

Witness Name: Caroline Lamb

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Exhibits: CL10

Dated: 05 August 2024

**MODULE 4
UK COVID-19 INQUIRY**

**WITNESS STATEMENT BY THE DIRECTOR GENERAL FOR HEALTH AND SOCIAL
CARE**

This statement is one of a suite provided for Module 4 of the UK Covid-19 Inquiry and these should be considered collectively. In relation to the issues raised by the Rule 9 requests served on the Scottish Government, in connection with Module 4, the Director General for Health and Social Care will say as follows: -

1. The Covid-19 vaccination programme required an unprecedented mobilisation of civic society, particularly across the public sector. The aim of the programme was to save lives and protect against ill health, and the rapid set up and subsequent management of our Covid-19 vaccine programme achieved this. A World Health Organization (WHO) study found that between December 2020 and November 2021 alone, an estimated 27,656 deaths were directly averted as a result of Covid-19 vaccination in Scotland [CL10/001 – INQ000249245].
2. The scale and pace of the programme was unique; between the first vaccine dose on 8 December 2020, and 8 March 2021, 1,937,894 vaccines were administered. By 8 June 2021 this had increased to 5,777,585. By 12 September 2021 everyone eligible aged 18 and over had been offered a second dose of a Covid-19 vaccine. This coverage was among the best in the world and testament to the dedication, resourcefulness, and flexibility of our whole-system approach to the Flu Vaccine and Covid-19 Vaccination (FVCV) programme.
3. The success of the vaccine programme was pivotal to the relaxation and ultimate removal of rules and regulations aimed at reducing the spread or harm of Covid-19. As outlined in the June 2021 Covid-19 Strategic Framework Update [CL10/002 - INQ000235137], the lifting of Level 0 restrictions was predicated on a sufficient number of individuals having had two doses of the vaccine. Effective rollout of the vaccination programme enabled a return to a more

normal way of living for the people of Scotland and was a key aspect of our overarching strategy for combating the Covid-19 pandemic.

Role of the Scottish Government in Vaccinations Pre-pandemic

4. The Scottish Government held responsibilities in relation to vaccination and immunisation prior to the pandemic under the National Health Service (Scotland) Act 1978. In practice, this consisted of policy development, decisions on finance and liaison with Health Protection Scotland (HPS), now Public Health Scotland (PHS), Health Boards and other partners on operational and delivery aspects.

Pre-pandemic Preparedness

5. The Scottish Government had been involved in scenario planning and response to a range of outbreaks and epidemics. In particular, officials were involved in a Scottish exercise called Silver Swan which looked at what the impact of an influenza pandemic would be. None of the outputs from exercise Silver Swan specifically looked at or recommended vaccination programmes as part of the outcomes or policy recommendations.
6. However, extensive work was undertaken to consider the impact of a vaccination programme on pandemic flu in general, with papers outlining the role and responsibilities of HPS, in delivering a vaccination programme, edits and updates to the Green Book, and considerable correspondence between medical officers, HPS and outside experts on the effectiveness of vaccines.
7. In terms of other potential pandemics, there was no recommended vaccine for Ebola cases potentially being imported into Scotland. Following suspected cases of Middle East Respiratory Syndrome (MERS) a Chief Medical Officer (CMO) letter was issued alerting Health Boards to the possibility of imported cases, but no references were made directly to any potential vaccination programmes [CL10/003 – INQ000376365].

Pre-pandemic preparedness undertaken in collaboration with the UK Government and other devolved nations

8. The Scottish Government engaged both directly and through four nations partners as part of UK-wide pandemic preparedness and resilience measures. This has ranged from long-

standing measures to build and maintain stockpiles of medicines to address challenges from potential influenza pandemics to more recent measures to establish stockpiles for the response to Covid-19. Collaborative working across the UK has also included partnership with industry to develop an onshore vaccine manufacturing capacity, with potential for pandemic deployment. For example:

- The Scottish Government has been part of four nations contractual arrangements to gain priority access to a pandemic-specific vaccine, in the event of an influenza pandemic. These arrangements have been in place and renewed as necessary, since before the 2009 H1N1/‘swine flu’ pandemic
- Four nations’ arrangements have previously involved holding stock of a pre-pandemic vaccine, based on an avian flu strain. Such vaccines may or may not provide some protection in the event of an avian flu pandemic and have the advantage of being immediately deployable in the event of a pandemic. On the advice of the New and Emerging Respiratory Virus Threats Advisory Group (NERVTAG) in 2015, the maintenance of stockpile was discontinued.

Role of the Scottish Government in Vaccinations during the Covid-19 Pandemic

9. In June 2020 the decision was taken to create a Vaccine Division to have oversight of all vaccination programmes and to start planning for a Scottish Government-led Flu Vaccine and Covid-19 Vaccine (FVCV) programme. An FVCV Programme Board was set up to oversee the following aspects:
 - Programme coordination
 - Service delivery, including workforce planning, workforce education, vaccine storage, cold chain and distribution
 - Policy advice, legal and regulatory issues
 - Vaccine safety
 - Surveillance, epidemiology and modelling
 - Vaccine confidence and informed consent
 - Digital and data
 - Performance management
 - Marketing and communications
 - Finance.
10. A chronology of key decisions taken over the time period set out in the Module 4 Rule 9 is provided, [CL10/004 – INQ000376394].

Key Figures and Decision Makers

11. The Senior Responsible Officer (SRO) for Scotland's FVCV programme was the Deputy Director with responsibility for vaccines, Derek Grieve. The national programme also had several Delivery Directors who oversaw the operational and delivery aspects of the programme. These were:
- Caroline Lamb, Delivery Director for the Flu and Covid-19 vaccination programme (Aug 2020 – Jan 2021)
 - Paul Hawkins, Interim Delivery Director (Jan 2021 – Feb 2021)
 - Colin Sinclair, Delivery Director (Mar 2021 – Aug 2021)
 - Karen Duffy, Operational Lead (Dec 2020 – Sep 2021); Delivery Director (Sep 2021 – May 2022)
 - Greg Thomson, Programme Director – Planning & Some Operational Lead cover (Sep 2020 – Apr 2022)
 - Nuala Healy, Operational Lead (May 2022 – present).

[In corporate statements submitted by Caroline Lamb to Module 1 (INQ000184897) and Module 3 dated 18 June 2024, it is stated in error that Ms Lamb was Delivery Director for establishing contact tracing and support for the isolation programme from May 2020 to August 2021. The correct time period in which Ms Lamb undertook this role is from May 2020 to August 2020.]

12. The Senior Civil Servants involved in the FVCV programme were as follows:
- Richard Foggo, Director of Covid Public Health (Jun 2020 – Feb 2021)
 - Stephen Gallagher, Director of Vaccines Directorate (Feb 2021 – Jul 2022)
 - Derek Grieve, Deputy Director Vaccines Operational Policy and Senior Responsible Officer (SRO) (Jun 2020 – Nov 2022)
 - Tracy Slater, Interim Deputy Director Vaccines (Nov 2020 – Oct 2021)
 - Marion McCormack, Deputy Director Vaccines (Dec 2020 – Mar 2021)
 - Jamie MacDougall, Deputy Director Vaccine Strategy (Dec 2020 – Aug 2022)
 - Jonathan Cameron, Interim Director – Digital Health and Care (May 2021 – Aug 2022).
13. The Senior Clinicians involved in the FVCV programme were as follows:
- Professor Sir Gregor Smith – Chief Medical Officer (CMO)

- Professor Alison Strath – Chief Pharmaceutical Officer (CPO)
- Professor Nicola Steedman – Deputy Chief Medical Officer (DCMO)
- Dr Syed Ahmed – Senior Medical Officer (SMO) *now retired
- Dr Lorna Willocks – SMO (took over from Dr Syed Ahmed)
- Professor Jason Leitch, National Clinical Director (NCD)
- Professor Fiona McQueen, Chief Nursing Officer (CNO) *now retired
- Professor Amanda Croft, CNO *now retired
- Professor Alex McMahon, CNO.

14. The Scottish Ministers with responsibility or direct portfolio interest for the FVCV programme were as follows:

- First Minister (FM), Nicola Sturgeon MSP (November 2014 – Mar 2023)
- Cabinet Secretary for Health and Sport, Jeane Freeman MSP (June 2018 – May 2021)
- Cabinet Secretary for Health and Social Care, Humza Yousaf MSP (May 2021 – Mar 2023)
- Minister for Public Health, Sport and Wellbeing, Joe FitzPatrick (June 2018 – 18 December 2020)
- Minister for Public Health, and Sport, Mairi Gougeon MSP (Dec 2020 – May 2021)
- Minister for Public Health, Women’s Health and Sport Maree Todd MSP (May 2021 – Mar 2023).

15. The Special Advisors (SpAds) who supported the Ministers above were as follows:

- David Hutchison
- Elizabeth Lloyd

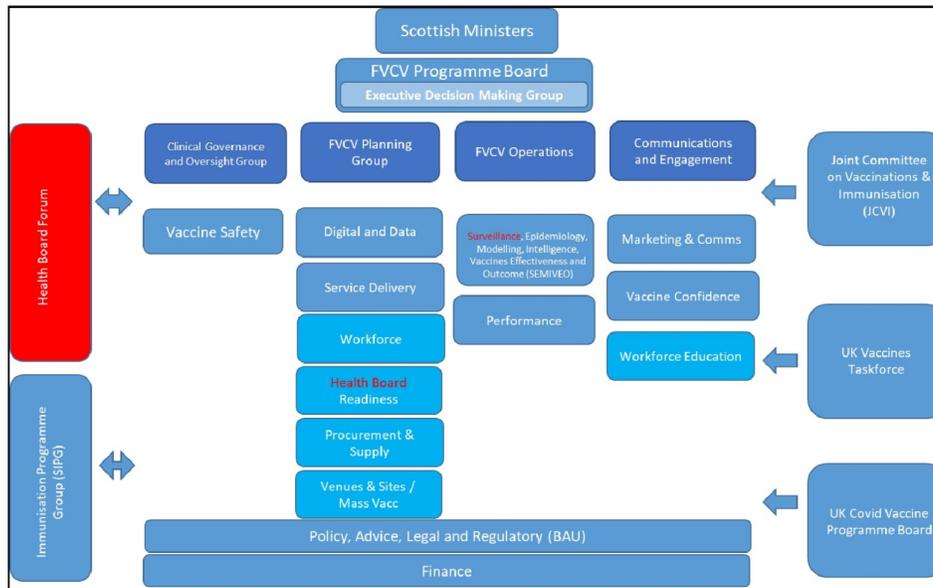
16. UK Government (UKG) colleagues involved with for the FVCV programme were as follows:

- Ben Pledger – Deputy Director, Vaccines Taskforce
- Ben Golding – Director of Strategy, Vaccines Taskforce
- David Edwards – Deputy Director, Delivery & Supply chains, Vaccines Taskforce
- Paul MacNaught – Director, Covid-19 Taskforce, Department for Health and Social Care (DHSC)
- Antonia Williams – Director, Covid-19 Vaccine Deployment, DHSC
- Laura Squire – Deputy Director Covid-19 Vaccine Deployment, DHSC
- Julie Alexander – Covid-19 Vaccine Deployment, DHSC.

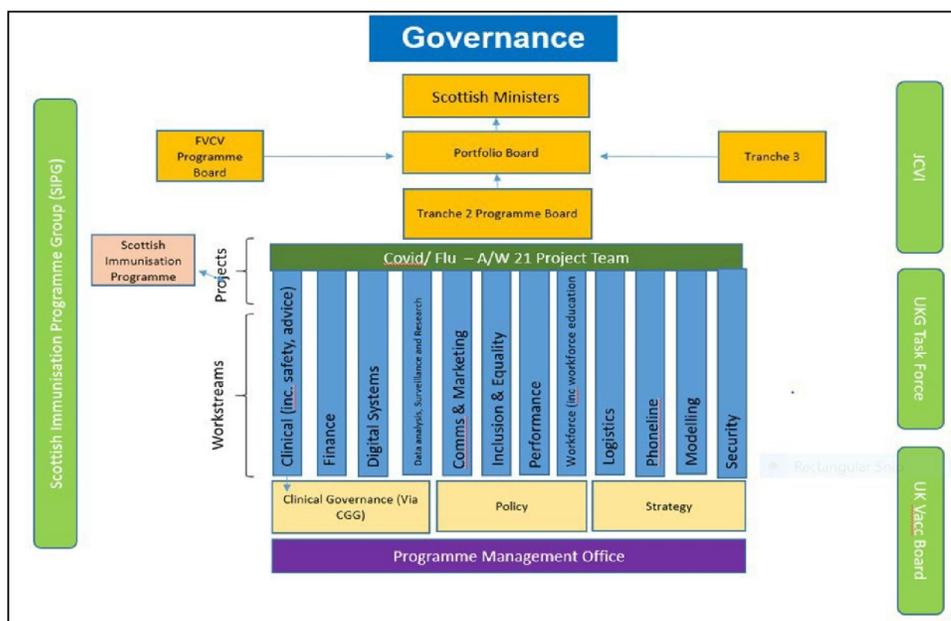
17. It should be noted that Scottish Government also worked with colleagues in NHS England and across the other devolved administrations across the UK.

Structures and Processes

18. The initial FVCV structure is displayed below, showing the key groups and their interrelations under the FVCV Programme Board as the Executive Decision Making Group:



19. The governance structure was amended regularly in line with programme developments, in particular to include a Clinical Governance Group and a workstream with a focus on inclusion and equalities. This later iteration of the structure is shown below:



Flu Vaccination Covid Vaccination programme (FVCV) governance

20. A decision was taken early in June 2020 to plan and prepare for the delivery of both the seasonal flu vaccine and a potential Covid-19 vaccine [CL10/005 - INQ000261179]. The rationale for this was based on the impact seasonal flu could have if circulating alongside a peak of Covid-19 cases. On that basis the existing seasonal flu programme was brought into the governance structure for the FVCV programme in Scotland.
21. There were regular meetings with the Cabinet Secretary with responsibility for Health and Social Care to update on the progress of the programme. These meetings were scheduled weekly however, this was sometimes altered to be more or less frequent depending on the status of the programme. Alongside these meetings, Ministerial submissions were issued to either provide an update or seek decisions on issues relating to the FVCV programme.
22. A list of FVCV meetings is being provided to the Inquiry by National Services Scotland (NSS). While the FVCV programme was led by the Scottish Government, it was delivered by the NSS programme management team. As such, associated documents for the FVCV programme delivery groups are not held the Scottish Government. An overview of these FVCV programme delivery groups is provided, [CL10/006 – INQ000376395].
23. The structure included a Clinical Governance Group which was operated by Public Health Scotland (PHS) and several workstreams and short life working groups (SLWG) led by Scottish Government. The Clinical Governance Group was initially co-chaired by the medical director of PHS and a Scottish Government Senior Medical Officer prior to PHS operating. SLWGs were set up at various stages of the programme to plan for key stages in detail (for instance on the roll out of vaccines to children and young people, and on the roll out of new vaccine types).
24. This structure was supported initially by a twice weekly Delivery Group meeting with representation from all NHS Health Boards and workstream leads, which, in the course of 2021, reduced to a weekly meeting. Extraordinary meetings were held when necessary.

25. The FVCV programme was run in partnership with a range of delivery partners including PHS, NHS Education for Scotland (NES) and NSS. Partners sometimes continued to operate existing relevant groups but expanded their remit to include FVCV. NES co-chaired the workforce workstream with Scottish Government, and NSS led on the phonline workstream. Scottish Government's Digital Health and Care Directorate led on the digital aspects of the programme with NSS Digital and Security (DaS) and NES as delivery partners. Furthermore, NSS PgMS (Programme Management Services) was commissioned to provide programme management support (PMO) for the Programme from the summer of 2020 and was initially supported with the setup of this function by KPMG.
26. Managing and monitoring risk was key to delivering the programme. The commission of NSS PgMS included management and responsibility for a risk register that covered all workstream areas. Risks were regularly reviewed and were standing agenda items at various governance forums such as regular (often daily) stand up meetings, Delivery Group and the Programme Board to ensure mitigations were in place, where possible. Key risks and dependencies were regularly discussed and shared with senior officials and Ministers through meetings and reflected in formal advice to Ministers.
27. Membership of the key governance groups comprised a range of representatives from territorial and national Health Boards, Scottish Government and other partners including a Convention of Scottish Local Authorities (COSLA) member on the Delivery Group representing Local Authority interests.
28. The FVCV Programme Board was stood up in July 2020 and originally met every 2 weeks until August 2021. The Programme Board was designed to provide strategic direction and oversight to the planning and delivery of the programme. The original Terms of Reference (ToR) for the Board noted the group was designed to:
- Work to ensure that the Programme will provide a lasting legacy for Scotland which will build on excellence in vaccinations across Scotland in the long term
 - Inform the evolution of the Strategic Document suite (Service Delivery Guide; Service Delivery Framework; Strategic Policy Framework; Communications and Engagement Strategy) to ensure the Programme has local Health Board leadership and innovation whilst ensuring appropriate national governance and oversight and ensuring equitable access for all, particularly those who are most vulnerable
 - Ensure that Programme Developments are informed by ongoing clinical and scientific evidence emerging from JCVI, MHRA, SAGE and others

- Have oversight of a workforce strategy which links to the wider SG Covid-19 ambitions, priorities and activities (e.g. the Accelerated Recruitment Portal) and takes cognisance of wider impacts across the system. It will include workforce planning, a communications plan, education plan and support mechanisms
 - Have oversight of the digital and data developments ensuring that they are sustainable and in line with the wider legacy work of the Programme
 - Monitor risks associated with programme delivery and planning providing guidance and decision making where risks have been escalated through the FVCV structure
 - Provide strategic direction and linking with the wider Covid response and how Vaccinations links to this.
29. The Programme Board continued to meet on a fortnightly basis until February 2022 when it moved to monthly.

The Scottish Approach to Vaccine Delivery

Context

30. A memorandum of understanding (MoU) linked to the General Medical Services (GMS) contract 2018, was agreed and published in November 2017 as part of a wider primary care transformation programme in Scotland [CL10/007 – INQ000376366]. Part of the MoU was to transfer the duty to deliver vaccinations from GMS (i.e. GP practices and their own contracted staff) to Health Boards. This change was delivered through the Vaccination Transformation Programme (VTP). The VTP was planned to be a 3-year phased approach, however, the programme was only part way through when the pandemic commenced, with some Health Board areas more advanced in their implementation than others. Although the completion of the VTP was postponed until April 2022 due to the pandemic, the fact that Health Boards had commenced this transfer of duties pre-pandemic meant that they were well placed to take on the responsibility of local FVCV vaccine delivery.
31. Engagement with stakeholders led to the decision to postpone the transfer date as it became clear that many of the same people within local Health Boards were also working on the Covid-19 response and this was agreed as the priority. Health Board Business Change Managers (BCM) were consulted through the BCM Steering Group and the final recommendation was made by the VTP Programme Board. The Cabinet Secretary for Health and Sport, Jeane Freeman provided the final sign-off for the pause [CL10/087 - INQ000499444, CL10/088 - INQ000499447 and CL10/089 - INQ000499448]. Chief

Professional Officers advised through CMO letters on 20 March and 9 April 2020 that immunisations other than Covid-19 should continue to be offered where safe and practicable to do so [CL10/090 - INQ000499449 and CL10/091 INQ000419273].

32. The VTP, together with issues around the initial availability of the Pfizer BioNTech Covid-19 vaccine and its complex characteristics, including transportation and storage at ultra-low temperatures, thawing requirements, further storage conditions once thawed and dilution and administration requirements, including that diluted product could not be transported, meant in most cases Scotland did not use GP practices either in the initial stage of the FVCV programme, or as a standard throughout. Neither did Scotland make routine use of community pharmacies for the FVCV programme, unlike other parts of the UK, however some Health Boards did choose to use them in their local delivery plans. Accordingly, the model in Scotland was delivered in the main by local Health Boards (with oversight from the central Scottish Government FVCV Delivery team), with staff contracted by Health Boards or working contracted shifts (whereby many GPs and practice nurses may have worked separate to their GMS contract agreement). This approach recognised the need to adapt and respond to emerging clinical advice, availability of vaccine supply coupled with the need to provide maximum protection to mitigate, at pace, against both the direct and indirect impact of the Covid-19 virus on society. This alignment provided staff resource and flexibility for the programme to effectively respond to rapidly changing circumstances.
33. This model of vaccine delivery also allowed Scotland to co-administer the Covid-19 vaccines alongside the flu vaccine during winter 2021, and in subsequent winter programmes. Critically, this also allowed more GPs, community pharmacists and primary care generally, to focus support on the wider pandemic response, rather than being tied up in vaccine delivery. Had this arrangement not been in place, GPs, community pharmacists and primary care may have had to pause essential primary care service in the community that only they could provide.
34. As highlighted in paragraph 32, the characteristics of the Pfizer BioNTech and Moderna vaccines meant that they were distributed directly to NHS Vaccine Holding Centres (VHCs) in Scotland where they were stored in ultra-low temperature facilities. From there the vaccines were packed down and distributed within the Health Board to the various NHS vaccination clinics. This ensured Health Boards operated within the extant regulations and the relevant licensing requirements for the supply of vaccines. As most Health Boards did not hold a manufacturing and import authorisation and/or a wholesale distribution authorisation they

could not distribute vaccines to a different legal entity, which would include GP practices and community pharmacies.

35. Although the Scottish Covid-19 vaccination programme did not routinely use GP practices or community pharmacies, a mix of mass clinics and smaller local community venues were available across Scotland. Health Boards were asked to plan their venues with their local communities in mind, with many established in trusted locations such as places of worship, workplaces or settings such as supermarkets or community centres. Although not routine throughout Scotland, some Health Boards – in particular in rural and island Boards – did work with their GP practices to offer the vaccine on-site to more vulnerable patients and some Health Boards trialed delivery in community pharmacies and the retailer Superdrug once a suitable Covid-19 vaccine became available in January 2021.
36. The AZ Covid-19 vaccine was the most suitable for delivery to primary care locations because it could be stored at +2 to +8°C. Initially, the vaccines were distributed to most GP practices weekly, based on available supplies under a storage and distribution contract with Movianto. This contract was managed by NSS. The delivery arrangements were the same service used for the historical flu vaccine distribution. Every primary care location had a weekly order cut-off time and a weekly delivery day. Where there was any spare vehicle capacity, the opportunity was taken to bring forward deliveries to a date earlier than the practices standard weekly delivery day. In a small number of Boards, a different arrangement was in place with vaccines directly distributed to practices from the Health Board VHC.
37. Data from PHS [CL10/095 - INQ000147517] indicated that GP administered vaccines were predominantly used for older age cohorts and feedback was provided through evaluation work [CL10/097 - INQ000283320], also undertaken by PHS, that consideration needed to be given to this as it was not sustainable under VTP. The Programme responded to this by ensuring suitable and accessible venues were available across communities. The PHS evaluation work did not, however, make recommendations for future delivery on increasing the use of GP practices or community pharmacies to achieve higher vaccine uptake in underserved communities.
38. As above, the use of community pharmacies and GP practices was considered in the delivery of the Covid-19 programme and used only in areas that were deemed appropriate for their communities to ensure maximum reach. The programme also engaged with these stakeholders to help inform planning and decision-making. This included engagement with the GPs at the Deep End group, which represented General Practice in areas of deprivation, and

bilateral negotiations with the British Medical Association (BMA) regarding the use of GP practices for the delivery of the Covid-19 vaccination which resulted in the publication of the Covid-19 Vaccination Directed Enhanced Service guidance letter in November 2020 [CL10/096 - INQ000480991].

39. To further explain the difference in approach between Scotland and England, it may be helpful to set out the different structures in place for delivery of GP services and some further considerations which applied to the Scottish context. GPs in England are organised into Primary Care Networks (PCNs) of multiple practices in densely populated areas. This is different to the individual practice model of delivery which operates in Scotland. This was important in the context of vaccine distribution; for example, the Pfizer vaccine was packaged in a single licensed box of 195 vials providing 1170 doses and the licensing terms did not allow for these vials to be further 'broken down' by the NHS for onward distribution to, for example, GP practices [CL10/106 – INQ000499465].
40. PCNs in England, typically serving between 30,000 to 50,000 people, were operating at a scale that did not require the Pfizer Covid-19 vaccine to be broken down in the way it would have needed to have been in Scotland if distributed to individual GP practices. As vaccine packs can only be broken down by licensed distributors, this would have been a constraint to implementation of a GP-led delivery model in Scotland. In addition, out with the PCN model, NHS England commissioned commercial distributors to pack down and distribute thawed vaccines to primary care locations, tracking the transport time. Whilst this could have been done in Scotland, it would not have been cost-effective and was more challenging because of geography and limited commercial providers with relevant licenses/scale within Scotland. The Health Board distribution of frozen vaccine to VHCs was therefore viewed as the better option for these vaccines.
41. In Scotland, delivery of childhood vaccinations is the responsibility of Health Boards, with children aged 6 months to 2 years (at risk) and 2-5 years (not at school) offered vaccination in community clinics. During the pandemic however, the delivery of childhood Covid-19 vaccines followed the same model as adult Covid-19 vaccination. From 2020, the flu vaccination offer was extended to include secondary school children, with all primary school (P1 to P7) and secondary school pupils (S1 up to S6) being offered vaccination in school. For Covid-19 vaccinations, as the Joint Committee on Vaccinations and Immunisations (JCVI) recommended descending age groups of children, the FVCV national delivery team worked with local Health Boards to explore options for delivery in or outwith the school setting, dependent on size of these sub-cohorts and time of year.

42. As above, Scotland's FVCV Programme differed in a variety of minor ways from the other UK nations. This was due to a range of reasons including the different epidemiology and prevalence levels of the virus at certain times, different NHS structures and delivery mechanisms, the healthcare system experiencing different pressures often linked to the spread of the virus, demographics and geography and stakeholder interests. Overall, though, the four nations generally took similar approaches to most of the Programme, despite these differences. Some of the differences to Scotland's delivery include but are not limited to:
- The duty to deliver vaccinations sitting with Health Boards in Scotland instead of Primary Care in the rest of the UK
 - Scotland uses the National Vaccination Scheduling System (NVSS) to support call and recall for vaccinations and to enable appointment creation, lettering and prompting, whereas in England, public communications are used as a call to action to encourage people to book their own appointment
 - Vaccine supply management in Scotland is undertaken nationally by NSS, whereas in England this is done locally by Primary Care teams
 - Scotland uses a large number of healthcare support workers in FVCV delivery whereas England is not so reliant on this part of the workforce.

Cohort Prioritisation

43. In Scotland, vaccination policy is informed primarily by the advice of the Joint Committee on Vaccination and Immunisation (JCVI) which informed all four UK nations' decisions on vaccination and immunisation.
44. The advice from JCVI was often high level and afforded flexibility in how the vaccines were to be delivered. In addition, it is important to note that unlike England and Wales, Scotland is not legally bound by JCVI advice, and it was therefore possible to make some decisions around cohort prioritisation and inclusion that were not explicitly stated within the JCVI advice. Whilst accepting the JCVI advice, the programme tailored the delivery approach to the needs of the Scottish population.
45. Early in the planning for the programme the JCVI provided interim advice on prioritisation highlighting front-line health and social care workers and those at increased risk of serious disease and death from Covid-19 infection, stratified according to age and risk factors. This supported early planning assumptions to ensure that people in these cohorts were appropriately supported to come forward to receive their vaccine.

46. The Scottish Government prepared a Cabinet paper in November 2020, which built on the initial JCVI recommendations from September 2020 [CL10/008 - INQ000232664]. The paper covered the considerations in relation to the development of a Covid-19 vaccination policy and sought agreement on an approach to priority groups. This paper was presented to and approved by the Cabinet on 1 December 2020.
47. From an early stage there were queries about the definition of frontline and non-frontline health and social care workers. A short life working group led by the Professional Advisor to the Chief Nursing Officer Directorate (CNOD) considered this. The group's work led to a letter being issued on 28 January 2021 by Paul Hawkins, Director for Covid-19 Vaccination Delivery, to provide clarification to delivery partners and others [CL10/009 – INQ000376373 and CL10/010 – INQ000242939].
48. The Scottish Government recognised early in the rollout that a process was required to consider issues around how JCVI advice was implemented in practice, and to also consider groups that weren't explicitly covered in JCVI advice. A Policy Panel group was established in March 2021 comprising clinical, policy, operational, and legal experts. This allowed holistic consideration of the merits of vaccinating specific cohorts, particularly where there was no explicit basis in JCVI advice to do so [CL10/011 - INQ000244062 and CL10/012 - INQ000243615]. Advice from the group was then considered by the Minister and a final decision taken. This is laid out in the Policy Panel Terms of Reference [CL10/013 – INQ000376398]. Some of the issues considered by the Policy Panel included:
- Prioritisation of foster carers
 - A review of the current policy and practice around in-hospital vaccinations, including those in mental health wards
 - Vaccination of those entering and resident in drug and alcohol rehabilitation residential centres [CL10/014 – INQ000376399].
 - Vaccination of seafarers
 - Vaccination of primary care givers of babies in neonatal intensive care units.

Data and Parameters used to Support Cohort Identification

49. The FVCV Programme drew on coding that General Practitioners had undertaken for their patients to identify those with eligible conditions. However, it became clear as the programme rolled out, that this data was not as reliable as had been originally anticipated. This was due to several reasons including inaccurate coding (e.g. medical conditions coded using differing

criteria in different areas) and incomplete diagnoses (e.g. historical diagnoses of cancer/immunosuppression marked as ongoing despite remission). Further sources of data were also utilised to help improve the reliability of this dataset, including hospital records, specialist databases and medication prescriptions. This, therefore, made the scheduling of cohorts, including the severely immunocompromised, challenging for NVSS.

50. Therefore, the Scottish Government encouraged Health Boards to use existing local referral pathways for identifying those with undocumented comorbidities, including those who were immunosuppressed and severely immunosuppressed. Health Boards were provided with template referral forms and encouraged them to continue using existing mechanisms.
51. Members of the public were also encouraged to speak with their clinician or General Practitioner if they thought they should be in a priority group but had not received an invitation.

The Effect of Supply Issues on Prioritisation Decisions

52. It was recognised early on from discussions at four nations meetings that supply may be a limiting factor in Scotland and the wider UK's vaccine rollout. Logistical challenges, such as ensuring the vaccines were stored and transported at the appropriate temperature, were compounded by Scotland's geography and population distribution.
53. Through policy engagement across the Scottish Government, it became clear that several non-health and social care groups were likely to seek priority access to vaccination based on their occupation and were making representation to officials and politicians on that basis. This included key workers who perceived themselves to be at higher risk of infection, such as teachers, other blue-light services including the police, the prison service and those in critical infrastructure roles. Due to this and given the likely limited supply, the policy team's approach was to focus on the JCVI's interim guidance, aimed at reducing severe illness and vaccine-preventable death from the virus. The Scottish Government concluded that the clinical risk of these groups lobbying for inclusion was not increased due to their occupation therefore they were not initially included in the priority access groups.
54. This approach to prioritisation was noted in the aforementioned Cabinet Paper (1 December 2020) which detailed the initial approach to Covid-19 vaccines deployment [CL10/008 - INQ000232664]. Considerations around supply and prioritisation were also set out in the Scottish Government's FVCV Delivery Framework [CL10/015 – INQ000376367] and the

subsequent Covid-19 Vaccine Deployment Plans published from 14 January 2021 onwards [CL10/016 – INQ000147414].

55. The UK Vaccines Taskforce asked the JCVI to have an early discussion about prioritisation of vaccine supply. This took place in May 2020. Scotland was represented in this forum by the Immunisation Coordinator for NHS Lothian, Dr Lorna Willocks, who was co-opted as a member of the Committee for input on operational issues affecting Health Boards in Scotland.
56. The Scottish Government closely followed the development of new vaccines, taking due regard of all relevant information when planning for deployment, to allow for the swift, and flexible, deployment of any available vaccine as soon as possible. In order to develop an initial deployment plan for a Covid-19 vaccine, the initial planning basis in December 2020 was for a 75% uptake. This was based on historical data on vaccine uptake, but it was recognised that the programme could flex and meet higher demand, if required, which was ultimately what happened.
57. In spring and summer of 2021, supply issues began to impact the programme in Scotland, and often at very short notice. This was due to several factors including Astra Zeneca batch failing quality assurance and delays of stock arriving from India. Given the programme was operating close to a 'just in time' delivery model, the pause or disruption in vaccine supply led to some appointments being cancelled and a requirement to reschedule appointments.

Workforce

58. As referenced in paragraph 30 to 42, Scotland's NHS structures differ from those in the rest of the UK and the workforce impact of this, coupled with the changes introduced by the VTP, meant there were different vaccine workforce considerations during the pandemic. Given workforce was likely to be a limiting factor for the FVCV programme, the amendments to the Human Medicines Regulations 2012 by the UK Government to introduce regulation 247A allowed unregistered healthcare support workers (HCSWs) to be deployed quickly to support with administration of the first and second doses of the Covid-19 vaccine. As the programme progressed, unregistered HCSWs continued to play a significant role in Scotland. This was particularly the case in the larger clinics run by Health Boards which benefited from continued deployment of this staffing group. In our experience, a delivery model using HCSWs to deliver under National Protocols, as is currently possible due to regulation 247A, is most workable in larger clinics with more staff, as HCSWs work alongside registered staff who take consent and provide supervision. The introduction of the regulation 247A also supported Scotland's

ability to put in place a workforce to deliver a mass vaccination programme that suited our circumstances and Health Board-led model. This also enabled us to scale up the delivery of the programme to match delivery to JCVI recommendations and availability of vaccine.

Geographical Considerations

59. While the JCVI priority cohorts were by far the main driver in delivery decisions, operational and logistical considerations, often driven by geography, also played a part in how Health Boards made the most efficient use of the vaccine to reduce wastage and facilitate vaccinations. Some areas of Scotland are very remote and hard to reach due to geography and/or have particularly small populations, for example some of the smaller island populations.
60. Although it may have been possible to vaccinate residents of small islands or remote communities in line with the JCVI priorities this would have meant frequent use of small quantities of vaccine, or staff or patients having multiple trips to remote destinations. Therefore, from early in the programme, remote and rural Health Boards were able to request the flexibility to vaccinate across cohorts, sometimes out of priority order, where it would make operational sense. This was referred to at the time as “bundling” [CL10/017 – INQ000376375]. For example, where all people on a small island aged over 50 could be vaccinated in one sitting, this reduced staff travel or stock transport and environmental impact, made prompt use of vaccines to protect people and minimised the potential for vaccine waste.
61. Boards were asked to apply to the national programme for permission to “bundle” as an exception based on specific circumstances, such as:
 - Population
 - Difficulty of access, for example:
 - Air
 - Sea
 - Distance
 - Patient or staff travel time.
62. To enable practical application and ensure consistency of approach, Health Boards were asked to provide written justification to the central Programme in January 2021. This is noted in the FVCV Programme Decision Log, provided [CL10/018 – INQ000376376]. Four

Health Boards requested bundling at this initial stage. To do this, Health Boards required an adequate volume of vaccines to cover more than one eligible cohort.

63. A number of rural and island Health Board delivery models included the use of mobile vaccination units to access more remote areas and reach those who would otherwise be unable to travel to a vaccination clinic. The FVCV Programme also engaged and funded the Scottish Ambulance Service (SAS) to provide several fully staffed mobile vaccine units which were offered to each of the Health Boards with the focus of reaching remote communities and those experiencing barriers [CL10/019 – INQ000241264 and CL10/020 – INQ000244235]. Some Health Boards developed relationships with local transport providers that offered buses to be used as vaccination clinics. In many cases, people were also offered free transport to clinics through partnerships developed with local transport providers and the third and voluntary sector, in particular in areas of rural deprivation.
64. The Scottish Government's Health Workforce policy team provided guidance for Health Boards on the recruitment of vaccinators and the diversification of workforces to ensure sufficient coverage of Health Board areas [CL10/021 – INQ000376377]. Additional staffing capacity was made available to Health Boards through the Covid-19 Health and Social Care Accelerated Recruitment Portal and the General Medical Council and Nursing and Midwifery Council emergency registers. The approach towards resourcing the FVCV programme was devolved to Health Boards which took responsibility for deploying staff across their own geographical locations.

The Role of Data in Vaccine Delivery

65. Prior to the pandemic, vaccination data became available in reporting post-vaccination event, after varying lengths of time depending on the vaccine. However, for the FVCV programme, data on administered vaccines was collected directly when patients received a vaccination, enabling real-time data monitoring. This data was primarily collected through the Vaccine Management Tool (VMT), which in the absence of any existing national digital system, was designed at pace and developed specifically for the FVCV programme. The VMT was developed in partnership with a group of public sector organisations, including NES, NSS, PHS and the Scottish Government. Alongside the data collected through the VMT, information was also captured and collated on scheduled appointments and appointment capacity by local Health Boards.

66. The data collected on administered vaccines was cleansed, analysed and routinely published by PHS. This published data allowed both the public and decision makers to understand differences in vaccine take-up by population demographics such as age, sex, location and ethnicity. Analysts and decision makers within the Scottish Government were also given routine access to more detailed, unpublished, management information. This would, for example, give more specific detail on vaccine take-up within demographics.
67. Management information on administered vaccines, appointment scheduling and appointment capacity was also captured and displayed in internal dashboards maintained by NSS. This was available from the start of the vaccine rollout in Scotland and was used by senior decision makers and Ministers from an early stage to help guide our deployment decisions. It also allowed decision makers at local and national level to view close to real time information on the delivery of vaccinations across Scotland.
68. The NVSS platform was developed at speed by NSS to provide a national solution for the scheduling of Covid-19 vaccinations. NSS used the existing SNOW platform to populate cohort information for NVSS which allowed for initial mass scheduling and lettering of those eligible for vaccination. Once the digital capability allowed, NVSS developed at pace a booking portal with the facility for citizens to book and rearrange appointments.
69. The functionality and capability of NVSS improved in response to feedback, including introducing the ability to book appointments in clinics in other Health Board geographical areas that a resident may reside, starting from the autumn/winter 2021 FVCV programme [CL10/022 – INQ000245134]. Such a system was not available prior to the start of the FVCV programme.
70. On 18 November 2021, Scotland introduced a question on ethnicity to the VMT which meant that people attending their appointment were asked their ethnicity. The question was then added to the booking portal and National Vaccination Helpline (NCC) from 23 December 2021. By the end of the winter 2022 programme, ethnicity was assigned to 93% and 90% of Covid-19 and Flu vaccine records respectively. Prior to the FVCV programme this information was not routinely recorded for existing vaccinations.
71. Informal information and insights from Health Boards on local coverage and any associated issues were routinely captured during individual fortnightly calls with each Health Board, led by Scottish Government operational delivery leads. Local data on vaccine uptake was utilised at the Health Board meetings to scrutinise performance and offer support with their delivery

plans. Action points from these calls were logged and discussed and progressed across the relevant Programme meetings and workstreams [CL10/060 – INQ000493478, [CL10/061 – INQ000501271, CL10/062 – INQ000499454, CL10/063 – INQ000501273 and CL10/064 – INQ000501274].

At the start of the Programme, updates on Board progress were provided to Ministers as a result of these meetings. As the Programme progressed, new staff had different ways of logging these actions, therefore there is no single action log for the full timeframe. Examples of informal notes from Health Board meetings are provided [CL10/062 – INQ000499454] and [CL10/063 – INQ000501273]. An example of a regular update to Ministers on Health Board vaccine performance is provided [CL10/64 -INQ000501274].

72. The Scottish Government Vaccine Deployment Plans [CL10/016 - INQ000147414] outlined our approach to Covid-19 vaccination, including in terms of cohort prioritisation, delivery, and workforce. Publishing these plans provided clarity and offered the opportunity for scrutiny from the media, public, and parliament. In addition, regular written Ministerial updates were provided which included vaccination data in various formats, including: First Minister's Questions briefings, submissions, PowerPoint presentations, and other briefings, examples of which are provided: [CL10/023 – INQ000376390 and CL10/024 – INQ000376391]. Scottish Government officials also met regularly with the Cabinet Secretary for Health and Social Care to provide Programme updates and data was used at these meetings.
73. The FVCV data also fed into Scottish Government strategic conversations and planning. For example, the Four Harms Group.
74. PHS started publishing uptake data on 27 January 2021. Whilst uptake was broadly high in the general population, some communities and groups were identified as having lower uptake.
75. Scottish Government communications and PHS used coverage data, as well as other relevant data and insights, to target specific public messaging to the following groups: students, healthcare workers, social care workers, certain ethnic minorities, pregnant women, prisoners, young people, parents of 5-11, 12 -15, and 16-17 year olds, those of child bearing age, and unpaid carers.
76. Certain ethnic minority communities had particularly low vaccine uptake, as demonstrated through the collection of ethnicity data, including Polish, African, and Gypsy/Traveller, which necessitated concerted outreach efforts at a local level.

77. Scottish Government communications and marketing also used coverage data to inform the translation of vaccine messaging to those groups and communities that had a lower vaccine uptake rate. Translations were also produced for communities even if they did not necessarily have lower uptake, in recognition that any potential language issues still represent an additional barrier to vaccine uptake.
78. The fortnightly Health Board performance calls reviewed uptake data as a standing agenda item to gain local feedback on what the data indicated. This enabled challenge from the programme and, if necessary, the Scottish Government and Ministers, if uptake was at a lower than targeted level. These meetings were also used to understand and share best practice if uptake was at a higher than targeted level.
79. Feedback from community groups and stakeholders also indicated that certain ethnic minority groups found mass vaccination clinics to be an additional barrier to vaccination. Intelligence gained from fora such as the Vaccine Inclusive Steering Group (which is discussed further at paragraph 175) which sought to amplify the voices of such communities, informed us that people felt more confident coming forward for vaccination if clinics were held in smaller, community settings they were more familiar with. This type of intelligence combined with coverage data was routinely fed back to the national programme by those working in the Inclusion Workstream (further detail on this workstream is set out at paragraph 186 below and informed national and local decision-making on a variety of topics. Progress on actions in response to feedback from these stakeholders was managed through the Inclusion Workstream, tying in with wider programme governance.
80. The national programme did not reconsider the use of mass vaccine clinics in response to feedback from the Vaccine Inclusion Steering Group given their importance in delivering the vaccine to a large number of people as quickly as possible. Health Boards were however encouraged to supplement these mass clinics by locating smaller clinics in suitable local settings and in areas of deprivation using the Scottish Index of Multiple Deprivations (SIMD) to reduce barriers of trust, time and cost for under-served communities.
81. Similarly, data indicating lower uptake in pregnant women was used to encourage alternative approaches to offering vaccines for this group. For example, vaccine clinics were held in maternity clinics with midwives giving advice as trusted experts.

82. Data also began to show low uptake amongst the social care workforce, with uptake rates varying between doses and in different social care settings (e.g. care home and care at home staff).
83. A submission to the Cabinet Secretary for Health and Social Care on 15 July 2021 outlined the considerations needed if Covid-19 Vaccinations were to be made mandatory for NHS Scotland staff [CL10/101 - INQ000240381]. The advice confirmed that there were serious considerations that needed to be made, including the potential for legal challenges, due to ethical and human rights considerations. There was also a need for consideration of the impact on minority ethnic staff, as evidence showed that there was a higher rate of vaccination hesitancy amongst minority ethnic groups. The Cabinet Secretary's final position was that the Covid-19 vaccine should remain voluntary for staff.
84. Further, engagement with employers and trade unions/professional organisations in Scotland indicated strong opposition to any proposals to make staff testing or Covid-19 vaccination a condition of employment in Scotland. Strong opposition was voiced to this, as it could have appeared to contradict public health messaging and resulted in health and social care workers being treated differently to the general population or other workforces.
85. Employers are ultimately responsible for the safety of staff, and this included managing the risk of staff declining a Covid-19 vaccination at the time. NHS Scotland staff are required to comply with reasonable requests from their employers, designed to promote their safety, the safety of other staff and the safety of patients and service users. Professional Codes of the Regulatory Bodies, in general, also require that registrants will put the safety of their patients and clients first, to promote professionalism and trust in the healthcare professions.
86. Regulatory Bodies advised that they assess each case individually on its own merits, in the prevailing context at the time. Scottish Social Services Council (SSSC) feedback was that, if Covid-19 vaccination was made mandatory, it would be likely to take failure to comply seriously, particularly where there is an impact on the safety of patients. In this context, refusal to be vaccinated could be considered as a refusal of a reasonable management request and the consequences could be disciplinary, regulatory, or both. However, there were concerns on how this could be enforced, in particular, whether any form of penalty, could be deemed as proportionate. There were also concerns around the impact on services, where redeployment of staff who declined to be vaccinated, to non-frontline roles would be difficult and could cause disruption.

87. In addition, as part of the public health and social care workforce is self-employed (e.g. many GPs who also visit care homes), it is likely that a duty to take reasonable steps to ensure that the self-employed workforce was vaccinated would place that obligation on the individual worker.
88. The Scottish Government also took into account the fact that some staff would still refuse to be vaccinated, even if it was made mandatory. The Scottish Government therefore focused on working with health and social care employers, providers, trade unions and professional organisations to encourage uptake of the Covid-19 vaccination.
89. Efforts to formulate a UK-wide policy on this issue and ensure a consistent approach may have formed part of the regular 4 Nations Chief Medical Officers meetings; however as minutes of these meetings were held by UKG we are unable to confirm if this was the case.
90. Traditionally, uptake for seasonal flu vaccines in the health and social care workforce has been lower than other parts of the population. Pre-pandemic, flu uptake in this group ranged from 35.3% in 2016/17 to 53.8% in 2019/20. Some key themes around vaccine hesitancy in this group were to do with convenience; such as how easy it was to log in and book an appointment or find a drop in clinic, not being able to take time off work to receive the vaccine, and the clinics not being in a convenient location. Another key determinant of low uptake was around side effects, especially that they may cause workers to be unable to go to work and, in some cases, not be paid. Insights work into this group reported that the pain and stiffness in the arm post-vaccination made it difficult to carry out their, often physically demanding, roles. Many also expressed confusion about why they had to keep receiving additional doses for protection, misunderstanding that protection wanes and repeated boosting was necessary. These factors were explored in PHS' evaluation report '*Frontline health and social care workers' views and experiences of the COVID-19 vaccination programme in Scotland*', published in July 2021 [CL10/025 – INQ000376392]. As the pandemic progressed past the Alpha and Delta variants into the Omicron phase, many also reported having Covid infection and the symptoms being mild, so not feeling they were at risk enough to warrant receiving another vaccine.
91. Concerted work was therefore undertaken at a national and local level to engage with stakeholders and put in place suitable delivery approaches and tailored communications for this group. For further information on this work please see paragraph 175.

92. The National Vaccination Helpline (NCC) was also used to provide intelligence on the rollout, identifying commonly occurring issues, reasons for calling and public complaints. This was then fed back to Scottish Government and FVCV delivery colleagues.

Appointment Methods

93. A decision was made to use blue envelopes to issue vaccination appointment letters to make the letters stand out. This enabled the Royal Mail to prioritise delivery and to make it immediately obvious to the public their vaccine invitation letter was enclosed, therefore ensuring it was not disposed of accidentally. This decision was generally positively received by the public and increased public awareness and the media attention around the Programme.
94. Research found that different booking methods suited different age groups with older cohorts preferring an appointment invitation in the post and younger age groups preferring to self-book or attend a drop-in clinic [CL10/026 – INQ000147516]. The Programme was able to learn from and respond to these insights and tailor the booking approaches. For example, Health Boards were asked to offer local drop-in clinics from the summer of 2021 at the time when younger cohorts began to be called forward. In response to initial lower uptake in the younger adult age group, especially young men aged 18-39, Health Boards arranged for vaccines to be given in pop-up clinics in a variety of community settings including shopping and leisure centres, car parks, and sports venues, including at football grounds.

Delivery Models

95. NHS Health Board delivery models mainly relied on mass vaccination centres to reach large numbers of people. However, through the programme's approach to supporting inclusion and equalities, more tailored, person-centred delivery approaches were also planned for and undertaken with community outreach, with some rural GP practices being used in a mixed model approach [CL10/027 – INQ000376379].
96. Data showed most vaccines administered before March 2022 were in mass or community vaccination centres [CL10/026 – INQ000147516 and CL10/028 – INQ000376380]. Whereas this model suited many people, others were deterred due to issues such as the travel required to access venues or concerns around attending large, busy, public spaces.

97. Evaluation of delivery approaches undertaken by PHS found that outreach activity tended to be preferred by minority ethnic communities, and particularly within African communities [CL10/028 – INQ000376380]. The Scottish Government regularly encouraged the use of locally targeted approaches, with support from community leaders, to reach groups which experience additional barriers. Even with this concerted effort, however, uptake data showed that those in certain ethnic minority groups continued to have significantly lower uptake than the rest of the population [CL10/029 – INQ000376381]. This trend was also seen consistently in areas of multiple deprivation (SIMD). The programme took a continuous improvement approach to ensuring the delivery approach was meeting the needs of every community. Further information on activity to address emerging issues and persistent challenges can be found at paragraph 170 - 180.

Use of MACA (Military Aid to Civil Authorities)

98. Military support was provided to the Scottish Government in the development of the vaccination programme and to Health Boards to alleviate significant pressures in acute settings and in the Scottish Ambulance Service. Additional support was also requested to support the increased pace of the vaccination programme. Military assistance provided greater capacity which allowed for quicker delivery and increased volume in the FVCV programme. It provided a flexible workforce that could be redeployed quickly as the requirement evolved [CL10/030 - INQ000241621 and CL10/031 - INQ000239945]. It also enabled the redeployment of NHS registered staff to other services.
99. In January 2021, 12 military planners provided support to the national programmes for vaccination and testing with a predominant focus on vaccine-related issues. A further 23 planners were provided and assigned across the territorial Health Boards to offer local planning support.
100. Furthermore, as part of efforts to support the initial phase of vaccination activity in early 2021, approximately 100 military staff were deployed to support the set-up of vaccination sites. Thereafter, arrangements were implemented to provide Health Boards with access to up to 109 military personnel to support direct delivery of vaccination activity. These personnel would form either “Vaccinator Quick Reaction Force (V-QRF)” teams, usually comprising of 10 military vaccinators and often accompanied by an independent prescriber; or “Vaccine Support Force (VSF)” teams tasked with supporting the set-up and operation of vaccination centres.

101. Accounting for the evolving vaccine supply position and acknowledging the requirement to maximise delivery capacity within Health Boards, access to these personnel was extended in March 2021 and expanded to provide for access of up to 138 individuals. This expansion reflected the preferred vaccinator to support staff ratio in operation across the wider programme. The requirement for MACA support was reviewed regularly thereafter, with personnel deployed as needed throughout spring and summer 2021.
102. In Autumn 2021, the Scottish Government and Health Boards determined that further military support could assist in alleviating significant pressures in acute settings and the Scottish Ambulance Service given the rise of a new variant. Additional support was therefore requested to support the increased pace of the FVCV programme.
103. The winter 2021-22 FVCV programme increased in both scale and pace as a result of JCVI advice to offer boosters to 50 – 59 year olds and first doses to 12 – 17 year olds. That pace was slowed by a delay in the JCVI advice to allow final confirmation of advice for co-administration of Covid-19 and flu vaccines, and to specify the vaccines used. This resulted in the revised programme delivery starting in mid-September rather than early September. While planning assumptions were provided by the Scottish Government, Health Boards formal delivery plans were not accepted until it could be confirmed the JCVI advice supported those delivery plans. This resulted in a build-up of outstanding boosters, due to eligible 50 – 59 year olds, of c.1.1m. The resultant combination of outstanding doses and maintaining the programme at pace, outstripped the capacity of the health vaccination workforce, necessitating the deployment of 121 military personnel across 11 mainland territorial Health Boards from 1st November – 2nd December.
104. Further JCVI advice in November 2021 recommended the inclusion of boosters for 40 – 49 year olds and second doses for 16 – 17 year olds, increasing pressure on the programme [CL10/032 – INQ000376382]. The FVCV programme determined that the older cohorts should be vaccinated fully before the majority of these younger cohorts became eligible for their booster / second doses given the relatively higher clinical risk of the older cohort. In addition, there was a need to offer vaccination boosters to all those 18 years old and above by the end of January 2022. Military deployment was therefore extended and a further 100 vaccinators were sought. The MACA deployment was kept under continual review and redeployment directed according to the changing needs of the programme. MACA support to the FVCV programme was stood down in January 2022.

The Role of the Wider Public Sector, Including Integrated Care Systems, in Supporting Roll-Out

105. As outlined earlier, with the Vaccination Transformation Programme (VTP), the responsibility for vaccine delivery in Scotland moved from primary care (GPs) to sit with Health Boards and, therefore, Health and Social Care Partnerships (HSCPs).
106. Scotland has an integrated health and social care system as a result of the Public Bodies (Joint Working) (Scotland) Act 2014. This meant that during the pandemic, Health Boards were well placed to work closely with their local authority partners through the HSCPs and Integration Joint Boards.
107. HSCPs played a key role in supporting the vaccination programme in a number of ways, including support for:
 - stakeholder engagement through local equalities advisory and working groups
 - delivery of vaccinations
 - accessible, local venues for vaccine clinics. A range of local authority owned venues were utilised as vaccine clinics
 - contracts with local transport providers such as taxis and minibus companies to assist with free or reduced cost transportation to appointments
 - assisting with the delivery model for housebound vaccinations in some Boards.
108. The response to Covid-19 and the delivery of the FVCV programme was not limited to Scottish Government, PHS and the NHS. The whole of the public sector was effectively mobilised to support various aspects of programme delivery. Local Authorities helped secure venues. HSCPs administered vaccines and helped identify vulnerable groups such as the housebound. Drug and Alcohol Partnerships and homeless services worked closely with the programme to deliver vaccination to those communities who do not always regularly present at traditional health venues. Immigration services helped us identify and reach out to asylum and refugee communities, to name just a few examples. St John's Ambulance and the Red Cross also provided vital support as vaccinators and volunteers supporting clinics. These public sector partners became increasingly important at times of surge.

Development of Vaccines and Therapeutics

UK Vaccine Preparedness in Early 2020

109. Prior to Covid-19, there were precedents for emergency arrangements in the form of the Essential Medicines Buffer Stock, the Memorandum of Understanding (MOU) for services regarding Pandemic Influenza Preparedness Programme, and Emergency Preparedness Resilience and Response and the existing MOU for the supply of a vaccine during an influenza pandemic.
110. The rapid set-up of the UK Government Covid-19 governance structure for vaccinations (Covid-19 Vaccines Taskforce and Programme Board) in the Spring of 2020 aided these existing structures. Further information on these governance structures is provided in paragraphs 18-24.

The Scottish Government's Role in the Development of Covid-19 Vaccines

111. Scotland did not provide funding for the development of any of the Covid-19 vaccines currently approved for use in the UK. Scotland agreed to a four nations approach to planning for the development of Covid-19 vaccines. The UK Government therefore led on the monitoring of the development of, and investment in, a range of research projects for Covid-19 vaccines.
112. Early in the pandemic, the UK Government established two governance structures - the UK Vaccines Taskforce and the UK Vaccination Delivery Programme. Vaccine research along with funding, manufacturing and procurement was led by the UK Government. Scottish Government officials, and therefore Ministers, were kept up to date on this via the four nations Programme governance, which also provided an opportunity to feed in any specific requirements from the Scottish Government.
113. In March 2022, Scottish Enterprise awarded a grant to French pharmaceutical company Valneva Scotland Ltd, which has a facility in Scotland and plays an important role in Scotland's life sciences sector. The Scottish facility is an important asset, developing and manufacturing vaccines for prevention and treatment of many infectious diseases and supporting high-quality jobs. The Scottish Enterprise funding included £12.5m to support Covid-19 vaccine work, however the funding was revised when the company suspended development of the vaccine after the EU significantly reduced its order from 60 million to 2.5 million doses in July 2022.

114. Although the Valneva Covid-19 vaccine was approved for use by the MHRA, it has not been deployed in the UK after its Covid-19 contract was cancelled by the UK Government in September 2021, prior to any use in the national programme. The termination of the contract had no impact on relations between the Scottish Government and Valneva or the pharmaceutical industry more widely.
115. As Scotland was not responsible for the development, manufacturing and procurement of Covid-19 vaccines, it is difficult to comment on any obstacles that were encountered in this regard.

Scottish Involvement in the Procurement and Manufacture of UK Covid-19 Vaccines

116. Four nations procurement of vaccines was common prior to the pandemic for large scale vaccination programmes, managed through an arrangement with UKHSA (UK Health Security Agency, formerly Public Health England) and the DHSC. This approach has historically offered economies of scale and supports four nations utilisation of any limited stock to protect those most at clinical risk.
117. During the early stages of the pandemic, the Department for Business, Energy and Industrial Strategy (BEIS) led on the development of vaccines and the supply chain surrounding their delivery. Scottish Government officials, therefore, engaged with BEIS officials who supported the UK Government's Covid-19 Vaccines Taskforce and Programme Board. Scottish Government held an observer role from an early stage on the Vaccines Taskforce but was not invited to be part of the membership.
118. In the highly competitive global environment for Covid-19 vaccine in 2020, effective alternative routes to market were not available and solo procurement was never considered to be a viable option for Scotland. The UK Government opted not to participate in the EU pooled arrangements for procurement. This was a decision reserved for the UK Government and Scotland did not provide formal input.
119. An Agency Agreement was prepared in August 2020 to allow the Vaccine Taskforce to purchase Covid-19 vaccine stocks on behalf of Scottish Ministers [CL10/033 – INQ000376400]. Discussions took place between Scottish Government, Department for Health and Social Care (DHSC) and BEIS around Scotland's percentage deployment share of the vaccines being based on population. DHSC and BEIS did not initially want to commit to this on the basis that JCVI would recommend priority groups, and this should inform

deployment on a UK wide basis. Scotland, therefore, signed the Agency Agreement without this commitment to allow for the Vaccine Taskforce to move forward, however this meant Scottish Ministers were not fully assured at that stage about the share of the vaccine Scotland would receive. This led to the Cabinet Secretary for Health and Sport subsequently writing to the Secretary of State for Health and BEIS on 27 August 2020 [CL10/102 – INQ000499468] to raise the issue and to inform them that Scotland was only signing the Agreement based on the assumption of access to a Barnett share of any available vaccine. It was later confirmed in a letter from the then Secretary of State, Rt Hon Matt Hancock MP), in November 2020, that Scotland would receive a Barnett share formula of the vaccines procured [CL10/034 – INQ000376393].

120. Throughout this time, Scottish Government officials and Ministers utilised and valued NSS colleagues' advice and expertise to ensure that discussions on procurement with four nations were taking into account the Scottish perspective.
121. The Scottish Government did not hold any contracts with vaccine manufacturers for vaccine development or procurement. These were all dealt with on a four nation basis by the UK Government governance put in place via the Vaccine Taskforce.
122. As covered in paragraphs 113 to 114, one vaccine manufacturing facility, Valneva Scotland Ltd, was located in Scotland. The UK Government contracted the facility with the aim of creating critical infrastructure to support the response to Covid-19 and any other future national medical emergency. A second contract was awarded by the UK Government which was intended to fund manufacture of a Covid-19 vaccine. In September 2021 the UK Government cancelled its vaccine purchase contract and stopped all funding for the facility and vaccine development. Scottish Government Ministers and officials met with Valneva representatives during this time to seek to ensure the long-term future of the site, and the associated jobs. These meetings did not pertain specifically to the development, procurement and manufacturing of UK Covid-19 vaccines.
123. The Scottish Government is supportive of the 10 year Moderna Strategic Partnership with the UK Government, given the potential role in future vaccine manufacture of a UK-based state-of-the-art vaccine manufacturing centre, with the ability to produce up to 250 million vaccines a year.

124. The Scottish Government also values the expansion of mRNA vaccine technology with the ability to rapidly produce new vaccines, when compared to conventional vaccine technology.

Scottish Health Board Participation in Covid-19 Vaccine Related Studies

125. The Scottish Government's Chief Scientist Office (CSO) invests in research infrastructure in Health Boards through NHS Research Scotland. This allows the NHS in Scotland to host and participate in clinical research studies and trials. This infrastructure was utilised during the pandemic to support Covid-19 vaccine trials and studies. The CSO and NHS Research Scotland were also represented on several UK groups and meetings that coordinated the delivery of Covid-19 vaccine research studies, including: the Urgent Public Health Study review process, the Covid-19 Vaccine Research delivery project response group, and the Covid-19 Vaccine Research Group Operational Call.
126. The delivery of the following Covid-19 vaccine-related research studies were supported by one or more Scottish Health Boards. The name of the study and the study sponsor organisation (in brackets) are provided.
- Investigating a Vaccine Against COVID-19 (COV002): A phase 2/3 study to determine the efficacy, safety and immunogenicity of the candidate Coronavirus Disease (COVID-19) vaccine ChAdOx1 nCoV-19 (University of Oxford)
 - A trial to evaluate SARS-CoV-2 Recombinant Nanoparticle vaccine: A phase 2/3 study to determine the efficacy, safety and immunogenicity of the candidate Coronavirus Disease (COVID-19) vaccine ChAdOx1 nCoV-19 (Novavax)
 - Phase III trial of inhaled anti-viral (SNG001) for SARS-CoV-2: A randomised, double-blind, placebo-controlled, Phase III trial to determine the efficacy and safety of inhaled SNG001 for the treatment of patients hospitalised due to moderate COVID-19 (Synairgen Research Limited)
 - ENSEMBLE 2 - Phase 3 COVID-19 Vaccine Study - VAC31518COV3009: ENSEMBLE 2 - A Randomized, Double-blind, Placebo-controlled Phase 3 Study to Assess the Efficacy and Safety of Ad26.COVS for the Prevention of SARS-CoV-2-mediated COVID-19 in Adults Aged 18 Years and Older (Janssen Vaccines & Prevention B.V.)
 - SARS-COV-2(BNT162b2) Vaccine Against Covid-19 in Healthy Pregnant Woman: A Phase 2/3, Placebo-controlled, Randomized, Observer-blind study to Evaluate the Safety, Tolerability, and Immunogenicity of a SARS-COV-2 RNA Vaccine Candidate (BNT162b2) against Covid-19 in Healthy Pregnant Women 18 years of age and older (BioNTech)

- Study of mRNA-1273.529 (omicron variant) compared to mRNA-1273 (original) booster vaccine: A Phase 2/3, Randomized, Observer-blind, Active-controlled, Multicenter Study to Evaluate the Immunogenicity and Safety of mRNA-1273.529 (B.1.1.529, Omicron Variant) in Comparison with mRNA-1273 (Prototype) Booster Vaccine (Moderna)
- Preg-Cov: A Phase II, randomised, single-blind, platform trial to assess safety, reactogenicity and immunogenicity of COVID-19 vaccines in pregnant women in the United Kingdom (St Georges University Hospital NHS Foundation Trust)
- Phase II/III Study of AZD2816 for the Prevention of COVID-19 in Adults: A Phase II/III Partially Double-Blinded, Partially Randomised, Multinational, Active-Controlled Study in Both Previously Vaccinated and Unvaccinated Adults to Determine the Safety and Immunogenicity of AZD2816, a Vaccine for the Prevention of COVID-19 Caused by Variant Strains of SARS-CoV-2 (AstraZeneca)
- OCTAVE-DUO: A Phase III, Multicentre, Randomised Trial Comparing SARS-CoV-2 Re-Boost Vaccine Strategies in Immunocompromised Patients (University of Birmingham)
- Evaluating COVID-19 Vaccine Boosters (Cov-Boost): A randomised, phase II UK multi-centre study to determine reactogenicity and immunogenicity of booster vaccination against ancestral and novel variants of SARS-CoV-2 (Southampton NHS University Hospital Trust)
- NEXT-COVE: A randomized, observer-blind, active-controlled Phase 3 study to investigate the safety, immunogenicity, and relative vaccine efficacy of mRNA-1283.222 administered as a booster dose compared with mRNA-1273.222 in participants aged 12 years and older for the prevention of COVID-19 (Moderna)
- Superiority of Immunogenicity of vaccine VLA2001 compared to AZD1222: A Randomized, Observer-blind, Controlled, Superiority study to compare the immunogenicity against Covid-19, of VLA2001 Vaccine to AZD1222 vaccine, in adults 18 years and older (Valneva)
- Coronavirus-Like Particle COVID-19 Vaccine (CP-PRO-CoVLP-021): A Randomized, Observer-Blind, Placebo-Controlled, Phase 2/3 Study to Assess the Safety, Efficacy, and Immunogenicity of a Recombinant Coronavirus-Like Particle COVID-19 Vaccine in Adults 18 Years of Age or Older (Medicago)
- OCTAVE (V1.0, 02-Feb-2021): OCTAVE: Observational Cohorts Trial - T-cells Antibodies and Vaccine Efficacy in SARS-CoV-2 (University of Birmingham)
- Safety & immunogenicity extension study for ChAdOx1 nCoV-19: Post-approval follow-up for the COV001 and 002 trials, to determine the long-term safety and

character of immunological response to the ChAdOx1 nCoV-19 coronavirus vaccine (University of Oxford)

- Active monitoring of the Safety of a COVID-19 Vaccine Study: Post-authorisation active surveillance of the Safety of COVID-19 Vaccine AstraZeneca (AZD-1222) in the UK: A consortium study (University of Oxford)
- COVID-19 Disease Safety Study (VAC4COVID Study): SARS-CoV-2 Vaccination for COVID-19 Disease Safety Study (VAC4COVID Study) (University of Dundee)
- COVID-19 Deployed Vaccine Cohort Study (DOVE): An observational study to determine the cross-specificity of B and T cell responses in people who have been vaccinated with deployed COVID-19 vaccines (NHS Greater Glasgow and Clyde)
- Early estimation of pandemic antiviral therapy and vaccine effectiveness (EAVE II): Early estimation of pandemic Antiviral, therapy and Vaccine Effectiveness and enhanced surveillance (EAVE) - use of a unique community and laboratory national linked dataset (NHS Lothian)
- Immunogenicity of COVID-19 vaccination in patients with renal disease: Immunogenicity of COVID-19 vaccination in patients with renal disease (No Sponsor recorded)
- VIP: Vaccination Immunogenicity against SARS-CoV2 in Patients with inflammatory bowel disease (Imperial College and Imperial College Healthcare NHS Trust).

Innovations Introduced to Speed up Clinical Trials

127. Experiences from the pandemic demonstrated the utility of volunteer registries (e.g. NHS COVID Vaccine Research Registry and Scottish Health Research Register and Biobank (SHARE)) to support recruitment to studies. In addition, the use of digital technology and NHS data systems (e.g. PANORAMIC study and COVID in Scotland study) to support recruitment and follow up of research participants and efficient study delivery with reduced additional burden on the NHS was also demonstrated. The Scottish Government continues to be interested in supporting further developments; the Scottish Government's Health & Social Care Data Strategy includes as a deliverable:

“We will explore greater use of data-enabled approaches to assessing research study feasibility, and the identification, recruitment and follow up of research participants”.

128. In addition, the benefits of platform trials (e.g. the Recovery trial) to support the evaluation of multiple (instead of single) treatments, and decentralised trials where participants can receive treatment and be followed up remotely, i.e. without the need to attend a clinic, reducing the

burden on participation on patients and the NHS were also shown. Novel trial designs such as these should continue to be considered, whenever appropriate.

An overview of the procedure for approval in Scotland of each of the UK Covid-19 vaccines

129. The procedure for approval of vaccines in Scotland is broadly similar to that in the rest of the UK, with certain stages tailored to the Scottish context:
- The vaccine is authorised for use by the Medicines and Healthcare products Regulatory Authority (MHRA)
 - The vaccine is approved and recommended for use by the JCVI
 - The Covid-19 Green Book Chapter 14a is updated with clinical information on the vaccine
 - The vaccine National Protocol and Patient Group Direction (PGD) are prepared by the pharmacy team at PHS. These are then reviewed by the healthcare professional members of the Clinical Governance Group
 - The National Protocol is reviewed by Scottish Government's Chief Pharmaceutical Officer (CPO), Chief Nursing Officer (CNO) and Chief Medical Officer (CMO)
 - If there are changes to the wording of the National Protocol itself, as opposed to changes to the clinical annexes only, the protocol would be sent to Scottish Government Legal Directorate (SGLD) for review
 - As per the regulation 247A of the Human Medicine Regulations 2012, a final version is sent to Scottish Ministers for approval. This would usually be the Cabinet Secretary for Health and Social Care, but was on occasion approved by the Minister for Public Health
 - The approved version is sent back to the pharmacy team at PHS who disseminate it to Health Boards, who then put the National Protocol and PGD through their own internal governance mechanisms
 - Scottish Government officials then upload a copy of the National Protocol to the Scot Gov website. Publishing of the National Protocols on the website ceased in November 2022, but copies can be requested, and the archive can still be viewed
 - The PHS team prepare and publish resources for individuals on informed consent
 - Updated vaccinator training materials on the vaccine would then be uploaded to the Turas site and a training webinar may also be held, recorded and then published.
130. Although some of this activity took place concurrently rather than sequentially, the pace and frequency of additional Covid-19 vaccines being approved by MHRA and the JCVI via

updates in the Green Book, at times resulted in protocols being issued close to the point of deployment. This required Health Boards to accelerate approval through their internal governance structures. At times this timeframe was compressed to under a week, which created challenges for those involved in this process.

131. The pharmacist team at PHS used annexes to format the National Protocols in a similar way to Patient Group Directions (PGDs). The annexes also reiterated relevant information from PGDs, including indication, inclusion/exclusion criteria, and cautions. The intention of this was for the same information to be available to the workforce some of whom would be operating under the National Protocol and others operating under a PGD.

Innovations Introduced to Speed Up the Approval Process

132. There were no specific innovations introduced to speed up the approvals process for vaccines for Scotland.
133. The ability for the MHRA to provide temporary approval for new vaccines under regulation 174 of the Human Medicines Regulations 2012 was considered helpful.
134. The expedited routes put in place for JCVI approval and updates to the Green Book Chapter 14a for Covid-19 allowed for swift deployment of the vaccines [CL10/035 –INQ000425558].
135. The Scottish Government is keen to retain this efficiency for us to effectively deploy new vaccines in a planned and timely fashion.
136. Scottish Government and Public Health officials have also, on occasion, engaged with Covid-19 manufacturers prior to the authorisation of vaccines to build awareness of vaccine characteristics. This enables early planning for deployment.

The Vaccine Manufacturing Innovation Centre

137. Any public funding for the Vaccine Manufacturing Innovation Centre to be located at Harwell is being provided by the UK Government. Information about the Centre and its role was shared with Scottish Government officials through various meetings during early Covid-19 Strategy meetings and the Scottish Government is supportive of there being increased manufacturing capacity for vaccines in the United Kingdom. The Scottish

Government or Scottish Ministers did not have a role in decision-making in relation to the Centre.

NHS Vaccine Registry

138. The NHS Vaccine Registry supported rapid identification and contact of volunteers for Covid-19 vaccine trials across the UK. This experience has helped to demonstrate the utility of volunteer registries to support the delivery of research studies.

The Development, Trials and Use of New Therapeutics

139. A UK Covid-19 Therapeutics Advisory Panel (UK-CTAP), which was part of the Clinical Trials Infrastructure National Core Study, was formed to accelerate delivery of large-scale trials for Covid-19 treatments and make recommendations on which therapeutic compounds should be studied through national publicly funded clinical trials, based on submissions from industry and academia. The UK-CTAP helped prioritise research into the most promising therapeutics during the first year of the pandemic. The proposal process was managed by a UK Research and Innovation (UKRI) team composed of scientists and programme staff. The panel reviewed the available scientific evidence and made recommendations to the principal investigators of each trial and Professor Sir Chris Whitty, the Chief Medical Officer for England, and Sir Patrick Vallance, Chief Scientific Adviser for DHSC.
140. The three main trials that contributed to the evidence base were the RECOVERY (Randomised Evaluation of Covid-19 Therapy) trial, which identified several effective treatments for hospitalised patients, including dexamethasone; PANORAMIC which was the largest community trial of its type, researching the effectiveness of oral antivirals, and REMAP-CAP which was an international phase 3 trial and was focused during the pandemic on testing treatments in patients with severe Covid-19 infection in intensive care units. Other trials included PRINCIPLE which was a phase 3 trial testing treatments in the community and PROTECT-V which was a phase 3 trial testing prophylactic interventions for Covid-19 in vulnerable renal and immunocompromised patients. Research and clinical teams across Scotland were involved in these trials.
141. The MHRA, as the UK regulator, approved any new therapeutics for use based on data from clinical trials submitted by the pharmaceutical companies. There was use of the Early Access to Medicines Scheme (EAMS) for the first Covid-19 therapeutic, remdesivir, which allowed access between the clinical trial and MHRA approval. There were several subsequent steps

in terms of establishing advice on the effectiveness of existing medicines for treating Covid-19. The first step involved a collaborative UK-wide partnership, named RAPID C-19, between the MHRA, the Antiviral and Therapeutic Taskforce (ATTF), the National Institute for Health Research (NIHR), the National Institute for Health and Care Excellence (NICE), NHS England (NHSE), the Scottish Medicines Consortium (SMC), the All Wales Therapeutics and Toxicology Centre (AWTTC), the All Wales Medicines Strategy Group (AWMSG), and the Department of Health in Northern Ireland. RAPID C-19 monitored emerging trial evidence on the clinical effectiveness of potential Covid-19 treatments during the pandemic.

142. In addition, NHSE established two groups: the Access and Policy National Expert Group and the nMAB (neutralising monoclonal antibodies) and Antiviral Access and Policy National Expert Group. These groups were chaired by either Professor Anthony Kessel or Dr James Palmer. The Chief Pharmaceutical Officer and a senior clinician were members of these groups. The groups assisted with the drafting of UK-wide clinical commissioning policies and advisory alerts that accompanied each of the clinical policies, with NHSE in the lead. This helped to ensure alignment of advice issuing to the respective NHS systems across the UK.
143. Some of the policies were for hospitalised patients and others for community-based patients. The groups also kept the evidence under review, meeting when required to review any emerging findings. In some situations, the groups adapted the four nation policies considering either challenges in the supply chain or based on emerging evidence on effectiveness against new variants.
144. There were no specific innovations in Scotland to speed up the development and approval of new therapeutics to treat Covid-19; we worked collaboratively across the UK to support the development and delivery of clinical trials for these therapeutics. The Scottish Government's CSO invested, through NHS Research Scotland, in research infrastructure in health boards in order that the NHS in Scotland could host and participate in clinical research studies and trials. This infrastructure was utilised during the pandemic to support Covid-19 trials of new therapeutics. In addition, the CSO issued two calls for research: a call for Rapid Research in Covid-19 issued in March 2020 and a call for applied research on the longer-term effects of Covid-19 infection in October 2020. One of the strengths, as opposed to innovations, was engagement of academics, clinicians and individual in clinical trials with global reach and impact. Another strength was the UK-wide approach to the procurement of both new and existing therapeutics.

How Vaccine Risks Were Communicated to the Scottish Government

145. Information or updates on any risks associated with the UK Covid-19 vaccines were provided through the UK Government formal governance structures and via the JCVI. The Green Book chapter 14a also includes a section on “safety” for each of the vaccines in use at any given time.
146. Daily briefings to the First Minister were used to provide information to the public on a range of topics, including for example, when alternative vaccines were to be offered to under 40s and under 30s in place of the Astra Zeneca vaccine.
147. Covid-19 vaccine manufacturer patient information leaflets (PILs) were provided to patients at the point of vaccination and are also available on the NHS Inform website. These leaflets provide patient information on possible side effects. The informed consent materials that are sent with the vaccination appointment also contain information on side effects and point people to NHS Inform for the PILs and to the MHRA Yellow Card scheme.
148. The “What to Expect” leaflet every patient receives at their appointment also contains information on side effects and is available online.
149. There is also a page on the NHS Inform website which provides information on side effects of the Covid-19 vaccine.
150. All of these resources have links to the Yellow Card reporting scheme for suspected side effects.

The Vaccine Damage Payment Scheme (VDPS)

151. The safety of medicines, including vaccines, are issues which are reserved for the UK Government. This includes policy on compensation for vaccine damages. Disability or damage caused by vaccination is covered by the VDPS and the Department of Health and Social Care (DHSC) are responsible for the policy of this scheme.
152. At this time, November 2023, we have not requested any meetings with the UK Government or DHSC to discuss the VDPS and DHSC has not asked the Scottish Government to comment on the scheme.

Barriers to Vaccine Uptake in Scotland

Causes of Disparity in Vaccine Coverage

153. PHS reporting on Covid-19 vaccine uptake identified disparities between various identifiable groups in Scotland. This included lower uptake in the following groups: certain ethnic minority communities, those living in more deprived areas, young people, pregnant women, women of childbearing age, social care workers, prisoners. All these groups were shown to have lower uptake through PHS data.
154. Stakeholder feedback and anecdotal evidence indicated additional groups and communities also had lower uptake, even if we did not have the quantifiable data to highlight it. These groups included generally underserved or marginalised communities who face additional barriers to uptake. For example, those who experience substance misuse, people who are homeless, people who sell or exchange sex, undocumented migrants, and asylum seekers/refugees.
155. The Scottish Government and Public Health Scotland undertook extensive research to understand and address disparity in vaccine coverage. The research identified that reasons for these disparities are wide-ranging and varied between identified groups. Many of the groups with lower vaccine uptake also experience marginalisation in other areas of society, and therefore lower vaccine uptake can be seen in the context of low engagement with health and wider services generally. The research demonstrated that for certain ethnic minority groups, this can be down to trust.
156. Research found that causes of vaccine hesitancy were wide ranging and stemmed from a variety of different sources. Through engagement with organisations that represent various ethnic minority communities, the Scottish Government gained intelligence on sources of vaccine hesitancy for several groups. For some, the feedback indicated there was a suspicion that the vaccine was designed specifically for white people, so therefore may have additional severe effects for minority groups. Other communities had more confidence in traditional or non-western treatments for Covid-19. Some communities had long-standing vaccine hesitancy due to historical and cultural reasons in their home country.
157. Not being able to access clear vaccine messaging in their own language also contributed to hesitancy. Where disinformation occurred in communities, for example through WhatsApp channels or social media coming from their home countries, this was difficult to counter

through regular NHS health messaging. Potential difficulties understanding English for certain ethnic minority communities also presented barriers to booking and attending a vaccine clinic, particularly mass vaccination clinics. For further information please see paragraph 174 to 180.

158. A higher proportion of people living in more deprived areas work in jobs where it was more difficult to take time off work to attend a vaccine clinic.
159. Covid-19 infection levels were higher in more deprived communities, so some people believed they were at a lower risk of being infected by the disease because they had already had it. Similarly, certain ethnic minority communities, due to a range of socioeconomic factors such as occupation and housing, felt less motivation to get the vaccine having already had the disease at a disproportionate rate; and thus believing they already had some protection.
160. Some young people didn't associate high personal risk with serious negative health outcomes from catching Covid-19. In contrast, older people and those with co-morbidities generally had high uptake, reflecting the risk they associated with catching Covid-19. This may also explain why vaccine uptake (of further doses) declined over the pandemic, as risk associated started to fall away after more people caught the disease, or received partial doses of the vaccine, or the disease fell to lower case levels.
161. For people living chaotic lives, such as those experiencing substance use or homelessness, those in and out of prison, and people selling or exchanging sex, booking and attending a vaccine appointment was challenging and vaccination was not a priority for them. Those experiencing transient lifestyles, including some Gypsy/Travellers or seasonal workers, may not have been registered with a GP and as such may have been unsure how to access vaccination, or understand their eligibility. This barrier was exacerbated by those facing digital exclusion.

Hesitancy Amongst Pregnant Women

162. High levels of Covid-19 vaccine hesitancy were observed in pregnant women. Feedback indicated this was due to a number of factors, including the delay in JCVI advice recommending the routine vaccination of pregnant women. Initial JCVI advice in December 2020 indicated that while the available data at that point did not indicate any safety concern or harm to pregnancy, there was insufficient evidence to recommend routine use of Covid-19 vaccine during pregnancy.

163. It was recommended that Covid-19 vaccination in pregnancy should be considered where the risk of exposure to Covid-19 infection was high and could not be avoided, or where the person had underlying conditions that put them at very high risk of serious complications. The advice emphasised that in such circumstances, clinicians should discuss the risks and benefits of vaccination with the woman, including the absence of safety data for the vaccine in pregnant women. This guidance was formally issued through a CMO letter on 1 January 2021 [CL10/036 – INQ000376306].
164. This approach was followed within the FVCV programme until further advice for this group was offered by JCVI in spring 2021. In April 2021 the JCVI updated its advice relating to vaccination during pregnancy. Based on new data that showed no safety concerns in around 90,000 pregnant women who were vaccinated, the JCVI advised that those who were pregnant should be offered vaccination at the same time as non-pregnant people, based on their age and clinical risk group. The data from the study in the United States involved mainly mRNA vaccines, including Pfizer-BioNtech and Moderna. On that basis the JCVI recommended that Pfizer or Moderna vaccines should be used for this group, where available. Those who had already received their first dose of the AstraZeneca vaccine were recommended to continue with Astra Zeneca for their second dose. This change was communicated to Health Boards via a CMO letter on 7 May 2021 [CL10/037 – INQ000414577].
165. A further CMO letter was issued on 18 August 2021 [CL10/038 – INQ000376361] requesting Health Boards encourage pregnant woman to take up the offer of Covid-19 vaccination.
166. This guidance was supplemented by campaigns from the Scottish Government Marketing and Communications team, promoting vaccine uptake in pregnant women.
167. The delay in JCVI recommendation was interpreted by some as an indication that there were specific risks attached to taking the vaccination when pregnant. Consequently, there has been lower Covid-19 vaccine uptake both amongst pregnant women and those of childbearing age. The perception of the effect the vaccine could have in disrupting menstrual cycle also likely contributed to this hesitancy. Some wrongly perceived that the Covid-19 vaccines reduced fertility, subsequently causing hesitancy in those trying to conceive.

Key Causes of Vaccine Hesitancy in Scotland

168. There are wide-ranging explanations for why vaccine uptake was lower in some groups. In

addition to the previously provided information, Scottish Government understands the key causes of vaccine hesitancy in Scotland to be complacency, access, trust, and side effects, as outlined below.

169. Those hesitant due to complacency either perceived themselves to be at low risk of catching Covid-19 or being unlikely to face severe negative health outcomes. There was a perception amongst some that the disease only severely affected the elderly or those with pre-existing conditions. For further information, please see the Scottish Government publication, *“The Covid-19 vaccine: barriers and incentives to uptake. A literature Review”* [CL10/039 – INQ000376364]. Scottish Government YouGov polling from January 2022 reported that 29% of those vaccinated with at least one dose, but unlikely to receive another, cited a perception of low risk as a reason.
170. Accessibility of vaccination was also a key determinant of hesitancy. If individuals had difficulty accessing clear, understandable information; accessing a vaccine clinic; or engaging with digital systems this could have caused vaccine hesitancy. There are many reasons why access to a clinic would have been difficult, including anxiety or other social/psychological barriers, travel distance, and risk of transmission on public transport or at a mass clinic.
171. Lack of trust can also cause vaccine hesitancy. The unprecedented speed of the development of the vaccine led to some being sceptical that all the usual necessary vaccine trials had been completed in full. Scottish Government YouGov polling from April 2021 reported that 47% of those who rated themselves as less likely to receive a vaccine reported ‘being concerned about the safety of vaccines’ as one of the main deterrents to uptake. Some were also concerned about the effectiveness of the vaccine, and its ability to tackle new variants. Scottish Government YouGov polling from January 2022 recorded that 36% of respondents were concerned the vaccine would not work against the new variant. Trust can also be extended to lack of trust in the political establishment; our evidence showed that medical professionals were more trusted as messengers of vaccine information compared to political leaders.
172. Side effects, and perceived side effects, were also a considerable cause of vaccine hesitancy, including both amongst those who had not taken any dose of the vaccine, and those who had had one or more doses but due to having side effects did not wish to have any more. This includes both short term and long-term side effects, with long term side effects overlapping with the aforementioned concerns over the speed the vaccine was developed. A PHS study in March 2021 into health and social care staff reported immediate and future unknown side effects being the largest determinant for refusing a vaccine. Concerns around fertility and

effect on pregnancy were relatively common in those of childbearing age in exhibiting vaccine hesitancy. The association of blood clots and myocarditis following vaccination with AstraZeneca and Moderna respectively was common among the vaccine hesitant. Scottish Government YouGov polling from January 2022 reported 29% of those identifying as being vaccine hesitant describing becoming unwell afterwards as a reason for not seeking another dose.

173. Dis-information, mis-information, and mal-information proliferated over the pandemic, though this was less significant in determining vaccine hesitancy generally than the aforementioned reasons. Disinformation is the deliberate creation and spread of false and/or misleading content. Misinformation is the inadvertent spread of such content. Malinformation refers to information that stems from the truth but is often exaggerated in a way that misleads and causes potential harm. The Scottish Government undertook extensive work to address concerns and vaccine hesitancy, while recognising there was a very small minority who would likely refuse any offer of vaccination irrespective of how much work we undertook to improve vaccine confidence.

Identifying and understanding those with High Levels of Vaccine Mistrust, and steps taken to address this

174. Engaging with communities through local organisations was critical to understanding and addressing high levels of mistrust. The Scottish Government recognised the importance of engaging with those representing communities experiencing barriers. This was in acknowledgement of the fact that certain communities have relatively higher levels of mistrust in Government, therefore partnership working was important to ensure vaccination was accessible to everyone.
175. Fora like the Vaccine Inclusive Steering Group were essential in seeking feedback on mistrust. The group had no decision-making role; however, it was used to engage with stakeholders, seeking advice and feedback on policy and delivery. [CL10/065 - INQ000501275, CL10/066- INQ000501276, CL10/067- INQ000501277, CL10/068- INQ000501278, CL10/069- INQ000501279, CL10/070- INQ000501280, CL10/071- INQ000501281, CL10/072- INQ000501282, CL10/073- INQ000501283, CL10/074- INQ000501284, CL10/075- INQ000501285, CL10/076- INQ000501286, CL10/077- INQ000501287, CL10/078- INQ000501288, CL10/079- INQ000501289, CL10/080- INQ000501290, CL10/081- INQ000501291, CL10/082- INQ000501292. CL10/083- INQ000501293, CL10/084- INQ000501294, CL10/085- INQ000501295 and CL10/086-

INQ000501296

Membership comprised a range of third sector, faith and community groups, representatives of ethnic minority groups as well as Health Board Equalities Leads and Deep End General Practitioners. The group initially met once a week, then transitioned to fortnightly and then monthly later in the pandemic. Meetings were initially chaired by Jamie MacDougall, Deputy Director, Vaccines Strategy Division, then once fully established, moved to Scottish Government Senior Management Team chairs, typically a Unit Head with the required seniority and experience. The group reported into the Inclusion Workstream of the FVCV, which fed back into the vaccine programme. This directly amplified the voices of the communities we were trying to reach, including those with high levels of mistrust. For example, the Gypsy/Traveller community generally has relatively high levels of mistrust in Government for a range of cultural and historical reasons. The steering group amplified the voices of organisations like MECOPP (the Minority Ethnic Carers of People Project) which works closely with the Gypsy/Traveller community. This engagement provided intelligence on the sources of vaccine mistrust in the Gypsy/Traveller community. The Programme subsequently worked with MECOPP to address these; including through the production of a Vaccine Explainer video which directly addressed misinformation around the vaccine. The Vaccine Explainer Video was available in BSL and multiple community languages, including Arabic, Cantonese, Hindi, Polish, Romanian, Urdu and Punjabi.

176. The Scottish Government worked with a variety of organisations to address mistrust and build vaccine confidence through its funding of third sector organisations. This included £80,000 of funding to community groups to develop culturally sensitive vaccine messaging for the following organisations:

- £50,000 to BEMIS, to empower local communities to host webinars, Q&As with trusted minority ethnic health professionals both in English and community languages
- £15,000 to Sikh Sanjog, to carry out research, with the support of Sikh medical professionals, on take-up for the Sikh community, marketing campaign, targeting community groups and utilising local community activists to increase uptake
- £15,000 to CEMVO, to add vaccine information to the 'Stay Safe Scotland' app which provides health information in various languages to encourage uptake. This information was also designed to dispel myths.

177. The Scottish Government commissioned social research to better understand barriers to vaccination. This included interviewing those who had varying levels of trust in the vaccine programme to better understand what determines trust. The Scottish Government commissioned Ipsos Mori project titled 'The Vaccination Programme: user journeys and experiences of Covid-19 and flu vaccination' gave insight into this. Feedback from this project and other sources of intelligence such as the Scottish Government YouGov polling and the

Vaccine Inclusive Steering Group highlighted relatively high trust for medical professionals (such as the NCD and CMO). Therefore, these medical professionals featured heavily in vaccine messaging, including in briefings with the First Minister, in recognition that this would provide people with more confidence and trust in the messaging. Clinicians such as the NCD, Jason Leitch, took part in online, and in later stages of the pandemic, face to face sessions with particular groups to address any concerns they may have.

178. The analysis of our communications strategy included assessing issues around mistrust of services, or of the vaccines themselves. Local community leaders and groups were engaged with to ascertain reasons for mistrust which would then be reflected in the tailored materials we produced for those communities.
179. Health Boards also undertook a large amount of work to engage local organisations which could play a role in disseminating information and encouraging their communities to access vaccination. Further information on the type of partnerships during the first phase of the Programme can be found in the Scottish Government publication, "*Coronavirus (Covid-19) vaccine inclusion: vaccination programme – phase 1*" [CL10/040 – INQ000376372]. Many of these relationships and approaches were maintained through the rest of the pandemic.
180. Communications were distributed to both members of the public and the vaccination workforce, who could address any concerns raised at the point of vaccination. This ensured informed consent was provided to everyone prior to choosing to receive the vaccine.
181. As above, once the JCVI published advice in April 2021 that pregnant and breast-feeding women should receive the vaccine, the Scottish Government worked closely with PHS to develop key messaging lines and campaign assets to encourage them to come forward. This included campaign videos on social media channels, press articles and radio activity showing pregnant women and trusted voices talking about their experiences of vaccination and those going through fertility treatment, in order to quell any concerns by those who were in similar situations. Tailored information leaflets and posters were also developed for pregnant women and breastfeeding women.
182. As referenced in paragraph 82, low uptake was identified in the social care sector necessitating specific national outreach activity. This included:
 - Engagement with key stakeholders (Care Inspectorate, Scottish Care - representing independent social care providers, Coalition of Care and Support Providers (CCPS) – representing third sector providers), Scottish Social Services Council (SSSC) and the

trade unions) to promote the benefits of boosters through their existing communications channels

- Tailored comms/guidance for social care workers and care home managers
- Social media videos highlighting the importance of getting boosters
- Direct mailing to all SSSC registered adult services workers reminding them of the importance of vaccination and booster
- Webinars for social care workers involving the NCD Jason Leitch
- Communications included in COSLA, SSSC and Care Inspectorate newsletters urging people to get their boosters and how to book online
- Financial support for vaccination costs to social care providers through sustainability payments.

183. NHS Boards and local partners also adopted a range of ways to encourage uptake among social care staff. For example, Health Boards set up “express lanes” at vaccination centres for social care staff to access boosters more quickly. Some Health Boards also set up bespoke vaccination clinics for health and social care staff.

184. Uptake was routinely discussed by officials in four nations forums, including between programme senior responsible officers (SROs) where hesitancy and mistrust in particular groups was raised. Each administration commissioned its own insight work and developed their own materials, and these were routinely shared, so they could choose to tailor them and use them in their own local communities, where similar barriers existed. Scotland's FVCV programme was focussed on developing an inclusive approach that considered and accounted for all the reasons someone may not take up a vaccine offer. Our response considered the location, accessibility and how welcoming a vaccine venue is; access to understandable information; trust and practical arrangements. Hesitancy was just one of these reasons considered in designing our response.

Our Inclusive Approach to Vaccinations

185. The disparities in vaccine uptake, noted above, necessitated work to both ensure inclusion was embedded throughout the vaccine programme, and to make concerted outreach where necessary. The aim of this inclusive approach was to remove any barriers to vaccination and to ensure no community was left behind.

186. The Scottish Government Vaccine Equalities and Inclusion team was set up in January 2021 to fulfil this remit, with an Inclusion workstream formally set up for the FVCV programme. A

workstream charter was created and updated on a regular basis. This equalities and inclusion work included requesting Health Boards formulate inclusion delivery plans where these did not already exist. These plans used the PHS Health Inequality Impact Assessment as a guide to ensure that they were fully considering those with one or more protected characteristic, and additional identified groups, in the vaccination journey. Further early evidence to inform inclusive approaches was provided through Voluntary Health Scotland's research on vaccine inclusion which was published in April 2021. The Vaccine Equalities and Inclusion team also worked closely with colleagues in the PHS Confidence and Equity team, who partnered with third sector and community groups to develop inclusive communications.

187. Using the inclusion delivery plans, the Scottish Government Vaccine Equalities and Inclusion team developed an inclusion criteria and framework for Health Boards to work to during the first phase of the Covid-19 programme. This included requirements to ensure inclusive access for a variety of groups, including disabled people. Health Boards were expected to provide accessible communications for all eligible groups and to ensure these were shared in adequate time ahead of appointments. To ensure all had access to clinics, Health Boards were encouraged to offer a variety of settings, including a mix of mass vaccination clinics and smaller community clinics. To accommodate those with additional needs, Health Boards were asked to flex delivery models to include home visits, quiet rooms at clinics, or support accompaniment to appointments from a carer or someone who could support. Health Boards were advised that there should be sufficient parking facilities to allow for those with mobility issues to be brought to the clinic entrance in their vehicle and any other relevant provision, such as ramps for wheelchairs. This framework was issued to Boards by Delivery Director Colin Sinclair on 29 April 2021 [CL10/041 – INQ000240531 and CL10/042 – INQ000376383]. Following further discussions with Health Boards and relevant Scottish Government officials, further supporting information was issued to Boards on 4 May 2021 covering the vaccination of identified groups with additional barriers to uptake, including: people experiencing homelessness; people with substance misuse; members of the Gypsy/Traveller community; people from minority ethnic communities; and people with disabilities.

188. As mentioned previously, from March 2021 PHS published vaccine uptake by ethnicity. Initially this was achieved by drawing ethnicity data from across a range of existing data sets, however none of these were complete. This approach gave Scotland-wide data but was not sufficiently detailed to target local Health Board activity or demonstrate if targeted activity was achieving its intended aims. To better understand inequity in vaccine uptake, and to enable more robust evidence to tailor outreach activity, we commenced the collection of ethnicity data through the vaccination programme in November 2021. This was a recommendation of

the Expert Reference Group on Covid-19 and Ethnicity and improving the quality of ethnicity health data was in Scotland's Programme for Government 2021-22. The improved accuracy and completeness of equalities data provided a better understanding of inequity. This improved understanding has enabled more targeted interventions for communities with low uptake, such as Polish, African, and Pakistani communities.

189. The Scottish Government regularly encouraged Health Boards to do all they could to maximise uptake in under-served communities using the data and intelligence available to them to guide targeted activity with those communities where uptake was lower. We encouraged creative, local, assertive outreach delivery models where necessary. For example, the Scottish Ambulance Service took the vaccine out to remote rural communities on an adapted bus, including to Gypsy/Traveller sites. Vaccines were also delivered at homeless shelters, churches, mosques, gurdwaras and fruit-picking farms. Seafarers were recognised as a transient group with particular delivery challenges, therefore specific outreach was required, this was achieved by providing vaccinations at Fishermen's Missions. Liaison with Health Boards on tackling inequalities took place through the fortnightly Health Board performance calls where approaches, data and evidence were considered and good practice and learning shared.
190. The Scottish Government commissioned research into the vaccine user journey and experience of those who face additional barriers to vaccinations. Interviews were primarily conducted with those who fall into at least one of the following categories: those who had a disability or long-term health condition; members of specific ethnic minority communities, specifically those who identified as African, Black or Caribbean, Gypsy/Travellers, Pakistani or Polish; and those living in a deprived area. Interviews were also conducted with those with unpaid care responsibilities; living in rural areas; had been pregnant during the vaccination programme; or had low digital skills.
191. The insights from these interviews were summarised in the Scottish Government report titled '*The Vaccination Programme: user journeys and experiences of Covid-19 and flu vaccination*' [CL10/043 – INQ000376368] and disseminated to delivery colleagues to inform their inclusive approaches. The Scottish Government further investigated causes of vaccine uptake disparity through research with a Glasgow Caledonia University academic, looking specifically at vaccine engagement among members of the African, Black and Caribbean communities. Access to vaccination was also a focus of questions in Healthcare Improvement Scotland's Citizens' Panel (a survey of a representative sample of the Scottish population). These research projects produced insights which were fed back to delivery colleagues, to improve

access to vaccination, and vaccine engagement with members of African, Black and Caribbean communities.

Considering Marginalised or Vulnerable Communities During Roll-Out

192. Tailored work was undertaken with a range of stakeholders to ensure the delivery model for the Covid-19 vaccine was suited to a range of different communities' needs. For example:

- Those experiencing homelessness – It was agreed with Ministers that those experiencing homelessness would be included in JCVI Priority Group 6 due to the prevalence of co-morbidities, poorer health outcomes and reduced access to healthcare. Priority group 6 was initially defined as all individuals aged 16 years to 64 years with underlying health conditions which put them at higher risk of serious disease and mortality. Outreach work undertaken in emergency accommodation and homeless shelters, with known and trusted support workers present to support people.
- English not as a first language – QR codes were added to appointment letters which took users to vaccine information in a range of community languages. New translations were added regularly as feedback and additional requests were received. Vaccine appointment invitation letters were developed to highlight that people could bring family members or could request translators at their vaccination appointments. A translation service was also available for the national vaccination helpline for booking or rearranging appointments. Using the data and evidence available, health boards were encouraged to offer assertive outreach to certain minority ethnic communities which were more likely to experience barriers to uptake. This included clinics being held in a range of religious settings (Polish and African churches, gurdwaras, and mosques), with the support of religious leaders, and in other community settings such as Chinese restaurants and community centres. The Scottish Government also supported tailored information sessions attended by the NCD, Professor Jason Leitch, with FENIKS (a charity supporting Eastern Europeans in Scotland) and Jambo! Radio (Scotland's radio station for those with African and Caribbean heritage). An interview with an Glasgow GP aired in English and Urdu on Radio Awaz, as well as a series of advertisements in English, Urdu and Punjabi. The Scottish Government's Senior Medical Officer Dr Syed Ahmed also spoke on Radio Awaz.
- Those with unconfirmed immigration status - Work was undertaken with PHS and the Scottish Refugee Council to develop a 'Statement of Facts' on the Covid-19

vaccine which was translated in to five languages. It covered information pertinent to these communities, including the vaccine approvals process, ingredients and confirming that no personal information would be passed to the Home Office in relation to immigration status.

193. Scottish Government vaccines and disability policy colleagues worked with disability charities to better understand the concerns and needs of those with disabilities. A range of vaccine information materials were produced in Braille and British Sign Language (BSL) whilst clinics were provided with meta data on accessibility criteria, so people could search on the booking system for clinics with services such as hearing loops and wheelchair accessibility.
194. The Vaccine Inclusive Steering group worked with groups like the Glasgow Disability Alliance and organisations representing people living with sensory loss. Through this partnership working the Programme was able to better understand disabled people's requirements including with regards to clinic access and booking methods. This was then fed to relevant colleagues, including those working in Digital, and Health Boards running clinics.
195. On 25 February 2021, the CMO and CNO issued specific guidance [CL10/044 – INQ000376360] to Health Boards on providing adjustments to those with learning disabilities and neurodevelopmental needs. This followed a decision to expand JCVI priority group 6 to include people with mild or moderate learning or intellectual disabilities This included a directive that Learning Disability Nurses should vaccinate people on their case load as part of their day-to-day workload. This was in recognition that these nurses will have an established, trusting relationship with their clients and this should be used to facilitate a comfortable and supportive vaccination experience for those with learning disabilities.
196. The Scottish Government promoted the use of Red Cross volunteers for supporting different communities to attend their vaccination appointment, including as sight guides, meeting and greeting to reassure etc.
197. The Scottish Government also recognised the key role unpaid carers fulfil in supporting those with disabilities, and the increased risks if carers were to catch Covid-19. Unpaid carers were challenging to identify, therefore a route was developed for self-identification and booking through the online portal. This opened for unpaid carers on 15 November 2021 for those Health Boards using NVSS [CL10/045 – INQ000376370], for those boards who

didn't use NVSS such as NHS Highland, NHS Western Isles, NHS Shetland, NHS Orkney, unpaid carers were sent a letter, or there were communications directing unpaid carers towards the National Vaccination Helpline. The definition of an unpaid carer was extended to include all unpaid carers aged 16+ in group 6 for tranche 1 prioritisation [CL10/046 – INQ000376371]. Communication with national and local carer organisations became key to promoting awareness of this offer. While there was a risk that people could falsely declare themselves as unpaid carers to receive a vaccine quicker, the programme deemed this an acceptable level of risk and uptake proved broadly in line with our expectations of the number of unpaid carers in Scotland.

198. The Scottish Government worked with the National Carer Organisations (NCOs) and Young Scot to develop tailored FAQs and information for unpaid carers and young carers in relation to eligibility and access to vaccinations for autumn/winter 2021-22.
199. An unpaid carers video campaign featuring Dr Krishan, aimed at ethnic minority audiences was created and translated into 7 community languages: Arabic, Cantonese, Hindi, Polish, Punjabi, Romanian and Urdu.
200. Letters were also sent for the autumn/winter 2021-22 programme to unpaid carers who were registered with GPs and/or in receipt of certain benefits (Carer's Allowance and the Young Carer Grant). These letters highlighted their eligibility and encouraged them to self-register using the national booking portal.

Prisoners

201. After the JCVI reviewed the Phase 1 cohorts of the programme, Scottish Government officials updated Ministers to inform them that plans were in place through the Inclusion workstream to ensure efforts were made to promote high vaccine uptake in prisons. Health boards were asked to include measures to encourage prisoner uptake in their Inclusion Plans.
202. Work to ensure access to vaccinations for prisoners was undertaken by Health Boards, supported by the national FVCV team. The Inclusion workstream supported this through engagement with prison policy colleagues, Scottish Prison Service (SPS) and PHS to understand challenges with uptake in prisons and find ways to encourage vaccination.
203. A range of approaches were undertaken to encourage prisoner uptake including the development of a prisoner letter "door-drop" similar to the national one for the rest of the population; tailored posters; and leaflets detailing how to get your second or booster dose

when released. The NCD, Jason Leitch, attended HMP Barlinnie for a Q&A session with prisoners which was available via prison radio and TV. He also recorded prison radio messages to encourage continued uptake and address any concerns.

204. In June 2021 the Policy Panel group recommended the “bundling” of all unvaccinated age groups of prisoners [CL10/047 – INQ000244129 and CL10/017 – INQ000376375]. The Policy Panel also considered other groups such as people entering drug and alcohol rehabilitation where a bundling approach might be helpful for vaccination purposes given many of the group would have co-morbidities.

Translation of Campaign Assets

205. The Scottish Government’s national communications plan [CL10/048 – INQ000282458] included the production of translated assets in a range of community languages and British Sign Language (BSL). The information was developed in multiple languages on NHS Inform, with accessible formats also available such as Braille, Easy Read, large print and audio.
206. The Scottish Government worked with PHS to create translated versions of the ‘What to Expect at a Large Vaccination Site – Louisa Jordan Walkthrough Video’ and a ‘Smaller Vaccination Walkthrough Video’ in seven community languages. This was shared with ethnic minority stakeholders and Health Boards and distributed via Equalities Policy colleagues. Individual health boards developed local versions for use through their own social media channels.
207. A Ramadan film was created in partnership with the British Islamic Medical Association and launched in April 2021. This video was to reassure Muslims who were concerned about getting the vaccine while fasting and was created in multiple languages. The Ramadan film was included in a toolkit addressing hesitancy in the Pakistani community which had assets translated into Urdu.
208. A toolkit specifically created for ethnic minority communities as part of the Roll Up Your Sleeves was created and launched in April 2021. This included bespoke assets and messaging that addressed particular concerns amongst ethnic minority groups, and included suggested social media posts which signpost to the language-specific pages that PHS have created on NHS Inform.

Minority Ethnic Communities

209. The Scottish Government worked with BEMIS and the Ethnic Minority National Resilience Network (EMNRN) to gather feedback from Ethnic Minority organisations and to help shape communications, which has influenced messaging and available formats. The EMNRN was launched by BEMIS to enable Scotland's ethnic minority communities to support each other throughout Covid-19 pandemic.
210. The Scottish Government worked with NHS Lothian's Minority Ethnic Health Inclusion Service (MEHIS), who input to the content specifically to address barriers to uptake for Scotland's South Asian community. MEHIS shared campaign assets with community outreach officers who engage with members of the community, both virtually and face-to-face.
211. Furthermore, the Scottish Government worked with the Scottish Public Health Network (ScotPHN) to provide the Covid-19 Vaccines National mailing directly to Gypsy/Traveller communities across Scotland, which were distributed via site managers.
212. As noted above in paragraph 192, the NCD took part in a Q&A session hosted by FENIKS for the Polish community on 6 June 2021 and a live streamed radio interview with Jambo! Radio which serves African and Caribbean communities.

Other Marginalised and / or Underserved Groups

213. The Scottish Government worked with the Scottish Trans Alliance to ensure that trans people received the correct information about the programme and prepared an FAQ document to support people with any questions they may have about our self-registration systems.
214. Call handlers on the National Vaccination Helpful were also supported so they had the appropriate information to ensure trans callers were treated with dignity and respect.
215. A Ministerial letter was issued to Drug and Alcohol Partnerships in January 2022 to encourage them to work with their clients to support them to access vaccination [CL10/049 – INQ000376384].
216. Frontline homelessness organisations promoted uptake and access to vaccinations by signposting people to local drop in centres and, where required, supporting them to attend appointments. A Ministerial letter was issued to homeless charities in January 2022 asking

them to encourage and support their clients with accessing vaccinations [CL10/050 – INQ000376385].

217. A Ministerial letter was issued to charities supporting asylum seekers and refugees in January 2022 asking them to encourage and support their clients to access vaccinations [CL10/051 – INQ000376386].
218. A Ministerial letter was issued to charities which support adults who sell or exchange sex in February 2022 asking them to encourage and support their clients to access vaccinations [CL10/052 – INQ000376387]. The letter also included a link to a video of DCMO speaking directly to this group to encourage them to come forward. This video had been requested by, and the script co-produced with, stakeholder partners.
219. The CMO wrote to the third sector on 17 November 2021 [CL10/053 – INQ000376225] to thank them for their work and encourage them to continue to promote the vaccination programme to their networks.

Communications

The Scottish Approach to Vaccine Messaging

220. In a fast-moving and dynamic pandemic – with mis and disinformation disseminated in real time via social media – our approach to our communications and engagement needed to be flexible. In order to support this, the FVCV programme put in place a dedicated communications team within the Vaccinations Directorate, to work in collaboration with the Scottish Government's centralised team of communications staff. This meant that the vaccination communications colleagues were fully involved and sighted on the day to day running of the programme and understood the needs of health boards and the public. A member of the health marketing team was also embedded into this team to ensure alignment.
221. The Communications team, in partnership with PHS, developed a number of communication and engagement strategies throughout the course of the pandemic which guided our approach. The key strategic principles to guide communications which were proposed in October 2020 to Programme Board were:
 - Driven by behavioural insights
 - Connecting meaningfully through different voices
 - Keeping communications simple

- Countering misinformation and disinformation with facts without repeating the mis/disinformation
- Part of a larger whole
- Ongoing optimisation.

222. From the beginning, the vaccines communications and marketing activity used the results from creative testing, campaign evaluations, regular polling and vaccine uptake data to inform recommendations and development of resources, assets, campaign and supporting lines.

223. The approach to communication evolved throughout the programme, with various factors influencing shifts in direction. For example, moving down the age-based cohorts; the onset of the Omicron variant; public insights; and emerging data and evidence.

224. The Communications Team followed the principles of the SUSSED campaign development process to determine the most effective approach. (SUSSED explained in more detail in table below).

S	Scoping	Ongoing conversations with policy areas and via key forums as well as proactive monitoring of the situation to assess the latest communications requirements. Assessments within Scottish Government Communications to determine best approach to address each requirement. Consideration also given to whether any existing/previous campaigns could be redeployed/ adapted.
U & S	Understanding and Specific, Measurable, Achievable, Relevant, and Time-Bound (SMART) objectives	Desk research, primary research (insight gathering) if time permitted to understand the audience. SMART objectives set.
S & E	Strategy and Execution	Overall strategy set out based on the above insight and understanding of audience barriers and what may motivate / prompt action.

		<p>Media proposals from media agency to reach target audiences with the required frequency of message.</p> <p>Creative ideas developed (in house and by agencies).</p> <p>Creative testing to ensure effectiveness (undertaken if time permitted).</p> <p>Consultation with third sector partners where appropriate</p> <p>Approval of approach from clinicians, policy leads and Ministers prior to production.</p> <p>All production undertaken at pace but in line with Covid-19 safety measures.</p> <p>Any last-minute amends made to reflect exact wording / exact changes to restrictions when confirmed.</p> <p>Approval of all creative assets by all relevant parties (senior SGC officials, clinicians, policy leads, Ministers, industry authorities).</p> <p>Media bookings adapted if needed to reflect changing messaging.</p>
D	Debrief of evaluation	<p>Campaigns evaluated and results used to inform future activity.</p> <p>Evaluation results shared with relevant parties – every 4-6 months initially.</p>

Monitoring and Evaluation of Public Messaging

- 225. The Communications Team worked closely with Health Boards to develop messaging that would support them to reach those being called forward at each stage of the vaccination programme. The use of social media assets was monitored throughout and regularly discussed and revised messaging to ensure these were utilised and effective for their audiences. Website analytics was used to understand how the public were accessing NHS Inform and days which had spikes from particular platforms allowed us to evaluate which social media platforms were most effective at reaching the public and where campaigns had been particularly effective at encouraging people to visit NHS Inform.
- 226. Marketing campaigns were independently evaluated for their reach and impact on the target audience.

Stakeholder Engagement

227. Stakeholder engagement and insights were key to ensuring the messages would resonate with target audiences and ensure that they reached these groups through existing trusted established networks. Communication and engagement strategies were developed and updated. Short life working groups were also set up to discuss the best delivery and communications methods which would be effective at encouraging those lower uptake groups or those experiencing barriers to vaccine uptake (determined via data and insights) to come forward. The Communications Team worked closely with PHS marketing and NHS inform colleagues to ensure messaging was consistent and sufficient materials were available online and in print form.

Key Decision-Makers in Formulating Public Messaging

228. The Scottish Immunisation Programme Communications and Information Advisory Group (SIP CIAG), chaired by PHS, provided the formal governance for all public resources developed. This included: appointment letters, what to expect leaflets, posters, vaccination information leaflets. The group comprises membership of policy, clinical, third section and communications experts and ensured information was accurate and consistent in tone.
229. Where national marketing campaigns were required, these were signed off by the Cabinet Secretary with responsibility for Health and Social Care.
230. Senior officials and Unit Heads were often involved in the decisions and clearance of messaging such as ad hoc development of lines to take and NHS Inform text.

The Delivery of Public Messaging

231. There was a wide range of delivery approaches to public messaging throughout. This ensured it met the needs of Scotland's diverse communities, as well as being appropriate for the different stages of the pandemic.
232. From the start of the pandemic there was Ministerial activity via regular briefings and news releases which were widely covered across all media, as well as marketing and social media activity. Stakeholder engagement was critical too, to ensure key partners – particularly NHS boards and PHS, third sector organisations – were aware of the latest messaging, to avoid conflicting or confusing advice issued to the public.

233. Public messaging relating to vaccines was delivered via a national door drop in January 2021 [CL10/054 – INQ000376245] and various advertising campaigns across 2021 and 2022 using TV, radio, press, digital and out of home formats, such as billboards or bus shelters.
234. The initial phases of the pandemic generally called for messages aimed at the wider population – a national “call to action” – with adjustments to reflect eligibility. The emergence of the Omicron variant in October 2021 and the potential for increased social interaction over the festive period, led to a heightened and concerted communications and marketing push to ensure record numbers of people came forward for vaccination.
235. The later phases of the programme, with a more complex and focused offer, called for a more nuanced and targeted approach. While communication aimed at the general population was still necessary on occasion, the messaging and the channels used to reach eligible people was more targeted – with extensive engagement with partners, stakeholders and appropriate organisations.

Vaccine Messaging for Rollout to Children

236. Scottish Government officials had undertaken engagement with public health officials from the Gold Coast, Australia, as their childhood Covid-19 vaccine programme was rolled out earlier than in Scotland. The learning from this helped to inform our public messaging as well as our delivery and clinic set-up.
237. Information was kept clear and factual and included videos from trusted medical professionals encouraging parents to take their children for vaccination and to use science and evidence to address any questions. These videos were distributed to health boards to share on their social media channels in order to reach as many people as possible.
238. The Scottish Government also worked with PHS to develop leaflets and materials to include with appointment letters and lines to share on NHS inform so that both parents and children were aware of what to expect at their vaccination appointment and any possible symptoms afterwards. A video was also produced to visually walk them through a Covid-19 vaccination appointment, this was shared with Health Boards and added to social media channels and NHS inform.

Age Specific Groups

239. Communications activity focused on each cohort as they were being invited forward for vaccination, delivering and tailoring messaging that was appropriate for each audience. For example, in collaboration with PHS the Scottish Government produced the 'roll up your sleeves campaign' to target younger audiences in order for them to make an informed decision about whether to get vaccinated.
240. The 18 - 49 year old age group for example were vaccinated throughout a time that restrictions were starting to ease and we highlighted the fact that it was more important than ever to remember that the easing of restrictions has only been possible due to the compliance of the public with the vaccine programme.

Timeline of 'Paid-for' National Marketing Campaigns by Age / Cohorts

241. Roll up Your Sleeves – 1
- 21st Jan 2021 – 31st Mar 2021
 - Unpaid Carers 15th – 31st Mar 2021.
242. Roll up Your Sleeves – 2
- 20th Apr 2021 – 30th Jun 2021 - 18-49 year olds - and hesitant audiences (Explainer Video)
 - 16-17 year old (older activity) 13th Aug 2021 – 29th Aug 2021
 - 16-17 year old (older activity) 29th Nov 2021 – 16th Dec 2021
 - Parents of 12-15s – 20th Sep – 10th Oct 2021
 - Pregnant (paid social only) 8th – 21st Nov 2021
 - Health Boards drop in clinics digital only 14th-20th Jul 2021
 - Health Boards drop in clinics Radio & Digital 1st – 12th Sep 2021
 - Vaccine I'm Not Giving In Pillar 1st Mar 2021 – 31st May 2021
 - Student Vaccination 20th Sept 2021 – 16th Sep 2021
 - Hesitants radio 15th Jul – 8th Aug 2021
 - Hesitants 7th Jul – 10th Aug 2021
 - Hesitants 6th – 19th Sep 2021.
243. Booster
- 27th Sept 2021 – 6th Feb 2022 inc extension
 - Health Boards Booster 15th Dec 2021 – 9th Jan 2022
 - 16-17s 13th-27th Jan 2022

- Pregnant Hesitants 17th – 30th Jan 2022
- Hesitants- 'Take it from me' - 7th Feb 2022 – 27th Mar 2022
- Parents of 5-11s - 15th -31st Mar 2022
- Pregnant & Fertility advertorials - 21st Feb 2022 – 27th Mar 2022.

244. Don't Let Your Protection Fade Co-vax (Flu and Covid-19)

- 10th Oct - 4th Dec 2022.

245. Don't Let Your Protection Fade Co-vax (Flu and Covid-19)

- 4th Sep – 30th Oct 2023.

Ensuring Accurate Public Messaging and Countering Misinformation in Scotland

246. At all times, the Scottish Government strived to ensure that all information materials on the vaccines were factually accurate, honest and open. These were revised continuously when new information and data was received, for instance when the risk of myocarditis and pericarditis emerged, or with the increased risk of blood clots with AstraZeneca. As well as updating the Scottish Government's public information and resources when the evidence and data evolved, the Programme was also quick to respond to new advice or evidence and offer people a more suitable vaccine type.

247. When the vaccines were authorised and initially deployed, information on their ability to prevent transmission of the virus was limited. Some of the initial messaging spoke of getting vaccinated in order for people to protect themselves and protect their loved ones. This messaging is wide ranging and open to interpretation, as getting vaccinated does protect others and society in a wider way. However, the Scottish Government received a selection of correspondence stating that people felt that we inferred they prevented transmission and that this was not the case. As more data emerged over the course of the pandemic and the limited ability of the vaccines to prevent transmission became clear, Scottish Government communications and marketing teams refined the messaging to focus on vaccination protecting the individual and the NHS.

248. As well as ensuring all Scottish Government public information was informed by the most up to date data and evidence, the division had a dedicated team lead whose role covered security and supply, who was responsible for managing anti-vaccination and mis / dis information activity. There was a clear pathway for Health Boards to report all activity of this

nature directly to the Scottish Government who would then feed that into four nation security meetings, where appropriate action would then be taken.

249. Training modules on security and misinformation were developed and placed on Turas for vaccination staff. This included the clear pathway for reporting and escalation. If key themes of misinformation were identified, we also used these to inform our information materials via the SIP CIAG group and could be addressed by those who ran engagement sessions at a local level.

Communications Addressing Concerns in Vaccine Safety

250. Media campaigns focused on promoting the safety and benefits of the vaccines.
251. The use of senior, trusted voices was also important and the CMO, DCMO and NCD would also relay information on safety at FM daily briefings and in any media appearances. Ministers and senior Scottish Government medical personnel would often be filmed by the media receiving their vaccines, reinforcing the safety message.
252. Another key element was establishing vaccine confidence in the vaccinator workforce and the wider health workforce, who had an important role in advocating for the vaccines and their safety. Vaccinator training materials all contain information on side effects and risks and we held training webinars for new vaccines, where attendees (mostly the vaccinator workforce) could ask questions on safety. These would be attended by senior clinicians from the Scottish Government and PHS who would answer these queries and were trusted voices. For the Scottish Government, the SMO would often attend.
253. As at paragraphs 147 to 149, patient leaflets were available at the point of vaccination and could be downloaded from the NHS Inform website. For those without digital access, the national vaccination helpline could provide information to those who called and people could request copies to be sent to them at any point.

Awareness of and managing possible side-effects

254. NES was responsible for developing the training and educational resources for the vaccination workforce throughout the pandemic. This was informed by the information in the Green Book chapter 14a which included information on side-effects and Yellow Card scheme reporting.

255. NES regularly updated the workforce training and resources as new vaccines were available, and the Green Book chapter was updated accordingly.
256. PHS also utilised the Clinical Governance Group to provide the Programme and individual clinical leads within the NHS Health Boards with advice on clinical matters. This included feedback from any incidents including MHRA and Yellow Card notifications.
257. Clinicians are aware of sources they can refer to, as these sources (MHRA, JCVI, Green Book Chapter etc) are well known and routinely used by clinicians, should they believe that a patient's symptoms are directly related to a Covid-19 vaccine. CMO letters were issued as new vaccines were introduced to the Programme which provided the NHS with information and links to JCVI advice, MHRA and the Green Book chapter 14a. The copy lists for CMO letters include NHS Chief Executives, Medical and Nursing Directors, Primary Care Leads and General Practitioners, amongst others.

Measuring Public Confidence

258. At the height of the pandemic the Scottish Government conducted weekly polling on the vaccination programme, and this contained several questions about vaccine confidence. PHS also conducted evaluations, roundtables and webinars. When individuals called the National Vaccination Helpline to cancel appointments, they would also be asked questions on their reason for cancellation. These insights were then fed back to delivery colleagues to track and address issues raised. The Scottish Government marketing team also undertake questionnaires for each individual programme, which includes questions on vaccine confidence.
259. Public confidence is also measured by uptake, though we recognise high overall uptake can overlook pockets of low uptake in certain communities.

Covid Status Vaccine Certification

260. Information on the Domestic and International Certification Schemes is provided in the Module 2A Health and Social Care corporate statement, M2AHSCD01. Following the example of a number of other countries, the mandatory domestic Covid Status Certification scheme came into force in Scotland on 1 October 2021.

261. The Covid Status Certification Steering Group [CL10/111 – INQ000147445] was established in March 2021, with cross-Government coordination and governance overseeing the development and introduction of the scheme. A range of key stakeholders were engaged, clear roles and responsibilities established, and an escalation route for key issues put in place. This formal governance mechanism captured progress, key activities and associated risks, and allowed stakeholders from various sectors and operational areas to provide their perspectives on the proposed policy. The group co-ordinated advice to Ministers and oversaw delivery of the scheme. The Domestic Certification Programme Board and Covid Status Certification Delivery Group were established in summer 2021 to implement the scheme. Governance was later taken on by NSS Portfolio Management Office (PMO) to oversee delivery through a programme board.
262. Parliament passed a motion approving the scheme on 9 September [CL10/103 - INQ000147443]. An evidence paper covering domestic vaccine certification and the four harms approach was published in September 2021 and updated in November 2021 [CL10/104 - INQ000383489], [CL10/105 - INQ000131042].
263. Impact Assessments were completed in advance of the introduction of the domestic policy and all significant changes to the policy throughout its life span: provided within general disclosure.
264. As stated in the Strategic Framework Update (November 2021) [CL10/108 – INQ000214388] and in legislation, the aims of the scheme were to:
- Reduce the risk of transmission of coronavirus.
 - Reduce the risk of serious illness and death thereby alleviating current and future pressure on the National Health Service closure or more restrictive measures.
 - Increase vaccine uptake.
265. As the conditions of the pandemic changed, the Scottish Government continued to make amendments to the scheme to ensure it remained necessary and proportionate. On 23 November 2021 the First Minister made a statement to Parliament on Covid-19. She confirmed that from 6 December 2021 the Certification scheme would be amended to include the option of providing a recent negative lateral flow test as an alternative to proof of vaccination, following a decision at Cabinet [CL10/110 – INQ000240346].
266. Further examples of amendments made to ensure the scheme remained necessary and proportionate are set out below:

- 6 December 2021, the scheme was amended to accept a negative test result within the previous 24 hours as an alternative to proof of vaccination.
- 9 December 2021, the Covid Status App was updated to include recovery status, third dose of the vaccine and boosters.
- 13 December 2021, the paper and PDF certificates were updated to include evidence of an individual's last 2 doses of the vaccine.
- 13 January 2022, boosters were added to the app for domestic boosters This change made it possible for more people to make use of the scheme, such as those who were not yet fully vaccinated. It also meant that individuals who received a vaccine not recognised by the MHRA, or who had experienced difficulty accessing their vaccination record, would be able to attend venues covered by the scheme.
- 17 January 2022, the definition of 'fully vaccinated' within the scheme was amended. The NHS Scotland Covid Status App was updated to reflect the Scottish Government's new definition of fully vaccinated. This meant that anyone who had received their final dose of their first vaccination course more than 120 days before seeking entry to the premises required also to have received a booster dose (at least 10 days before seeking to enter the premises) in order to be regarded as fully vaccinated.
- 24 January 2022, the definition of 'late night premises' within the scheme was amended and live events were removed from the scheme.
- 28 February 2022, the mandatory domestic Covid Status Certification scheme was ended.
- The government's approach to certification was successful against a legal challenge in September 2021, prior to the scheme coming into force. The legal requirement for certification was lifted at the end of February 2022.
- A petition was lodged in the Court of Session Edinburgh by Fubar Stirling Ltd and Invopco Limited on 28 September 2021 against the Scottish Ministers for judicial review of the decision taken by the Scottish Ministers to introduce and implement a mandatory vaccination certification scheme in Scotland affecting late night hospitality venues. They asked the Court to Interdict (forbid) Scottish Ministers from implementing the scheme.
- The motion for interim interdict was heard by Lord Burns on 29 September 2021 who refused the application on 30 September 2021. The petitioners were then allowed to serve the petition on Scottish Ministers. The petition was formally served on Scottish Ministers on 5 October 2021 and on 6 October 2021 the petitioners asked if Ministers would agree to the case being "sisted" or put on hold. The petition was sistied at the petitioners' request until 8 March 2022, Following a change to the policy, the petition

became academic and the petitioner's agents enrolled a motion to dismiss the action. The Ministers consented to the motion and that brought an end to the petition process.

Lessons Learned and Future Pandemic Preparedness

Future Pandemic Preparedness

267. The Scottish Government acknowledges that developing plans for pandemic readiness cannot happen in isolation and requires close four nations working. The Scottish Government continues to engage both directly and through four nations partners as part of UK-wide pandemic preparedness and resilience measures. This includes building on long-standing measures to build and maintain stockpiles of medicines to address challenges from potential influenza pandemics and more recent measures to establish stockpiles for the response to Covid-19. Collaborative working across the UK also includes partnership with industry to develop and onshore vaccine manufacturing capacity, with potential for pandemic deployment.
268. The Scottish Government continues to work with the UK Government on modelling the efficacy and cost effectiveness on procuring a stockpile of a pre-pandemic vaccine, based on an avian influenza virus strain (H5N1), to address the increased threat from that type of pandemic. As part of that work, steps are being taken to look at the most likely delivery model were such a vaccine to be required, depending on the demographic of the potential cohort, and workforce implications.

Lessons learned from adopting a Scotland-specific vaccine programme

269. It was sometimes challenging for Scotland to develop a programme that suited the Scottish landscape, systems and population. Throughout the course of the pandemic, Scottish officials built relationships with the JCVI and the Secretariat to ensure advice considered the Scottish context and was published at a suitable time. This relationship-building complemented the representation on the committee by Dr Lorna Willocks, who was co-opted as a member for input on operational issues affecting NHS Boards in Scotland.
270. The divergence in approach to the other four nations caused some public confusion at points, and we had to ensure our communications and messaging were clear and tailored to Scotland. For example, Scotland decided to extend the definition of "unpaid carer" for the purposes of vaccination to align with our legal definition of an unpaid carer in the Carers

(Scotland) Act 2016. Close work with Scotland's National Carer Organisations (NCOs) and our dedicated unpaid carer marketing campaign helped to ensure that unpaid carers in Scotland understood their eligibility.

271. The Scottish Government had a strong working relationship with the UK Government, although on occasion this could involve challenge. On 3 August 2021 the First Minister made an announcement to Parliament referencing imminent JCVI advice on the vaccination of 16 and 17 year olds. This announcement came before the official JCVI statement on vaccinating 16 and 17 year olds on 4 August 2021. The SRO for FVCV emailed the JCVI on 03 August 2021 to notify them that the First Minister would shortly be referencing their imminent advice in a statement to Parliament [CL10/107 - INQ000499466]. The First Minister had been briefed on the imminent JCVI advice and was of the view that this should be shared with Parliament, and that withholding this information could prompt accusations that either First Minister misled Parliament or was, at a minimum, not fully transparent. This announcement was also predicated on the understanding that the advice was finalised but unpublished; and that official announcement was only awaiting agreement on timing with the UK Government, with whom the JCVI generally arranged with.
272. This prompted a letter from DHSC to the FVCV SRO for Scotland, robustly outlining their view that the First Minister should not have shared imminent JCVI advice prior to official JCVI announcement [CL10/060– INQ000493478]. To note, the vaccination of 16 and 17 years old was adopted in Scotland only when the official JCVI advice had been issued. Subsequent communication from the FVCV SRO to DHSC noted that this direct, official-to-official, communication over such a matter was highly atypical.
273. It is clear from data and studies that Scotland's approach to vaccination was having a positive impact, for example, World Health Organisation (WHO) study found that between December 2020 and November 2021, an estimated 27,656 deaths were directly averted as a result of Covid-19 vaccination programme in Scotland.

Key Lessons Learned by the Scottish Government in Respect of Vaccines and Therapeutics

274. Digital Health and Care Directorate published a report into Scotland's Digital Health and Care Response to Covid-19 [CL10/055 – INQ000147422]. This report includes key lessons learned in relation to the vaccination programme and was published in October 2021. The Directorate continues to use experience from the pandemic to inform the delivery of digital services.

275. In December 2022, the Four Nation CMOs published a technical report on the Covid-19 pandemic (which was then updated in January 2023) [CL10/056 – INQ000203933]. Chapter nine specifically focuses on vaccines and therapeutics in terms of researching, developing and deploying them during the pandemic. This is informing our future pandemic preparedness plans for the development, authorisation and delivery of vaccines and therapeutics.
276. PHS set up an evaluation team to specifically consider the FVCV Programme in October 2020. The team undertook a range of evaluation projects and published a number of reports during that time. A PHS report titled “*Evaluation of the COVID-19 vaccination programme, 2020/22*” was published on 12 October 2022 [CL10/057 – INQ000376363]. The report considered various aspects of the Programme, including vaccine uptake by population group; appointment method; and delivery models.
277. A Programme Management Office (PMO) led internal lessons learned exercise was undertaken at the end of the first tranche and a report shared with the FVCV Programme Board in August 2021 [CL10/058 – INQ000458925]. Key recommendations looked at: governance and programme management; service delivery; and digital.
278. A further PMO led lessons learned exercise for Tranche 2 was also undertaken and presented to the FVCV Programme Board in December 2021 with recommendations centred around: governance and programme management; workforce; communications; digital; policy; and celebrating success. Recommendations from these exercises were built into future programme planning and delivery [CL10/059 – INQ000458926].
279. Lesson learned and best practice was continuously shared by the four nations via the SRO and policy alignment meetings. There were also four nations in-person planning and strategy session where key lessons were discussed and shared. Colleagues from DHSC, NHSE and UKHSA attended those meetings.
280. One significant lesson learned from the pandemic in relation to vaccines was around the availability of workforce to administer these vaccines. Where initially the supply of workforce was diversified with independent primary care practitioners unable to carry out their own function to the same degree as prior to the pandemic (dentists and optometrists in particular), as services were recommencing it was considered that that part of the vaccination workforce should no longer be relied upon.

281. The Scottish Government Health Workforce team recognised the challenges of recruiting and deploying health and social care staff at pace. A need was identified for a more sustainable approach to resourcing, which led to Health Boards being tasked in July 2021 with moving towards a sustainable vaccination workforce model to ensure more effective and efficient delivery of activity going forward while also safeguarding other services across our health and social care system.
282. In October 2021 the Flu and Covid-19 Vaccinations Programme Board wrote to Finance leads, identifying the need for forward planning on a funding model to support future requirements for a permanent vaccinations' workforce in each Health Board, taking responsibility for the delivery of all future vaccination programmes. Health Workforce made recommendations to Health Boards at the end of October 2021 suggesting various options to increase the efficiency of the vaccination programme and reduce the overall workforce burden.
283. In November 2021 Health Workforce shared their conclusions around the development of a sustainable vaccination workforce with internal colleagues in order to continue to develop on the lessons learned.

Vaccine Preparedness for Future Pandemics

284. As previously mentioned, the UK Government has agreed a 10 year partnership with Moderna, to onshore mRNA vaccine manufacturing, and Scottish Government colleagues have been included and involved in the development of the shape of the partnership. The deal will include an mRNA vaccine manufacturing facility capable of supply in the event of a health emergency and provide the UK with access to new vaccines treating pandemic pathogens, including vaccines against flu and RSV, multi-pathogen vaccines and potential trivalent vaccines.
285. The Scottish Government is working closely with the UK Government as the outline of the Moderna Strategic Partnership develops and have emphasised the need for Devolved Administrations to maintain input to all the discussions as it is intended as a UK wide plan. We have also raised the need to have consideration around the operationalising of any vaccine developed and deployed in Scotland, as our delivery model and deployment is substantially different.

- 286. The Scottish Government's vaccine teams are larger than pre-pandemic, with strong links to four nations colleagues and improving digital systems. Lessons learned from during the pandemic are under continuous consideration in our work moving forward.
- 287. These strong connections with four nations colleagues, as well as the Moderna Strategic Partnership, puts us in a strong position for any future vaccine development and procurement. Scotland specific considerations will remain relevant in the event of a future pandemic, in terms of our requests for a population level share of any vaccine.
- 288. Through the Scottish Government's ongoing work to transfer national operational oversight for vaccines to PHS (transition took place in January 2024), future national roles and responsibilities are clear and well understood across the system. Clear governance and meeting structures in Scotland are also in place to ensure effective decision-making and communication across all partners.
- 289. The ability to continue and expand specific developments such as the use of non-registered healthcare workers to administer vaccines may be helpful in any future pandemic situation, recognising Scotland's delivery model for vaccines.
- 290. A range of digital improvements were made during the pandemic, such as the introduction of the NVSS, the online booking system and the VMT. These products will remain in use in Scotland and will be further developed for future use across other programmes.

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.

Personal Data

Signed:

Dated: 05/08/2024