Witness Name: Scott Heald
Statement No.: 1
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UK COVID-19 INQUIRY

WITNESS STATEMENT of SCOTT HEALD

I, Scott Heald, will say as follows:

1. Qualifications and Background

1.1 I hold a BSc (Hons) Class 2:1 in Mathematics and Statistics from the University of Edinburgh (1990 – 1994). Following completion of my degree, I began work for the Scottish Office where I worked from August 1994 to February 1996 as a consultant statistician supporting the work of HM Schools Inspectorate. In February 1996, I joined the Information & Statistics Division (ISD) of the Common Services Agency (CSA) of NHS Scotland. ISD (by then re-named the Information Services Division and part of NHS National Services Scotland (NSS), the common name for the CSA) was one of the organisations which formed Public Health Scotland (PHS) in April 2020.

1.2 During the period February 1996 to January 2020, I held a variety of data and statistics roles in ISD (progressing through the grades from Senior Statistician to Associate Director). In January 2020, I held the dual role of Associate Director and Head of Profession for Statistics. The first part of that role, the Associate Director, was a senior leadership role with responsibility for ISD's data management function, which administered Scotland's national health and care data estate. The second part of that role, being Head of Profession for Statistics (see section 3.1 below), was a professional responsibility relating to the production of official statistics produced by ISD and ensuring compliance with the UK Statistics Act and UK Code of Practice for Statistics. The Head of Profession role also covered other national NHS bodies in Scotland who produced official statistics: other divisions of NHS National Services

Scotland, including Health Protection Scotland; NHS Education for Scotland; the Scottish Ambulance Service; and NHS 24.

1.3 This dual role continued when ISD became part of PHS in April 2020.

1.4 During the period April 2020 to April 2022, I held a variety of leadership roles in PHS – initially as an Associate Director (as described in paragraph 1.2 above), then as interim Contact Tracing Director (May 2020 to January 2021), Chief Officer (January 2021 to May 2021), and finally as Director for Data & Digital Innovation (from June 2021). In all roles, I attended the regular (initially daily, then later reduced in frequency) internal PHS senior team calls which took place to update us all on the latest case numbers and key work-streams which were being undertaken across PHS to support the pandemic response.

1.5 Throughout the whole period January 2020 to 18 April 2022, in addition to the leadership roles described in paragraph 1.2, I held the professional role of Head of Profession for Statistics and had accountability for the statistics which PHS published into the public domain on the COVID-19 pandemic. Paragraph 3.1 describes my Head of Profession for statistics role – although my role involved advising Scottish Government officials, the final decisions on the publication of statistics lay with me.

2. Description of my roles and responsibilities

Early pandemic response

2.1 In the early period of the pandemic (January to March 2020), I had limited involvement in work relating to the pandemic. I was not close to Scottish Government officials who were making decisions relating to the early COVID-19 threat. I played no role in giving advice to the First Minister, Cabinet Secretaries, Ministers, Scottish Government committees or Scottish Government advisors in relation to how Scotland should respond to COVID-19. I was not involved in the initial strategy and decision-making period. I was not involved, for example, in any discussions relating to events at that time like the NIKE conference or the Scotland versus France Six Nations rugby match, or the Scottish Government's decision to adopt a national lockdown in March 2020.

2.2 The early contribution to the pandemic response was provided by Health Protection Scotland (HPS), at that time also part of NHS National Services Scotland (I worked in ISD, another division of NSS). ISD and HPS were two of the organisations which formed Public Health Scotland in April 2020.

2.3 I was aware of work monitoring and preparing for COVID-19 and was involved in discussions to release ISD staff to HPS to support the early response (either to provide analysts and data managers to support the data collection and reporting aspects, or to identify staff who could be released and trained as contact tracers, should that be required). Within my area of responsibility in ISD, I had a small team (3-4 individuals) who directly supported HPS on an ongoing basis, and much of their work was directed to the pandemic response in these early days. Their work was directed by colleagues in HPS (rather than directly by me).

2.4 My recollection is that HPS were taking the potential threat of COVID-19 very seriously (in my experience they had regular direct engagement with Scottish Government officials). HPS had set up an incident management response (highlighting the seriousness with which COVID-19 was being treated), including setting up initial monitoring and reporting of COVID-19 cases through already established lab reporting data flows. It was clear that the desire for timely, frequent data meant that both HPS and Scottish Government officials were keen to track the

spread of COVID-19 in Scotland (even though initially when systems of reporting were set up there were no confirmed cases).

2.5 My only direct engagement during this early period was on shielding (see Section 4) and this was being taken very seriously by Scottish Government, who were working at pace to set up a register of patients who were required to shield. The pace of this work highlighted to me the seriousness with which the COVID-19 threat was being taken, particularly for those people in Scotland who were most vulnerable. From my experience, particularly in relation to the establishment of the shielding register, collaboration was strong between Scottish Government, NHS Boards and Local Authorities.

2.6 On the formation of PHS in April 2020, the pandemic response was led by the Clinical & Protecting Health (CPH) directorate (staff in the previous organisation of HPS moved into this directorate so there was continuity during the formation period of PHS). Staff in ISD largely moved into the new Digital & Data Innovation (DDI) directorate, which I moved into at the formation of PHS.

My direct involvement in the pandemic response

2.7 I became more directly involved in aspects of the pandemic response as PHS mobilised to support the pandemic. The key work areas I was directly involved with relating to COVID-19 were:

I. Statistical autonomy and the production of daily and weekly statistics on the COVID-19 pandemic (see Section 3) *(January 2020 to April 2022, and in particular from the start of public reporting by PHS from April 2020)*

II. Shielding – directing data work relating to the identification of individuals who were required to shield using routinely held data in Scotland (see Section 4) *(26 March 2020 to 14 May 2022)*

III. Contact Tracing – setting up a national approach to contact tracing in Scotland, including establishment of the National Contact Tracing Centre (NCTC), latterly the National Contact Centre (NCC) (partnering with NHS National Services Scotland) and the introduction of a Case Management System (CMS) for contact tracing for use by NHS Boards and the NCC (see Section 5) *(focused leadership from early May 2020 to 3 September 2020 with handover to my successor in this role until 14 October 2020 to ensure*

continuity, and available in an advisory capacity until early January 2021).

IV. Border Control – setting up a regular flow of data from the Home Office to Public Health Scotland for all individuals entering Scotland from abroad and working with the NCC to contact a sample of those individuals to offer public health advice (see Section 6) *(6 June 2020 to 3 September 2020)*

V. Hospital discharges to care homes – leading the production of a statistical report giving details on patients discharged from hospital to care homes in the early stages of the pandemic (see Section 7) *(24 August 2020 to 21 April 2021)*

VI. Community testing (see Section 8) – led the development of a community testing dashboard for use by Scottish Government, NHS Boards and local authorities in Scotland *(13 January 2021 to 16 July 2021).*

2.8 All the responsibilities described above involved working with Scottish Government officials in an advisory role. I also liaised closely with NHS Boards and Local Authorities (particularly in my work relating to shielding, contact tracing and community testing).

2.9 The development of public health policy and guidance was led by clinical colleagues in the CPH directorate throughout the pandemic – I was not directly involved in the development of public health policy or guidance but implemented it in all my roles. Section 4.2 of the PHS Corporate Statement for Module 2A **(SH/1- INQ000237820)** references the Scottish Government's "4 Harms" approach to decision making, which involved balancing the direct harm to life and health, wider health and care services (including health and wellbeing of the population), harm to wider society, and damage to the economy, employment and Scotland's prosperity. Full details of PHS's contribution to expert advisory groups are given in Section 6 of the PHS Corporate Statement for Module 2A.

2.10 I did not have a direct role in respect of relationships and communications, including joint decision making or divergence, between the Scottish Government and the UK Government or devolved administrations in Northern Ireland and Wales. My main role was in linking with other statistics producers in the UK, in particular the UK Health Security Agency (UKHSA), see paragraph 3.6.

Communicating with Scottish Government officials

2.11 Throughout the pandemic, my main methods of communication with Scottish Government were through emails, meetings and forums. Informal communication was predominantly undertaken by telephone call (or Microsoft Teams conversation), followed up by email.

2.12 In the early days of the pandemic, the use of Microsoft Teams was not widespread (particularly within Scottish Government) so much of the early dialogue was undertaken on teleconferences by phone. This did not impede the conversations or pace of the work but it did make it harder to make connections with people who you had not met.

2.13 I was not part of WhatsApp groups during COVID-19 so I was not involved in decision making or recording of views which were done via this platform. Likewise, any communication by text or messages via platforms like Microsoft Teams, was done to alert to an issue or a decision which was required and this would then be followed up by a phone call, email or by discussion in forums like the Data & Intelligence forum (e.g. issues relating to publication of new, emerging data quickly to enable Ministers to reference it in speeches, in keeping with our ambition to have all publicly referenced data in the public domain).

2.14 I do not have any direct evidence to suggest how the public's confidence in the Scottish Government's response to COVID-19 was affected by alleged breaches of rules and standards by Ministers, officials and advisers (both within the Scottish Government and UK Government).

2.15 In Scotland, the highest profile breach of the rules was by the then Chief Medical Officer, Catherine Calderwood, in early April 2020. Dr Calderwood resigned after the breach came to light. My personal opinion is that the swift action here did not impact public confidence as it demonstrated how seriously the Scottish Government were treating such matters and did not want to risk undermining confidence in the Scottish Government's handling of the pandemic at that early stage.

2.16 From a Public Health Scotland perspective, trust from the public remained high – a survey undertaken by Progressive during February 2022 highlighted that 80% of those surveyed had heard of PHS and, of those, 84% would trust the health

information provided by PHS.[1]

3. Statistical autonomy & production of COVID-19 statistics

My roles as Head of Profession for Statistics

3.1 Section 1.4 of the PHS Corporate Statement for Module 2A (quoted immediately below in italics), outlines the importance of statistical autonomy and the role I played in safeguarding this function in my role as Head of Profession for Statistics.

> *"The production of Official Statistics during the COVID-19 pandemic was a crucial part of PHS's role in disseminating timely data to inform the pandemic response and provide public transparency. PHS is the main provider of official health and social care statistics for NHS Scotland, a role inherited from ISD in April 2020.*
>
> *The Head of Profession (HOP) for statistics at PHS is Scott Heald, the Director of DDI. This role also covers the Official Statistics provided by NSS, the Scottish Ambulance Service (SAS), NHS24, and NHS Education for Scotland (NES), all of which are named in legislation as producers of Official Statistics alongside PHS. As HOP, Scott Heald is responsible for ensuring compliance with the Statistics and Regulation Services Act 2007 (PHS/14 - INQ000235190)[1] and implementing the provisions set out in the UK Code of Practice for Statistics (PHS/15 - INQ000235110)[2].*
>
> *The Code of Practice for Statistics is based on three pillars:*
>
> - *Trustworthiness: confidence in the people and organisations that produce statistics and data through commitments to clear, orderly publication of statistics.*
> - *Quality of outputs: by ensuring the use of suitable data sources and the best available methods that produce assured statistics.*
> - *Value of the insight provided: ensuring that statistics support society's needs for information.*
>
> *The HOP is professionally responsible to the UK National Statistician in order to discharge their professional responsibilities while remaining in the formal line management of PHS. The HOP has sole authority for statistical*

[1] National Archives. Statistics and Registration Service Act 2007. 2007.

[2] UK Statistics Authority. UK Code of Practice for Statistics 2018. Accessed March 2023.

methods, standards, procedures and timing of statistical releases. The National Statistician, Sir Ian Diamond, is also head of the UK Government Statistical Service and Chief Executive of the UK Statistics Authority. The regulatory arm of the Statistics Authority is the Office for Statistics Regulation, whose Director General is Ed Humpherson (see also paragraphs 3.3.4 – 3.3.5).”

3.2 PHS and Scottish Government published a range of daily statistics (Scottish Government on their website and PHS through its COVID-19 daily dashboard launched in April 2020). The Scottish Government website included statistics produced by PHS, and data Scottish Government received directly from NHS Boards (which PHS did not collect). PHS also produced a COVID-19 weekly report (first published on 6 May 2020), giving more detail, including trends, interpretation, and one-off bespoke analyses. The content of the PHS COVID-19 dashboard, the SG's daily web pages, and the PHS COVID-19 weekly report changed over the period of the pandemic to align with the different stages of the pandemic (e.g. introducing data on contact tracing and vaccinations when they were introduced). The PHS COVID-19 dashboard, in particular, was a big success with tens of thousands of users each day. The presentation of data in the dashboard changed over time to include more granular level data at local geographies to help people understand trends in COVID-19 cases in their local and neighbouring areas.

3.3 In my role I was not directly involved in the production of the statistics but had overall accountability, and final decision making, for the statistics which were produced by PHS. I was supported in fulfilling the Head of Profession role by the PHS Statistical Governance team, which supports the production of official statistics in PHS, including development of policies and guidance (e.g. on quality assurance and checking) and training for staff involved in the production of official statistics (including awareness of the UK Statistics Code of Practice). All statistical publications are pre-announced in advance of release to ensure openness and transparency about future releases. Any changes to publication dates, along with explanations for the changes, are published on the PHS website. This was particularly important in the early days of the pandemic when PHS scaled back the reporting of non-COVID-19 statistics to ease the data collection burden on NHS Boards and to ensure PHS could direct staffing resource to the COVID-19 response. Paragraph 2.16 also gives details of a survey undertaken by PHS to ascertain public

awareness of the organisation, and their levels of trust in the work undertaken by PHS.

3.4 In addition, PHS is regulated by the Office for Statistics Regulation (OSR), whose role includes setting the statutory code of practice for statistics, assessing compliance with the code of practice, and reporting any concerns on the quality, good practice and comprehensiveness of official statistics. The OSR undertook a number of rapid assessments of statistical reports produced during the pandemic, including the COVID-19 weekly report produced by PHS.[2] Letters written to me by the OSR (and my responses) over the pandemic are published on the OSR website.[3]

3.5 On 23 November 2021, I gave evidence to the Scottish Parliament's Health, Social Care & Sport Committee, along with Ed Humpherson, Director General of the OSR, in a session on "Data and digital services in health and social care". Although this session was covering all aspects of data and digital services, it did discuss our work on producing data and statistics during the pandemic, including areas where further investment is required to improve the coverage of our statistics (particularly relating to primary care and social care).[4]

3.6 I also engaged periodically with other statistical producers across the UK, in particular the UKHSA. This was typically in relation to Scottish plans to change or enhance reporting of COVID-19 statistics which would impact on the inclusion of Scottish data in the UKHSA's UK COVID-19 dashboard. Day to day engagement with the UKHSA was handled by the teams in PHS producing the statistics – my involvement tended to be of a strategic nature (e.g. when considering reducing the frequency of daily reporting in Scotland). I was also part of a group of statisticians from across the UK looking at how we produced and published our statistics on testing and contact tracing.

Liaison with Scottish Government officials

3.7 My role throughout the pandemic required extensive engagement and coordination with SG officials, in particular Anita Morrison and Nicola Edge who headed the SG Health & Social Care Analysis (HSCA) team, which had responsibility for the publication of statistics on the SG website and led on statistical briefings for

Ministers, and Roger Halliday, the Chief Statistician at SG.

3.8 The positive, productive relationship with the Health & Social Care Analysis (HSCA) team meant that we were able to manage the coordination of data requests between PHS and SG. In the very early days of the pandemic, while people in both PHS and SG were adjusting to the dynamics of information reporting in the pandemic world, requests from SG to PHS lacked coordination which had the potential for confusion and duplication. The daily reporting cycle we put in place led to a more coordinated, organised approach, which stood us well over the course of the pandemic. We worked hard to ensure joined up communication (e.g. between clinical teams in PHS, who were often liaising directly with the Chief Medical Officer's office at SG, and between analytical teams who were liaising directly with HSCA).

3.9 Coordination of statistical outputs was managed through a COVID-19 Data & Intelligence Forum which met weekly to discuss forthcoming data requirements and publication plans. Details of the remit of this group are explained in Section 7.4.3 of the PHS Corporate Statement for Module 2A. This group was chaired jointly by PHS and SG – the PHS chair was the Director of Data & Digital Innovation (DDI). I was promoted into the role of Director of DDI in June 2021 so took over joint-chairing responsibilities at this time. Prior to this date, I attended in my professional capacity as Head of Profession for Statistics. On promotion to the Director of DDI, I also retained my Head of Profession for Statistics responsibilities to ensure continuity throughout the pandemic. I still hold the Director of DDI / Head of Profession for Statistics role today.

3.10 In June 2021 (when I became Director of DDI), I also began attending the Scottish COVID-19 Data & Intelligence Network which is described in paragraph 6.3.17 in the PHS Corporate Statement for Module 2A.

3.11 Importantly, ministers could not quote statistics publicly unless those statistics were available in the public domain (so that content and sources could be referenced by others, and transparency maintained). Any issues relating to inappropriate use of statistics by Ministers was usually picked up the OSR. An example relates to the use of unpublished statistics in a Scottish Government news release. A letter was written from the OSR to me and Roger Halliday, Chief Statistician at Scottish Government,[5] to which we responded.[6]

3.12 Occasionally we had to rapidly adapt our daily or weekly reporting (outwith the weekly cycle of the Data & Intelligence Forum) to ensure any urgent, emerging issues Ministers wanted to comment on were supported by publicly available data. For example, when the reporting of data relating to COVID-19 deaths in Scotland changed in April 2020, I attended a briefing with the First Minister, Nicola Sturgeon, (along with PHS colleagues Angela Leitch and Dr Jim McMenamin) to explain the changes in reporting of death data. Dr Jim McMenamin and I subsequently attended a media briefing with Jason Leitch, Scottish Government, to discuss these changes.

3.13 The data produced by PHS fed into decision making, although I was not directly involved in decision making in Scottish Government (e.g. relating to national lockdowns, local and regional restrictions, working from home, reduction of person to person contact/social distancing, self-isolation requirements, the closure of schools and education settings, the use of face-coverings, or the use of border controls) as this was led by clinical and epidemiological experts in the PHS Clinical and Protecting Health directorate, or through briefings produced within Scottish Government by their own statistical teams.

3.14 From my experience, I was not aware of the Scottish Government being restricted in any way from understanding the full scientific picture. Section 5 of the PHS Corporate Statement for Module 2A provides more details about PHS's support to the development and implementation of Scottish Government strategies. Section 7.4 of the PHS Corporate Statement for Module 2A gives an example of scientific evidence produced in Scotland through the EAVE-II consortium which produced the first evaluation into the effectiveness of COVID-19 vaccinations.

3.15 PHS's role in modelling work to support the pandemic is described in Section 7.7 of the PHS Corporate Statement for Module 2A. The Scottish Government had the overall remit for modelling. I was not directly involved in the modelling work, but Section 7.7 describes how other teams in PHS, particularly from our Clinical & Protecting Health directorate were involved.

3.16 Scottish Government also published accompanying statistical papers with key decisions made (e.g. decisions relating to changes in lockdown restrictions) to give full transparency on the underlying data and assumptions used (data which was

often produced by PHS).

3.17 Although I was not involved in decisions in relation to the second national lockdown, I was not surprised by the decision to introduce a further lockdown based on increasing numbers of COVID-19 cases that we were seeing at the time, as reported through the PHS daily and weekly COVID-19 statistics.

3.18 The importance of monitoring racialised health inequalities is described in Section 9.12 of the PHS Corporate Statement for Module 2A, including a report published by PHS outlining the routine monitoring (and challenges with these data) on racialised inequalities across Scotland. At the beginning of the vaccination programme, for example, the ethnicity of patients being vaccinated was not initially collected, making it difficult to fully understand the health impact on those who were vaccinated and those who were not. The ethnicity of patients was later added, enabling a more robust analysis of these data by PHS.

Lessons learned

3.19 The regular rhythm of the production of COVID-19 statistics, and the presence of the COVID-19 Data & Intelligence forum throughout the pandemic, meant there was no formal lessons learned exercises undertaken because we were learning throughout and adapted our data and statistics response to the different stages of the pandemic.

3.20 For example, over the course of the pandemic, our teams worked to improve processes, in particular to produce the daily statistics which required processing of ever-increasing volumes of data as the pandemic progressed. PHS's work on automation (referred to as a "reproducible analytical pipeline") features in a guest blog I wrote for the OSR.[7] PHS also released data relating to COVID-19 on its open data platform, allowing users to lift the data and use it for their own purposes. The open data was used, for example, by the BBC to populate their own COVID-19 statistics web pages, the UKHSA for inclusion in the UK COVID-19 dashboard, and by other users like Travelling Tabby (a Scottish COVID-19 tracker) who produced their own COVID-19 dashboards and narratives.

3.21 COVID-19 data was also made available in the NHS Scotland corporate data

warehouse which enabled NHS Boards direct access to data relating to their Board areas.

3.22 The OSR also undertook a lessons learned exercise on statistics during the COVID-19 pandemic, which I contributed to.[8]

3.23 The orderly release of statistics into the public domain was an area which I think Scotland did very well, to ensure transparency and openness, in line with the UK Code of Practice for Statistics.

3.24 For future pandemics, I would recommend outlining at the start of the pandemic how long daily reporting would be put in place. With hindsight, for COVID-19, we started daily reporting immediately and did not have in place a plan or criteria by which reporting could switch to a less frequent rhythm (and be ramped up again if required). Daily reporting became the expected norm and this meant that reporting continued, even during period when COVID-19 cases were declining.

4. Shielding

4.1 At the beginning of the pandemic (March to May 2020), I was part of a multi-agency group comprising representatives from Scottish Government, NHS Boards and local authorities, tasked with establishing a register of clinically vulnerable people who were required to shield.

4.2 Daily huddles (by phone) with all partners in this work took place every day (Monday to Friday) during the period of my involvement.

4.3 My involvement in this work was to lead the initial development of a register using data centrally held within ISD (until March 2020) and PHS (from April 2020), and supplemented by other data held locally within NHS Boards (e.g. on registries which were not routinely available to PHS).

4.4 My advisory role was in relation to how we could identify individuals using national data sets. Working with clinical experts was crucial during this period – those experts advised on the criteria for inclusion of people on the shielding lists through the use of appropriate clinical codes for identifying individuals on the data held within ISD and PHS.

4.5 This work was undertaken at pace given the importance of identifying those most clinically vulnerable. My experience of working with the Scottish Government on this project was that there was a high level of commitment to identifying and supporting the most clinically vulnerable through the pandemic.

4.6 Accuracy of the data was of utmost importance given the register would be used to write to individuals advising them to shield. Data quality assurance was undertaken in a variety of ways including: reviewing the outputs with clinical leads to ensure the numbers of individuals identified for each condition looked plausible based on their clinical experience; sharing patient listings with NHS Boards allowing Board clinicians to review the listings to ensure no one was missed in error, or included inappropriately; matching identified individuals to the deaths register in National Records of Scotland, to ensure people who had died were not sent a shielding letter.

Lessons learned

4.7 Data experts, clinicians and policy officials worked well together – there was a willingness to undertake this work at pace and address issues at pace. A particular success was quickly putting in place data sharing arrangements with each of the local authorities which enabled the transfer of data about individuals on the shielding register from PHS to their local authorities. This was to enable the local authorities to put in place support (e.g. with food shopping) for those individuals.

4.8 At the time, though, I recall the "faster, faster, faster" mantra of some Scottish Government officials as there was an understandable desire to identify patients required to shield as quickly as possible. My role was to be a buffer between government officials and my data team, reinforcing that teams were working as fast as they could but there had to be a commitment to accuracy too, to ensure we were identifying appropriate cohorts of people required to shield.

4.9 From my perspective, this multi-agency work was an early success in the pandemic.

4.10 PHS undertook an evaluation of the shielding programme (which I was not part of) – this is described in Section 4.8 of the PHS Corporate Statement for Module 2A.

5. Contact tracing

5.1 In May 2020, I was asked by the CEO of PHS, Angela Leitch, to take on responsibility for establishing a national approach to contact tracing in Scotland (part of Scotland's 'Test, Trace, Isolate, Support' ("TTIS" approach, later re-named Test & Protect – also described in Section 8.2 of the PHS Corporate Statement for Module 2A).

5.2 My role involved setting up and recruiting staff for a National Contact Centre (NCC), working with NHS National Services Scotland (who operated the NCC on behalf of PHS), a new Case Management System (CMS) for use by the NCC and NHS Boards (to ensure a consistent, joined up approach) and appropriate training for use of the CMS. This would put in place a resilient contact tracing system for COVID-19 in Scotland which would involve NHS Boards and the NCC working together to maximise the use of resource and deal with peaks and troughs in case numbers.

5.3 Section 8.2.5 in the PHS Corporate Statement for Module 2A gives details of the initial approach to contact tracing, including ways of working between the NCC and NHS Boards.

Initial governance framework for contact tracing

5.4 Timelines for delivery were tight and putting in place a governance framework for this work was crucial.[9]

5.5 I co-chaired the PHS Contact Tracing Implementation Group (my co-chair was Dr David Goldberg, a consultant in public health medicine in PHS, to ensure senior clinical oversight was in place throughout), supported by 7 work-streams as follows:

- Contact Centre Implementation (lead: Martin Morrison, NSS)
- Data & Digital Solutions (lead: Carol Sinclair, PHS)
- Public Health Approach & Guidance (lead: Dr Colin Sumpter, PHS)
- Education and Training (lead: Ruth Robertson)
- HR (lead: Sarah Moffat, NSS)
- Finance (lead: Louise Roberts, NSS)
- Communication and Stakeholder Engagement (lead: Rachel McAdams, PHS)

5.6 PHS CEO Angela Leitch, chaired an Oversight Board which met weekly (and allowed me to report progress, seek approvals to progress, and to discuss any risks, issues or blocks).

5.7 As part of the wider Test & Protect programme, Scottish Government put in place two governance groups – the Test and Protect Delivery Group, which covered the operational delivery aspects in detail (chaired by Caroline Lamb, Director with responsibility for Test & Protect, and met twice a week) and the Test and Protect Steering Group chaired by Elinor Mitchell, Interim Director General Health and Social Care in Scottish Government, which met weekly (see also paragraph 8.2.3 of the PHS Corporate Statement for Module 2A). I updated on progress with the contact tracing elements of the programme at these groups.

5.8 Throughout the development of the contact tracing approach, I received advice and support through regular informal discussions with a group of Directors of Public Health (representing NHS Grampian (Susan Webb), NHS Fife (Dona Milne), NHS Lanarkshire (Gabb Docherty) and NHS Greater Glasgow and Clyde (Linda de Caestecker)), a Director of Planning representing NHS Lothian (Colin Briggs) and a Director of Finance representing NSS (Carolyn Low). This group was chaired by Colin Briggs.

5.9 PHS also chaired a network of policy and clinical colleagues ("Contact Tracing Information Network – CoTIN") which I, or one of my team, attended on a regular basis. The role of CoTIN is described in paragraphs 8.2.8 and 8.2.9 of the PHS Corporate Statement for Module 2A.

5.10 I, or members of my team, also attended the National Incident Management Team ("NIMT"), described in Section 4.3 of the PHS Corporate Statement for Module 2A, to update on contact tracing issues, but to also understand likely changes in guidance which would impact on contact tracing to ensure that the NCC and NHS Boards were prepared for any changes.

"Go live"

5.11 The National Contact Centre became operational on 22 June 2020, the same date we started using the new CMS in Scotland. NHS Boards were moved on to the new CMS in a phased manner from 22 June to the end of July 2020 (note, prior to the

Boards moving to the CMS, a short-term simple tracing tool was in use so details about individuals contacted through contact tracing were still captured; however the introduction of the CMS allowed a greater level of detail to be captured, and enabled greater collaboration between the NCC and NHS Boards).

5.12 Prior to "go live" of the new approach to contact tracing (i.e. the NCC and NHS Boards working together, using the new CMS), a readiness assessment was undertaken by KPMG on behalf of the Scottish Government. On 20 June 2020, I met with Caroline Lamb and senior representatives from NHS Grampian (the first Board to go live with the new Case Management System and joint-working with the National Contact Centre) and was given the green light to proceed on 22 June 2020. Following successful roll-out to NHS Grampian, the programme then rolled out to all NHS Boards by the end of July 2020.

Staffing model

5.13 Putting in place the optimum, 7 days a week staffing model for contact tracing was an important aspect of our work. The staffing model had to be flexible enough to cope quickly with peaks and troughs in demand, as COVID-19 cases could increase or decrease quickly, and it was important we had a system in place which could adapt to these uncertainties (see also paragraph 5.17). Staffing levels across Scotland (in both the NCC and NHS Boards) were kept under review by Scottish Government.

5.14 Contact tracing staff in the NCC were employed on a mixture of pay bands. Initially, the NCC employed staff on NHS Agenda for Change Band 3 for contact tracers (who could undertake straight-forward contact tracing) and they were to be managed by Team Leaders at Band 5 (who could also undertake more complex contact tracing cases, or direct cases to NHS Board teams to handle). That was based on equivalent jobs for call handlers in the Scottish Ambulance Service (SAS) and NHS 24. It was important that the pay bands of staff in the NCC were the same as those for equivalent roles in SAS and NHS24. Otherwise, there could have been a shift of resource from those organisations to the NCC (i.e. if the pay bands were higher in the NCC, SAS and NHS24 may have lost staff who would have moved to the NCC, leaving the services provided in SAS and NHS24 vulnerable due to lack of resource).

5.15 I attended the NHS Scotland Workforce Senior Leadership Group on 12 June 2020 to talk through the staffing approach in the NCC.

5.16 The staffing model in use in the NCC included a mixture of full and part time employees (either employed directly through recruitment, or through existing staff in PHS and NSS who were directed to this work). NSS, who ran the NCC, also established a contact tracing "bank", which allowed staff to be called upon at short notice where there were increases in COVID-19 case numbers. NSS also put in place arrangements with organisations used to running large call centres (e.g. Barrhead Travel who, at the time, were not able to operate their usual holiday booking services due to the pandemic). This model of staffing ensured the NCC had flexibility given the unpredictability of COVID-19 case numbers and the need to respond quickly to peaks and troughs in case numbers.

Next steps following initial roll-out across Scotland

5.17 Following the initial roll-out of the CMS to all NHS Boards, and the implementation of the new model for contact tracing (i.e. the NCC working with NHS Boards), I co-led a short-life working group with Linda de Caestecker, Director of Public Health in NHS Greater Glasgow and Clyde, to review the profile of staffing (e.g. the balance of Band 3 and Band 5 contact tracing staff to ensure we had sufficient capacity in the NCC to handle complex cases) and ways of working and triaging of cases between the NCC and NHS Boards, particularly during period of high volume outbreaks. These were all areas which were kept under subsequent review and actioned by my successor in the contact tracing role.

5.18 From 3 September 2020, I passed on responsibility for contact tracing to George Dodds in PHS, with an extended handover period until mid-October 2020 to ensure continuity.

6. Border control

6.1 As part of my contact tracing role, I also led work on establishing a flow of data from the UK Home Office to PHS, giving details of all arrivals into Scotland. Prior to arriving in the UK, visitors or returning nationals, had to complete the Passenger Locator Form (PLF), which was then used to send details of returning passengers to PHS.

6.2 Section 8.4 in the PHS Corporate Statement for Module 2A provides details of the requirements placed on PHS by Scottish Government to implement follow-up with people entering Scotland, including situations in relation to which it would be appropriate for PHS to pass on passenger details to Police Scotland for further follow-up.

Liaison with the UK Government Home Office

6.3 My role, as part of our wider contact tracing work, was to build a team to establish a regular (every day, Monday to Friday, with Monday including data for Saturday and Sunday) transfer of data from the Home Office to PHS of all individuals registered as entering Scotland on the Passenger Locator Form. Essentially, all people who were entering Scotland (and were required to quarantine) were contacted by email with public health advice relating to their quarantine requirements (including details of how to get help with, for example, food shopping); a sample (initially up to 450 per week, but later expanded when foreign travel increased) were contacted by contact tracers in the National Contact Centre (NCC) to ensure they had understood the public health advice and to answer any questions they may have relating to their quarantine.

6.4 Prior to the transfer of data from the Home Office, a number of data protection and security measures had to be put in place to ensure the safe transfer of data from the Home Office. We also received test data sets from the Home Office which contained errors and this had to be addressed before a full flow of data could begin. We had originally anticipated that the flow of data (and subsequent contacting of arrivals in Scotland) would begin on 22 June 2020 (when the NCC went operational) but this was delayed until 7 July 2020 to ensure all data protection and security measures were in place and testing of data was complete. At this time, the number

of arrivals into Scotland was low as there was limited permitted foreign travel at the time. My email of 6 July 2020 to Caroline Lamb at Scottish Government describes this in more detail.[10]

6.5 The data received from the Home Office covered all people entering Scotland from abroad, including the country (or countries) they were travelling from. This enabled us to refine our data searches to include only those who were required to quarantine (and this was adjusted frequently as travel guidance from different countries changed throughout the pandemic).

6.6 Training and script writing for the contact tracers were also developed (and kept up to date as quarantine arrangements changed (e.g. new countries being added or removed from the quarantine list).

6.7 Initially, the PHS team liaised with the SG COVID-19 community surveillance team. Once contacting of individuals took place, governance of our Border Control work was through the established governance for Test & Protect described in Section 5.

6.8 I met with the Cabinet Secretary for Justice, Humza Yousaf, on 31 August 2020 to discuss new requirements from SG to increase (from 450 to 2,000 per week) the number of people required to be contacted by contact tracers (due to the increase in foreign travel at this time). This led to an increase in funding for additional capacity in the NCC so that it had sufficient staffing resource to undertake border control calls.

Sharing of data with Police Scotland

6.9 As we embedded our Border Control processes for contacting arrivals in Scotland, it became clear that some individuals could not be contacted because their contact details provided to the Home Office were invalid (e.g. incorrect or invalid phone numbers or email addresses), or during calls with individuals it became clear that some were not complying with the quarantine requirements. Paragraphs 8.4.2 to 8.4.5 in the PHS Corporate Statement for Module 2A provide details of the engagement between Scottish Government and PHS on this matter, resulting in an instruction to PHS to revise its passenger contact approach, including the circumstances under which PHS would provide data to Police Scotland. I played a

lead role in engaging with Scottish Government and Police Scotland in reaching resolution on this matter and then subsequently setting up the appropriate data sharing mechanisms with Police Scotland for the transfer of data from PHS.

Reflections and lessons learned

6.10 From my perspective, our work on border control was a success, and showcased strong joint working between PHS, the National Contact Centre run by NSS, and Police Scotland. The team in PHS handled the frequently changing list of countries from which quarantine was required. The changes were, in fact, so frequent that our team sometimes heard about the changes on the BBC News before SG colleagues could notify us directly. However, our data systems and processes were agile enough to cope with the frequent changes.

6.11 At the time, the issue of PHS passing data to Police Scotland was challenging. As noted in paragraph 8.4.3 of the PHS Corporate Statement for Module 2A, PHS was concerned that if non-respondents' personal details were passed to Police Scotland for enforcement purposes, this could detrimentally impact on the public's trust in PHS. The subsequent agreement with SG (detailed in paragraph 8.4.5 of the PHS Corporate Statement for Module 2A), on the circumstances in which PHS would transfer data to Police Scotland, addressed this concern and would be the baseline for future reporting if that was ever required.

7. Hospital discharges to care homes

7.1 On 18 August 2020, the Cabinet Secretary for Health & Sport commissioned PHS to undertake an independent analysis and publish a report in the public domain setting out how many people had been discharged from hospital to a care home, and whether they had been tested prior to discharge during the early stage of the pandemic (from March to May 2020). The analysis would be presented in two parts, to understand what happened in the periods before and after guidance changes relating to testing patients prior to discharge from hospital to care homes.

7.2 The universities of Glasgow (Dr Jenni Burton) and Edinburgh (Professor Bruce Guthrie) were partners in this work.

7.3 I was asked to lead the work and pulled together a team (comprising staff from PHS and universities of Glasgow and Edinburgh) to undertake this work at pace.

7.4 Section 4.9 of the PHS Corporate Statement for Module 2A gives further details about the report (published on 28 October 2020,[11] and followed by an updated report in April 2021[12]).

Publication of the first report (October 2020)

7.5 Our initial deadline was to have the work completed by 30 September 2020 but this was later extended to 28 October 2020 to address data quality concerns (Section 1 in the published report explains the challenges with the data and the work undertaken to create an accurate register of patients discharged from hospital to care homes).[11]

7.6 The analysis and content of the report was decided by PHS, working with our co-authors from universities of Edinburgh and Glasgow.

7.7 Scottish Government or Ministers did not input into the writing of the report or its conclusions. During the development of the report, PHS held regular weekly progress meetings with Scottish Government officials, which I attended. I, along with Bruce Guthrie, one of the authors, from the University of Glasgow, met with the

Cabinet Secretary for Health & Sport, Jeanne Freeman, on 23 October 2020 to talk her through the results.

Publication of the updated report (April 2021)

7.8 The initial report was updated in April 2021.[12] The following revisions were made:

- Further quality assurance of the data used in the report.
- The reporting of the statistical modelling (which analysed the risk of care home outbreaks associated with hospital discharge) was updated following feedback from users and the OSR. Additional visuals and commentary were included to provide greater clarity on our findings.[13,14]
- Further analysis, including work undertaken with the PHS Public Microbiology Team on genomic sequencing (where possible) to understand more about patterns of infection transmission and relationships between hospital discharge and care home outbreaks.

7.9 Both the original and updated reports were pre-announced in advance, in line with our usual practices under the UK Code of Practice for Statistics, to give full transparency.

Responding to Freedom of Information requests

7.10 Following publication of the first report, PHS received several Freedom of Information (FOI) requests relating to requests for further breakdowns of the data presented, or for copies of correspondence between PHS and SG during the writing of the report. PHS responded to all FOIs within statutory timescales.

7.11 One FOI was escalated to the Scottish Information Commissioner's Office (ICO) relating to a request to provide data at a low granular level, which PHS was concerned would break Data Protection requirements due to the potential for identification of individual residents of care homes. On subsequent review, the Scottish ICO instructed PHS to release the data.[15] The Scottish ICO did acknowledge the data protection concerns PHS had but ruled that the data were in the public interest and should be released. PHS complied with the ruling.

8. Community testing

8.1 As part of the Scottish Government's approach to targeted community testing when COVID-19 hotspots were identified, I chaired a short-life working group (SLWG) to develop a new "community testing dashboard", which ran from January 2021 to July 2021. The SLWG comprised representatives from NHS Boards, Scottish Government, Local Authorities and Biomathematics and Statistics Scotland (BIOSS), who were producing data on behalf of Scottish Water and the Scottish Environment Protection Agency (SEPA) on wastewater detection of COVID-19 cases, which we incorporated into the dashboard.

8.2 This dashboard was developed incrementally over this period for use by Scottish Government, NHS Boards and Local Authorities. The dashboard was not released into the public domain, although contained similar information to that published in the PHS public COVID-19 dashboard, albeit packaged in a different way to enable data-driven targeted community testing (e.g. where trends suggested COVID-19 cases were increasing in a particular location). The dashboard was produced until October 2022.

8.3 Coordination of community testing between NHS Boards and Local Authorities was crucial for the success of community testing and an important aspect of the development of the dashboard was putting in place data sharing arrangements to enable local authorities access to the data.

8.4 Progress on developing the dashboard was reported by me to an overarching Community Testing Board, which met from 15 January 2021, chaired by Christine McLaughlin and Richard Foggo at Scottish Government. This included advice on the most appropriate measures to report on (through the discussions at the SLWG).

Statement of Truth

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

Signed Personal Data

Dated 11th October 2023

References

1. Brand tracking omnibus: wave 1 report. Public Health Scotland; 2022. **(SH/2 - INQ000286846)**

2. COVID-19 weekly report: **(SH/3 - INQ000235148)**

3. Letters from the Office for Statistics Regulation to Scott Heald, and from Scott Heald to the OSR. Office for Statistics Regulation. **(SH/4 - INQ000286864)**

4. Scottish Parliament Health, Social Care & Sport Committee. Transcript from Data and Digital Services in Health and Social Care. Tuesday 23 November 2021. **(SH/5 - INQ000286854)**

5. Letter: Ed Humpherson to Scott Heald and Roger Halliday: The use of unpublished statistics in Scottish Government news release. Office for Statistics Regulation. 8 July 2020. **(SH/6 - INQ000286857)**

6. Letter: Scott Heald and Roger Halliday response to Ed Humpherson: The use of unpublished statistics in Scottish Government news release. Office for Statistics Regulation. 14 July 2020. **(SH/7 - INQ000286865)**

7. Heald S. Blog: Listen to your enthusiasts: Implementing RAP at Public Health Scotland. Office for Statistics Regulation. **(SH/8 - INQ000286860)**

8. Improving health and social care statistics: lessons learned from the COVID-19 pandemic. Office for Statistics Regulation. October 2021. **(SH/9 - INQ000286859)**

9. NSS National Contact Tracing Centre (NCTC) Programme Governance Approach. Public Health Scotland/National Services Scotland. June 2020. **(SH/10 - INQ000286861)**

10. Email from Scott Heald to Caroline Lamb at Scottish Government. 6 July 2020. **(SH/11 - INQ000286858)**

11. Discharges from NHSScotland Hospitals to Care Homes between 1 March and 31 May 2020. Public Health Scotland. 28 October 2020. **(SH/12 - INQ000147514)**

12. Revised release. Discharges from NHSScotland Hospitals to Care Homes between 1 March and 31 May 2020. Public Health Scotland. April 2021. **(SH/13 - INQ000101020)**

13. Letter: Ed Humpherson to Scott Heald: Presentation of findings from the Discharges from NHSScotland hospitals to care homes report. Office for Statistics Regulation. 14 January 2021. **(SH/14 - INQ000286856)**

14. Letter: Scott Heald response to Ed Humpherson: Presentation of findings from the Discharges from NHSScotland hospitals to care homes report. Office for Statistics Regulation. 14 January 2021. **(SH/15 - INQ000286863)**

15. Decision 138/2021: Discharges from hospitals to care homes. Scottish Information Commission. 6 September 2021. **(SH/16 - INQ000286855)**