and clarify how academic institutions, industry partners, Health and Care Research Wales, health boards and UK bodies would operate collectively during a future pandemic. This includes agreeing governance arrangements, surge capacity, information-sharing mechanisms and the interface between research delivery, clinical services and pharmaceutical development.

A key dependency is ensuring Wales is appropriately represented within any future UK-wide advisory structures or taskforces responsible for vaccines and therapeutics.

Public Health Wales would wish to ensure parity with other UK public health agencies and, should the UK Health Security Agency (UKHSA) hold a position on any new pharmaceutical expert advisory panel or equivalent body, PHW would seek appropriate representation to ensure Welsh public health expertise, evidence and system perspectives are reflected in UK-level decision-making.

Limited capacity to maintain dedicated pandemic research preparedness outside emergency periods remains a challenge.

Recommendation 2: Formalise Work with Communities About Vaccine Equity Strategies

This recommendation is directly relevant to PHW's vaccination, health inequalities, behavioural insights and public engagement functions.

Significant work has already been undertaken through the Vaccine Preventable Disease Programme (VPDP), Vaccine Programme Wales (VPW), Welsh Government and NHS Wales health boards.

Established arrangements include:

- A bi-monthly Vaccine Equity Group involving Welsh Government, VPW, PHW and health boards.
- A Vaccine Equity Network that shares surveillance data, best practice, education resources and local learning.
- Publication of a Rapid Evidence Review examining interventions to reduce inequalities in immunisation uptake.
- Development and launch of a Wales-wide Vaccine Equity Toolkit.
- Peer review of Health Board Vaccine Equity Strategic Plans, with recommendations submitted to Welsh Government.
- Regular communications and engagement forums involving PHW, health boards and VPW colleagues.
- Insight and engagement work focused on groups experiencing lower vaccine uptake, including older adults, pregnant people, parents of young children, school-age children and specific underserved communities.
- Collaboration with Deep End Cymru to better understand barriers to vaccination within deprived communities.

PHW also continues to align behavioural insight work with vaccination campaigns and has developed the "Confident Vaccine Conversations" training package using behavioural science and motivational interviewing approaches.

Remaining challenges include the need for a more systematic approach to monitoring and addressing vaccine misinformation, particularly within underserved groups. Limited dedicated capacity for vaccine equity and misinformation work remains a significant constraint, and recommendations

arising from a Welsh Clinical Leadership Fellowship vaccine equity review are currently awaiting further Welsh Government consideration.

Recommendation 3: Improve Monitoring and Evaluation of Vaccine Uptake and Delivery

This recommendation aligns closely with PHW's surveillance, epidemiology, intelligence and behavioural science functions.

PHW already contributes substantially to understanding vaccine uptake, confidence and inequalities through surveillance systems, attitudinal surveys, focus groups and behavioural insight work.

Current activity includes:

- Sharing vaccine equity surveillance data across Wales.
- Conducting attitudinal research on barriers and facilitators to vaccination.
- Evaluating interventions designed to improve vaccine acceptance and reduce inequalities.
- Producing horizon-scanning reports on vaccine acceptance and communication campaigns.
- Research into the effectiveness and cost-effectiveness of behavioural interventions designed to increase vaccine uptake.

PHW is also involved in wider research examining vaccine uptake inequalities and evaluation methodologies through work relating to COVID-19 vaccination, RSV vaccination and HPV vaccination programmes.

While strong foundations exist, further collaboration across the UK and Welsh systems will be required to support consistent approaches to vaccine confidence monitoring, evaluation standards and routine publication of findings.

Recommendation 4: Proportionate Access to Linked Healthcare Records for Assessment of Safety Signals

This recommendation is closely aligned with PHW's data science, surveillance, informatics and research capabilities.

PHW has continued to strengthen data linkage and analytical capability through investments in digital transformation and population health intelligence.

Of relevance is the development of the Public Health Wales feasibility hub within the SAIL Databank environment, which supports secure linkage and analysis of health and non-health datasets to generate evidence and public health intelligence.

Enhanced data systems are improving PHW's ability to undertake surveillance and evidence generation; however, challenges remain regarding access, interoperability and the availability of comprehensive linked datasets across health systems.

Implementation of this recommendation would require continued collaboration between governments, health services, regulators and data custodians, alongside robust safeguards to protect patient confidentiality.

PHW's role would primarily be to support surveillance, analysis, evidence generation and public health intelligence rather than regulatory decision-making.

Recommendation 5: Reform the Vaccine Damage Payment Scheme

This recommendation sits largely outside PHW's direct remit and relates primarily to UK Government policy, legislation and compensation arrangements.

PHW does not administer the Vaccine Damage Payment Scheme and has no direct responsibility for determining eligibility, compensation levels or legislative reform.

However, PHW would continue to contribute evidence, surveillance data and public health expertise where requested by Welsh Government or UK bodies.

Public confidence in vaccination programmes depends upon transparent safety monitoring, effective communication and trusted public health systems, all of which remain important areas of PHW activity.

Overall Position

PHW has already made substantial contributions to many of the areas highlighted within Module 4, particularly in relation to vaccine equity, vaccine confidence, behavioural insight, research delivery, clinical trial capability, surveillance, data linkage and public engagement.

The strongest areas of existing activity relate to Recommendations 2, 3 and 4, where mature programmes and networks are already in place across Wales. Significant work has also been undertaken to support research preparedness under Recommendation 1, although further formalisation of partnerships, governance and surge arrangements would strengthen future readiness.

Many of the recommendations require system-wide action, national policy decisions, dedicated funding and continued Welsh Government leadership. PHW's role will remain focused on providing public health expertise, research capability, evidence generation, surveillance, behavioural insight and support to Welsh Government and wider partners to improve future pandemic preparedness and vaccine programme resilience.

3.3 PHW Prioritisation for Welsh Government Engagement

Public Health Wales (PHW) has identified the following priority areas for engagement with Welsh Government (WG) arising from Module 4 of the UK Covid-19 Inquiry.

These priorities reflect areas where national policy direction, system leadership, sustained investment or cross-sector coordination will be required to strengthen Wales' preparedness for future pandemics. They are informed

by the Inquiry's findings on vaccines, therapeutics, vaccine equity, pharmaceutical preparedness, surveillance and public confidence.

The priorities also recognise those areas where PHW has a significant advisory, scientific, surveillance, research and public health leadership role, but where responsibility for policy, funding, governance or legislative change rests principally with Welsh Government, UK Government or UK-wide organisations.

Priority 1: Pharmaceutical Preparedness, Research Capability and Strategic Partnerships

Module 4 highlights that the UK's success in developing and deploying vaccines and therapeutics was underpinned by exceptional scientific capability, clinical research infrastructure and collaborative partnerships between government, academia, industry and health services.

The Inquiry also found that preparedness arrangements were insufficiently developed before the pandemic, and that strategic oversight of vaccines and therapeutics requires strengthening.

This priority aligns with Module 4 recommendations relating to:

- Establishment of pharmaceutical preparedness and advisory arrangements;
- Strengthening research, development and trial readiness;
- Maintaining relationships between government, academia, health services and industry; and
- Sustaining capabilities required for rapid vaccine and therapeutics development and deployment.

Why: Welsh Government leadership will be required to ensure Wales is appropriately represented within future UK-wide vaccines and therapeutics preparedness structures and to support the development of formal arrangements for research mobilisation, governance, surge capacity and strategic partnerships.

PHW can provide scientific leadership and coordination support but cannot independently establish the broader national frameworks required.

Priority 2: Vaccine Equity, Community Engagement and Public Confidence

Module 4 concludes that inequalities in vaccine uptake were predictable and reflected wider structural inequalities affecting underserved communities.

The Inquiry also identified vaccine confidence, trust and misinformation as critical determinants of programme effectiveness.

This priority aligns with Module 4 recommendations relating to:

- Development of targeted vaccine equity strategies;
- Formal engagement with communities experiencing lower uptake;
- Reducing inequalities in access to vaccines and therapeutics;

- Strengthening vaccine confidence and trust; and
- Addressing misinformation and disinformation.

Why: While considerable progress has been made across Wales through established vaccine equity programmes and partnerships, sustained national commitment, policy support and dedicated investment will be required to maintain and expand this work.

Welsh Government leadership will be necessary to embed vaccine equity within future pandemic planning, support community engagement infrastructure and ensure appropriate resources are available to address misinformation and confidence challenges at scale.

Priority 3: Vaccine Uptake Intelligence, Evaluation and Behavioural Insights

Module 4 emphasises the importance of robust monitoring and evaluation arrangements to understand vaccine uptake, identify inequalities, assess programme effectiveness and support evidence-based decision-making during future pandemics.

This priority aligns with Module 4 recommendations relating to:

- Improved monitoring of vaccine delivery and uptake;
- Evaluation of vaccination programmes and interventions;
- Understanding behavioural drivers of vaccine acceptance;
- Monitoring inequalities in uptake; and
- Supporting evidence-informed public health decision-making.

Why: Further progress will require national agreement on standards for monitoring, evaluation and reporting, alongside continued investment in analytical and behavioural science capability.

Welsh Government support will be important in ensuring consistent approaches across NHS Wales and enabling long-term development of surveillance, intelligence and evaluation infrastructure that can be rapidly utilised during future health emergencies.

Priority 4: Data Linkage, Surveillance and Vaccine Safety Monitoring

Module 4 identifies improvements in linked healthcare data as a critical enabler of more effective vaccine safety surveillance and faster assessment of potential safety signals. The Inquiry concluded that stronger access to linked health datasets would improve preparedness and public confidence.

This priority aligns with Module 4 recommendations relating to:

- Access to linked healthcare records for safety monitoring;
- Enhanced post-authorisation vaccine surveillance;
- Strengthening public health intelligence and evidence generation;

- Secure data sharing and interoperability; and
- Supporting rapid identification and assessment of potential safety concerns.

Why: Delivery of this priority depends upon system-wide progress in data governance, interoperability and infrastructure across Wales and the wider UK. Welsh Government leadership is required to address barriers relating to data access, linkage and information governance.

PHW will continue to support surveillance, analysis and evidence generation but is dependent on broader national systems and policy frameworks to realise the full benefits identified by the Inquiry.

Priority 5: Public Trust, Transparency and Support for Those Affected by Vaccine Injury

Module 4 recognises that public confidence in vaccination programmes depends upon trust, transparency, effective safety monitoring and fair treatment of the small number of individuals who experience serious adverse outcomes following vaccination. The Inquiry concludes that the Vaccine Damage Payment Scheme requires significant reform.

This priority aligns with Module 4 recommendations relating to:

- Reform of the Vaccine Damage Payment Scheme;
- Transparent communication about vaccine safety;
- Public confidence in vaccination programmes;
- Fairness and visibility of redress arrangements; and
- Maintaining trust in public health systems.

Why: Responsibility for compensation arrangements and legislative reform rests outside PHW's remit and principally with UK Government. However, public confidence in vaccination programmes has direct implications for future pandemic response. Welsh Government engagement will therefore be important in ensuring that transparency, safety surveillance, communication and support arrangements are considered as part of wider preparedness planning.

PHW will continue to contribute evidence, surveillance data and public health expertise to support these discussions.

Overall Position

PHW has already established significant capability across vaccine equity, behavioural insights, public engagement, surveillance, research delivery, clinical trial coordination, data science and evidence generation. Many of the areas highlighted by Module 4 are therefore consistent with work already underway across Wales.

However, the most significant opportunities for improvement identified by the Inquiry require national leadership, long-term investment and system-wide coordination. The priorities outlined above represent those areas where engagement with Welsh Government is likely to have the greatest impact on strengthening future pandemic preparedness, improving vaccine and therapeutics resilience, and maintaining public confidence.

This prioritisation is intended to support Welsh Government in addressing the most strategically significant findings arising from Module 4, while ensuring that PHW continues to contribute its public health expertise, scientific capability and system leadership to the development of a resilient and equitable approach to future pandemic preparedness.

As with previous Inquiry modules, PHW will continue to support Welsh Government and wider partners across all recommendations within the limits of its role and remit.

Well-Being Of Future Generations (Wales) Act 2015

Public Health Wales (PHW) has applied the Well-being of Future Generations (Wales) Act 2015 to its learning from Module 4 of the COVID-19 Inquiry, recognising that decisions relating to vaccines, therapeutics, public confidence and pandemic preparedness have long-term implications for population health, health equity and system resilience.

Module 4 highlights the importance of sustained investment in research, surveillance, preparedness and community engagement to ensure that future pandemic responses can be delivered rapidly, safely and equitably. The findings reinforce the need to address inequalities, maintain public trust, strengthen collaboration and retain critical capabilities between emergencies.

The Inquiry's conclusions align closely with the five ways of working set out in the Act: long-term, through sustained preparedness and investment; prevention, through effective vaccines and therapeutics; integration, through coordinated public health, research and healthcare systems; collaboration, through partnerships across government, academia, industry and communities; and involvement, through meaningful engagement with populations to improve confidence, access and uptake.

Module 4 also supports the Well-being Goals of a Healthier Wales, a More Equal Wales and a Resilient Wales, reinforcing the importance of ensuring that future pandemic planning strengthens both population health outcomes and equitable access to public health interventions.

4. Recommendations

The Board is asked to:

- **NOTE** this report and **CONSIDER** the summary of the UK Covid-19 Inquiry Module 4: *Vaccines and Therapeutics*.
- **TAKE ASSURANCE** in relation to organisational activity contributing to the mitigation of the Module 4 recommendations, particularly in relation to vaccine equity, vaccine confidence, research preparedness, surveillance, data linkage and public engagement.
- **TAKE ASSURANCE** on the continued use of existing PHW groups and governance structures to address identified recommendations, embed learning and facilitate a programme of continuous improvement in pandemic vaccine and therapeutics preparedness, resilience and response.



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Appendices

Appendix 01: Module 4 Report Synopsis by Chapter

Chapter 1: The landscape of vaccines and therapeutics

Sets out the background to vaccines and therapeutics, explains the different vaccine technologies used during the pandemic, and examines the UK's preparedness for vaccine and therapeutic development before Covid-19.

Finds that the success of the UK response relied heavily on decades of prior scientific research, particularly in adenoviral vector and mRNA technologies. However, pandemic planning was largely focused on influenza, with insufficient consideration of novel pathogens ("Disease X"), limited therapeutic readiness and inadequate domestic manufacturing capability.

Concludes that future preparedness requires sustained investment in life sciences, manufacturing capability, diverse vaccine and therapeutic technologies, and planning for a wider range of pandemic threats.

Chapter 2: Discovery and development

Examines the rapid discovery, development and testing of Covid-19 vaccines and therapeutics, including the role of research funding, clinical trial infrastructure and collaboration between academia, government and industry.

Finds that the UK's world-leading research base, existing clinical trial infrastructure and rapid mobilisation of funding enabled vaccines and therapeutics to be identified, developed and tested at unprecedented speed. Trials such as RECOVERY demonstrated the value of large-scale adaptive research platforms.

Concludes that maintaining research capability, clinical trial infrastructure, rapid funding mechanisms and partnerships across sectors is critical to future pandemic response.

Chapter 3: Securing supplies

Evaluates the UK's approach to procuring, manufacturing and securing supplies of vaccines and therapeutics through the Vaccine Taskforce, Therapeutics Taskforce and Antivirals Taskforce.

Finds that the UK's willingness to take financial risks, adopt a diverse procurement strategy and engage closely with industry enabled rapid access to vaccines and therapeutics. However, significant weaknesses existed in domestic manufacturing capacity, particularly for mRNA vaccines and monoclonal antibodies.

Concludes that a more strategic and sustained approach to pharmaceutical preparedness is required, including stronger manufacturing capability and enduring structures to oversee vaccine and therapeutic readiness.

Chapter 4: Authorisation

Examines how vaccines and therapeutics were assessed, regulated and authorised for use, including the role of the Medicines and Healthcare products Regulatory Agency (MHRA).

Finds that regulatory processes were accelerated without compromising safety, quality or efficacy standards. Mechanisms such as rolling reviews enabled rapid decision-making while maintaining rigorous scrutiny of clinical evidence.

Concludes that regulatory independence and robust safety standards were preserved during the pandemic and should remain central to future emergency authorisation arrangements.

Chapter 5: Delivery

Reviews the delivery of vaccines and therapeutics across the UK, including prioritisation decisions, vaccination infrastructure, eligibility arrangements and access to treatment.

Finds that the vaccination programme was highly successful, delivering vaccines at scale and saving large numbers of lives. Priority groups were identified using a largely age-based approach that was simple and effective, although some groups, including people with learning disabilities, unpaid carers, clinically vulnerable individuals and pregnant women, experienced confusion and barriers to access.

Concludes that future programmes should retain the strengths of a clear prioritisation framework while improving identification of vulnerable groups, communication and equitable access to both vaccines and therapeutics.

Chapter 6: Disparities in vaccine uptake

Explores differences in vaccine uptake across population groups and examines the factors contributing to vaccine hesitancy and lower vaccination rates.

Finds significant disparities in uptake among some ethnic minority communities, socially deprived populations, migrants, Gypsy, Roma and Traveller communities, and some disabled people. Vaccine confidence was influenced by trust, misinformation, previous experiences of public services and practical barriers to access.

Concludes that reducing inequalities requires sustained community engagement, targeted communication, accessible services and improved data systems to identify and monitor populations with lower uptake.

Chapter 7: Post-authorisation safety and surveillance systems

Reviews the systems used to monitor vaccine safety after authorisation, including the Yellow Card scheme, epidemiological studies and regulatory responses to emerging safety concerns.

Finds that the UK's pharmacovigilance systems successfully identified and responded to rare adverse events, including thrombosis with thrombocytopenia syndrome and myocarditis. The regulatory response was timely and proportionate, although limitations existed in data linkage and public awareness of reporting systems.

Concludes that post-authorisation safety surveillance was robust but would benefit from improved access to linked healthcare records, stronger data integration and enhanced public understanding of safety monitoring processes.

Chapter 8: The Vaccine Damage Payment Scheme

Examines the operation of the Vaccine Damage Payment Scheme (VDPS) and its application to individuals reporting serious injury following Covid-19 vaccination.

Finds that the scheme was overwhelmed by the volume of applications and that many applicants experienced lengthy delays. The £120,000 fixed payment and 60% disablement threshold were widely criticised as inadequate and insufficiently responsive to the range of injuries experienced.

Concludes that the scheme requires significant reform to provide fairer, more timely and more proportionate support for those who suffer serious vaccine-related harm while maintaining public confidence in future vaccination programmes.

Appendix 02: Module 4 Report Recommendations

Recommendation 1: Establish a pharmaceutical expert advisory panel

The UK government should establish a standing pharmaceutical expert advisory panel, in consultation with the Department of Health and Social Care and the Department for Science, Innovation and Technology.

The panel should include ministers, civil servants and representatives from industry and academia, and be led by an independent Chair with experience of working in a relevant industry.

The panel's role should be to:

- oversee the UK's preparedness to develop, procure and manufacture pharmaceuticals (vaccines and therapeutics) in the event of a pandemic or health emergency, assisting with cross-government strategy development;
- ensure that the UK government and devolved administrations, their agencies, industry and academia are aligned around shared goals in developing vaccines and therapeutics for pandemic diseases;
- oversee strong links between government and the pharmaceutical industry;
- advise the UK government on how to incentivise pharmaceutical companies to invest in manufacturing facilities and research in the UK; and
- advise the UK government on its research investments, with a view to ensuring a diverse portfolio of pharmaceutical research in the UK.

During a pandemic, the panel should form the basis of specialist taskforces, which would be responsible for securing and developing medical interventions and leading on their procurement on behalf of the four nations of the UK.

They should have sufficient autonomy, delegation and direct access to senior ministers, similar to that which worked well in the Covid-19 pandemic.

Recommendation 2: Formalise work with communities about vaccine equity strategies

The UK government, Scottish Government, Welsh Government and Northern Ireland Executive should maintain networks with local communities to produce targeted vaccination strategies and communications.

To achieve this:

- The Scottish Government, Welsh Government and Northern Ireland Executive should establish local community networks, mirroring the approach being taken by the UK Health Security Agency.
- All four governments should work with their network to identify specific and measurable actions to improve vaccine uptake and reduce inequalities and consult with these networks on communications campaigns and delivery approaches.

- All four governments should publish a report annually on progress against these actions.

Recommendation 3: Improve monitoring and evaluation of vaccine uptake and delivery

Each of the four UK public health or health security agencies should work together to:

- maintain accurate, UK-wide insight into the state of vaccine uptake and hesitancy; and
- understand the measures proven to be effective in increasing uptake across the four nations of the UK.

There should be collaboration and some standardisation in the agreed approach across the four nations for monitoring and publishing routine vaccine uptake and vaccine confidence levels in order to better understand regional variations and patterns.

Each nation should set and regularly review its minimum acceptable standards of vaccine uptake, which would trigger targeted uptake campaigns if not reached.

The effectiveness of vaccine uptake campaigns should be evaluated against clear, standardised measures. This includes retrospective analysis of the Covid-19 uptake campaigns, as well as evaluation of routine vaccination uptake campaigns.

Recommendation 4: Proportionate access to linked healthcare records for use in the assessment of safety signals

The UK government and devolved administrations should work together, with their respective health delivery services, to facilitate and coordinate regulatory bodies' access to healthcare records in order to make the post-authorisation safety monitoring of new vaccines and therapeutics more efficient.

In particular, the Medicines and Healthcare products Regulatory Agency should be granted specific and proportionate access to comprehensive and comparable data from across the four nations of the UK, including linked primary and secondary healthcare data records.

This should include data on vaccines and therapeutics administration. This improved linkage must be accompanied by strong safeguards for patient confidentiality, which the Information Commissioner's Office should work with the four governments to ensure.

Recommendation 5: Reform the Vaccine Damage Payment Scheme

The UK government must reform the Vaccine Damage Payment Scheme as soon as possible. The reform should include as a minimum:

- increasing the £120,000 payment, at least in line with inflation to date;
- subsequently applying annual increases in line with inflation;



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Item 4.5: Appendix 02

Module 4 Report Recommendations

- introducing multiple levels of payment, commensurate with the degree of injury suffered; and
- any transitional arrangements necessary to provide for fairness between applicants to the existing scheme and applicants to the revised scheme.