

Witness Name: Glyn Jones

Statement No: 1

Exhibits: 76

Dated: 8th December 2023

UK COVID-19 PUBLIC INQUIRY

FINAL WITNESS STATEMENT OF GLYN JONES

I provide this statement in response to a request under Rule 9 of the Inquiry Rules 2006 dated 14 February 2023 and referenced M2-WG-KAS-01.

I, Glyn Jones, will say as follows: -

Preface

1. The Covid-19 pandemic was unprecedented for all of us, with impacts on lives, livelihoods, and our very way of living. On behalf of my team and myself, I would like to extend our deepest sympathies to all those who were affected, and particularly to those who lost loved ones or have suffered lasting health impacts.
2. I would like to put on record my thanks to colleagues and all our partners for their commitment and dedication during this extraordinary period.

Introduction

3. I am a civil servant of 23 years, having joined the Welsh Government in 2000 following a short stint at the Office for National Statistics. As a member of the Government Statistical Service, I spent the first twenty years of my career working as a Welsh Government statistician in various roles (including education, economic, and population statistics). From 2011 onwards I led the statistical profession in Welsh Government, being formally appointed as Chief Statistician in 2013. As Chief Statistician I was the primary adviser to Ministers on statistical matters and had sole responsibility for the publication of official statistics by Welsh Government, with a

decision-making role which was independent to Ministers. I also represented the interests of Wales in UK statistical structures.

4. In 2020 I led the analytical response to the pandemic from the activity prior to the first national lockdown until the end of July 2020, at which I point I was promoted into a Director role, as Chief Digital Officer (CDO). In January 2021 I took on wider responsibility as Director for Analysis in Welsh Government, alongside the CDO role. At this time, Knowledge and Analytical Services, and therefore their work in support of the response to the Covid-19 pandemic, moved into my Directorate (as described below) although the Chief Statistician remains operationally independent in terms of decision making on matters around official statistics.
5. With the assistance of the KAS team, we have prepared a chronological list of analysis and briefings conduct by KAS for the Welsh Government and Ministers. To avoid duplication, only documents not contained in the chronology are exhibited to this statement. A copy of the Chronology is exhibited as **GJM2BKAS01/01–INQ000271864**.
6. Many parts of this statement refer in the third person to “The Chief Statistician” to represent the activity which either I led prior to July 2020, or Stephanie Howarth took from July 2020 onwards.
7. I understand that the period of particular importance is that between 21 January 2020, which is the date on which the WHO published its “Novel Coronavirus (2019-nCoV) Situation Report – 1” and 30 May 2022 which is when the remaining Covid-19 restrictions were lifted in Wales.
8. As mentioned above, I was Chief Statistician at the outset of the pandemic, a role subsequently undertaken by Stephanie Howarth. Stephanie has assisted considerably with the drafting of this statement and has confirmed she has read and approved the final version of this statement. I have also been assisted by Dr Steven Marshall, Chief Social Research Officer, and Jonathan Price, Chief Economist, on matters related to their analytical professions. They have contributed to paragraphs 14-19 in relation to analytical heads of profession and analytical resourcing.

The Role of Knowledge and Analytical Services

9. Knowledge and Analytical Services (“KAS”) within the Welsh Government comprises a range of analytical professions and services, including statistics, social research, economics, geography, data science and information management. The role of KAS is to provide:
- i. assistance to policy colleagues on data requirements and new data collections, and to publish official statistics;
 - ii. research to describe, explain and predict changes in social and economic structures, attitudes, values and behaviours;
 - iii. geographical data, guidance on the use of digital map data, and aerial photography; and
 - iv. a library of information resources and advisory service on information research.
10. Paragraph 320 of Andrew Goodall’s first statement to the inquiry (M2BWG01) set out the significant role Statistical Services in KAS played during the specified period in collecting, analysing, disseminating, and advising on data and statistics. Social researchers played a role in the provision of qualitative and quantitative evidence, including evaluation (however evaluation activity was more likely to be in relation to pandemic recovery, rather than the pandemic response itself).
11. At the outset of the pandemic, KAS was part of the Welsh Government’s Health and Social Services Group (“HSSG”), reporting to the Director for Mental Health, Vulnerable Groups and NHS Governance. Although part of HSSG, KAS provided analytical services for all groups in the Welsh Government. From January 2021, KAS moved from HSSG and to the Digital, Data and Technology Directorate (“DDAT”), reporting to the Chief Digital Officer, who in turn reported to the Permanent Secretary. Exhibit **GJM2BKAS01/02–INQ000271861** shows an organogram of senior individuals in Knowledge and Analytical Services and its reporting line within the Welsh Government.

Analytical Heads of Profession

12. There are two divisions in KAS, led by deputy directors:
- i. Statistical Services, led by the Chief Statistician.
 - ii. Social Research and Information Division, led by the Chief Social Research Officer.

13. I was Chief Statistician at the outset of the pandemic, before becoming Chief Digital Officer in July 2020. Stephanie Howarth was appointed as interim Chief Statistician from 20 July 2020, and then on a permanent basis from February 2021. As well as leading the Statistical Services division, the Chief Statistician is head of profession for statistics. Responsibilities include being the principal advisor to the Welsh Government on statistical matters, ensuring compliance with the Code of Practice for Statistics, contributing to the leadership of the Government Statistical Service, and building statistical capability and capacity. The responsibilities of a statistics head of profession are set out on the Analysis Function website¹, the relevant extract of which I attach as exhibit **GJM2BKAS01/03–INQ000271835**.
14. The Chief Social Research Officer, Dr Steven Marshall, was in post throughout the period covered by this statement. Responsibilities include being the principal advisor to the Welsh Government on social research matters (including leading the National Survey for Wales), ensuring compliance with the Government Social Research Code and Publication Protocol, contributing to the leadership of the Government Social Research profession, and building social research capability and capacity.
15. The Chief Economist, Jonathan Price, is part of the Economy, Treasury and Constitution group, reporting to the Director of the Welsh Treasury. While not part of the division Knowledge and Analytical Services, all analysts across the Welsh Government are part of the "analysis function". The role of the Chief Economist during the pandemic response is covered in more depth in the second statement of Andrew Goodall served in Module 2B and which relates to the Welsh Treasury M2B-WT-01 refers.
16. The Chief Statistician and Chief Social Research Officer did not attend Cabinet Covid-19 committees. The Chief Economist regularly attends Cabinet to provide a general economic update. This normally occurs approximately twice a year and these updates would have covered the broad economic implications of the pandemic. The Covid-19 data monitor, which was produced by KAS (discussed later), was regularly tabled at Cabinet meetings during the pandemic.
17. Analysts did not lead on providing any written or oral evidence to the Senedd or any committees of the UK Parliament in relation to the response to Covid-19, however

¹ [Government Statistical Service \(GSS\) Heads of Profession: roles and responsibilities – Government Analysis Function \(civilservice.gov.uk\)](https://civilservice.gov.uk/government/statistical-service/gss-heads-of-profession-roles-and-responsibilities)

there are likely to have been occasions where KAS contributed to evidence provided by other Welsh Government officials.

18. There was no informal or private communication (including use of WhatsApp) between senior members of KAS and Ministers or senior civil servants about significant advice or key decision-making.

Analytical Resourcing

19. There are approximately 125 statisticians, 120 social researchers, 20 economists and 20 geographic analysts working for the Welsh Government, as well as a small additional number in arm's length bodies. There are also a small number of individuals from other analytical professions, such as data science and operational research (fewer than 10 in total). The number of analysts in the Welsh Government is considered to be small when compared to the Scottish Government and major UK government departments. All analysts are professionally accountable to their head of profession, regardless of where in the organisation they work. There are benefits to being a small analytical function which were valuable during the pandemic, such as an enhanced ability to collaborate and communicate across teams and topic areas, but it also presented challenges in terms of the ability to resource all demands.
20. The pandemic saw an unprecedented reprioritisation of analytical resources, with many routine areas of work paused or cancelled. As a result of increasing analytical demand, the Covid-19 analysis hub was stood up in KAS on 23 March 2020. Paragraphs 323-324 of Andrew Goodall's first statement to the inquiry set out the responsibilities of the Covid-19 analysis hub, as well as the role other analysts played in supporting the hub's operations. The hub operated on a 7-day-a-week basis until 17 May 2021, at which point routine weekend and bank holiday cover was stood down.
21. The size and structure of the Covid-19 analysis hub evolved over the course of the pandemic. Initially a team of 7 (including statisticians and administrative support), it grew to include many more individuals who contributed significant parts of their time alongside existing responsibilities. From autumn 2020, many of the roles became dedicated full-time roles in their own right, rather than being staffed on a "voluntary" basis alongside other responsibilities. I exhibit as **GJM2BKAS01/04-INQ000271860** organisational charts setting out the above structure.

22. This unprecedented redeployment of analytical resources was only possible due to the cancellation or postponement of considerable amounts of regular statistical activities. In the normal course of events KAS resources would have been committed to a range of projects within their analytical work programme, including a vast range of statistics published on a statutory basis via the Code of Practice for Statistics. However, many of these statistics were postponed due to the emerging situation, with it being impractical or inappropriate to continue with some data collections and other non-critical statistical work able to be paused. Paragraph 327 of Andrew Goodall's first statement (M2B/WG/01) to the Inquiry gives the example of the closure of schools, which made it impractical to collect some education and teaching data. The collection of some housing and social services data from local authorities was paused as it was considered inappropriate to divert local government resources towards this and away from the immediate pandemic response. This may not have been replicable in other emergency scenarios, where business as usual work would be expected to continue alongside the emergency evidence needs.
23. As a result, KAS were able to move at pace to meet the early and rapidly evolving analytical needs that were emerging from the crisis. However, demand rapidly outstripped supply as the scope of the pandemic work expanded into wider areas during the spring and summer of 2020. As a result, it was accepted that further resources were needed to keep pace with the growing analytical demands, including, for example, leading the Welsh Government's contribution to the ONS Covid-19 infection survey. Five new analytical posts were agreed by ExCo in June 2020 with an additional six posts agreed in November 2020. This was in addition to the demand for analysts to support the growth of the TAC.
24. Just prior to the pandemic, plans and funding had been established to set up a small Data Science Unit within KAS to build data science capability in support of the organisation. Despite the challenges of the pandemic, we pressed ahead with the establishment of the Unit as it was evident early on that new sources of data would need to be utilised to support the pandemic response. A head of Data Science Unit, John Morris, was appointed in March 2020 and the Unit quickly began to provide support for KAS and TAC, particularly in the area of mobility data. Following the move of KAS to the Digital, Data and Technology (DDAT) directorate in January 2021, the Data & Geography team reported directly to the Chief Digital Officer, rather than the Chief Statistician, to recognise their role as part of the wider digital and data function.

25. Arm's length bodies in Wales loaned four of their analysts to assist with the emergency response in the early stages of the pandemic. Loans from other departments (most notably the Office for National Statistics) also helped to bolster analytical resources. There was limited coordination at a UK level to address priority analytical resourcing needs. Attempts to make use of a centrally run Covid-19 deployment scheme from the UK Cabinet Office did not result in any additional analysts being placed with the Welsh Government.
26. Recruiting sufficient specialist resources (whether on a temporary or permanent basis) to meet the high demand for evidence was a constant challenge. This was particularly acute from late 2020 onwards, due to a combination of growing demands for Covid-19 related analysis, the return of some business-as-usual activities and burn-out experienced by analysts who had worked intensively on the early stage of the pandemic.
27. Despite significant redeployment of Welsh Government analysts and flexible use of resources, there were some projects that could not be adequately resourced due to a lack of capacity and capability. For example, the Technical Advisory Cell used an external organisation to produce and maintain an interactive dashboard of Covid-19 data which might otherwise have been delivered by KAS and/or the DDAT function if capacity were available. Demand often outstripped supply, so priorities were regularly reviewed and agreed by KAS Covid Senior Management Team (led by the Chief Statistician), with priority given to activities that only KAS could and should do.

The Code of Practice for Statistics

28. The Chief Statistician is responsible for the implementation of the Code of Practice for Statistics in the Welsh Government. As an official statistics producer, the Welsh Government is independently regulated by the Office for Statistics Regulation ("OSR").
29. Statisticians played a key role in advising on and upholding the standards of the Code of Practice for Statistics throughout the specified period. From the outset, KAS sought to be transparent and keep users informed of the impact of the pandemic on statistical services. For example, changes to statistical plans were communicated openly through the Chief Statistician's updates on the Welsh Government's Digital and Data Blog. An example of such an announcement published on the Chief

Statistician's blog² is exhibited as **GJM2BKAS01/05–INQ000271836**. The volume of new statistics published during the specified period also demonstrated a commitment to transparency in a way that sought to be build trust in statistics and meet unprecedented user demand. Annex C includes a list of publications during that period.

30. Over the course of the pandemic, statisticians moved at pace to acquire new data sources from within and outside the Welsh Government and published a wide range of new statistics. Although most of these new statistics were not formally badged as Official Statistics or National Statistics, many of the same standards from the Code of Practice for Statistics on trustworthiness, quality and value were applied.
31. Given the value and public interest in very timely data, quality assurance processes were necessarily modified in order to provide appropriate assurance in the time available. Paragraphs 361-363 of Andrew Goodall's first statement to the inquiry set out the approach to quality assurance, alongside an example of its application in relation to NHS management information on hospital activity.
32. KAS statisticians used a range of methods to monitor the implementation of statistical standards across Welsh Government. Independent assurance was sought from OSR on a number of new statistical developments, including plans to publish data on provision for children in local authority settings, which is attached as exhibit **GJM2BKAS01/06–INQ000271840** and on new monthly indicators from the National Survey for Wales, which I exhibit at **GJM2BKAS01/07–INQ000271841**. OSR undertook rapid regulatory reviews on each of these, which included an assessment of the extent to which they met the standards of trustworthiness, quality, and value.
33. There were also well-established processes in place to ensure the appropriate use of statistics within the Welsh Government. KAS clearance was required where Cabinet papers used statistics. Welsh Government guidance on drafting Ministerial advice also advises that KAS clearance is sought where statistics are used. During the specified period, KAS officials worked with communications teams and special advisers to ensure that statistical information in press briefing scripts was quality assured by KAS in advance. This is discussed further in the section on communication of statistics.

² [Chief Statistician's update: producing statistics during a national pandemic \(follow-up to previous update\) | Digital and Data Blog \(gov.wales\)](#)

34. Within the Welsh Government, KAS statisticians played an active role in promoting good practice and adherence to the Code of Practice. The R number for Wales began to be routinely published following advice from a statistician based in TAC. The Chief Statistician and other KAS statisticians also worked closely with Care Inspectorate Wales (“CIW”) to make the data they held about care homes available publicly. The impact of Covid-19 in care homes was a key topic of public interest, and thanks to the joint working of both KAS and CIW, regular data on notifications of Covid-19 related deaths (and later, Covid-19 infections) was made available in the public domain from 5 May 2020. This data was also shared with ONS to support their work on mortality and care homes.
35. The Chief Statistician, as the leader of the official statistical system in Wales, played a proactive role in improving standards across a range of statistical producers during the specified period. Both Stephanie Howarth and I worked closely with PHW on the implementation of standards from the Code of Practice, as PHW faced unprecedented public interest in their daily publication of statistics. PHW did not have a head of profession for statistics and there was a lack of experience in parts of PHW on official statistics matters, which meant that, at times, they required significant guidance and support from KAS. An early example of this was the Chief Statistician’s role in improving reporting of rapid surveillance data on Covid-19 mortality, which was described in paragraph 368 of Andrew Goodall’s first statement to the inquiry.
36. The Chief Statistician also regularly advised PHW on statistical matters such as timeliness and frequency of statistical publications, meeting user needs, communicating data quality and the presentation of data. This latter point included how to communicate revisions to data series, for example, when new streams of testing data became available from Lighthouse Labs. The Chief Statistician also ensured PHW were included in cross-UK statistical discussions and supported PHW in their engagement with OSR.
37. Given the pace at which the Civil Service was working, there were inevitably some challenges in implementing the Code of Practice for Statistics. For example, it would not have been possible to carry out the same level of quality assurance that takes place outside of a time of crisis. Statisticians were pragmatic in their application of the standards set out in the Code and prioritised meeting user needs in a transparent way. Practical implications also needed to be considered, such as the best timings of

statistical releases when the traditional 9.30am release time did not meet user needs (for example, to align with the public interest requirements of daily press conferences). For example, the Chief Statistician had to align some economic publications with the new ONS release time of 7.00am and seek OSR approval for publication of other datasets like the Covid-19 Infection Survey at midday. I exhibit that at **GJM2BKAS01/08–INQ000271837**.

38. The Chief Statistician advised Ministers and senior officials on several occasions on the proposed use of statistics that would normally be considered outside the standards set out in the Code of Practice. This usually involved exceptional use of unpublished data (for example in press briefings or the Senedd). In offering advice on this topic, the public value of using unpublished (or soon to be published) data was weighed against the potential impact on trust in statistics and trust in government. An example of this was when a “local lockdown” was to be confirmed in a press briefing. The daily infection case rates which had informed that decision were not yet in the public domain, however the Chief Statistician agreed there was clear public value in being able to use this data in the press briefing to explain the decision.

Engagement with the Office for Statistics Regulation

39. Throughout the pandemic, the Welsh Government has worked positively with OSR, recognising the value that transparency of statistics brings. Good statistical practice by the Welsh Government has been regularly recognised by OSR. In particular, OSR has regularly praised the use of the Chief Statistician’s blog as a way of communicating plans and explaining statistics. A report containing one such reference is exhibited at **GJM2BKAS01/09–INQ000271824**. Presentation of uncertainty in the R number in Wales was also praised. I exhibit that at **GJM2BKAS01/10–INQ000271829**.
40. In its October 2021 report “Improving health and social care statistics: lessons learned from the Covid-19 pandemic”, exhibited at **GJM2BKAS01/11–INQ000271834**, OSR noted the following good practice in Wales:
- Publication of a blog on plans for vaccination statistics;
 - A commitment to establish an equality data unit;
 - Sharing learning from the development of the National Data Resource;
 - The One Wales collaboration between the Welsh Government, NHS, academia and public health to share data and expertise;

- Data linking analysis on teachers and teaching support staff on the shielded patient list; and
- The use of technical media briefings to communicate and explain statistics.

41. There were a relatively small number of occasions during the specified period that OSR made interventions on the use of statistics by the Welsh Government. I have identified four instances of interventions regarding the use of unpublished data by Ministers in press conferences and two interventions on the availability of slides used in press conferences. Slides used in press conferences were always based on publicly available data, however the Welsh Government began routinely publishing the slides themselves in December 2020. The slides and data set are available at gov.wales page³ and I attach as exhibit **GJM2BKAS01/12-INQ000090650** and **GJM2BKAS01/13-INQ000271863** an example of those slides dated 11th December 2020 and 15th March 2021. On each occasion that OSR raised a concern about the use of unpublished data, KAS acted to make the data publicly available soon after. The table exhibited at **GJM2BKAS01/14-INQ000353523** describes each intervention in further detail.

42. Correspondence on the matters described above was between OSR and the Chief Statistician. The correspondence related to these six interventions is exhibited at:

- **GJM2BKAS01/15-INQ000353113**
- **GJM2BKAS01/16-INQ000353159**
- **GJM2BKAS01/17-INQ000353164**
- **GJM2BKAS01/18-INQ000353165**
- **GJM2BKAS01/19-INQ000353271**
- **GJM2BKAS01/20-INQ000353273**
- **GJM2BKAS01/21-INQ000353277**
- **GJM2BKAS01/22-INQ000353304**
- **GJM2BKAS01/23-INQ000353526**

Other correspondence with OSR related to KAS and Welsh Government's use of statistics during the period of interest have been provided to the inquiry.

43. To the best of my knowledge, OSR only formally wrote to Ministers and the Permanent Secretary to notify them of the publication of relevant reports (such as the

³ [Slides and datasets from the coronavirus briefings | GOV.WALES](#)

lessons learned report referred to in paragraph 40) or to raise awareness of recently published guidance. OSR also wrote to senior statisticians across the UK, including the Welsh Government's Chief Statistician, in November 2020 on transparency of Covid-19 data, and in December 2020 and January 2021 on OSR's expectations on vaccination statistics. These are exhibited at **GJM2BKAS01/24-INQ000353524**, **GJM2BKAS01/25-INQ000271838** and **GJM2BKAS01/26-INQ000271839**.

44. Correspondence with OSR on more routine matters such as compliance checks, rapid reviews and seeking approval for alternative release times during the period of interest has not been included here but is available publicly on the OSR website⁴.

The Covid-19 Data Monitor

45. The Covid-19 data monitor was a regular compendium of data and charts produced by KAS. The first data monitor was produced and circulated on 3 April 2020, following a discussion at the Covid-19 Preparedness Bird Table about the need for a single document of key information and graphs. The frequency of the data monitor changed over the course of the pandemic. It was produced twice a week until 8 June 2020, when it then moved to a weekly update. During the summer of 2020 when Covid-19 case rates were relatively low, the monitor was updated fortnightly, before returning to weekly updates from 28 September 2020. The monitor was shared widely within the Welsh Government (including with Ministers) to enable monitoring of trends across a range of topics during the pandemic. Paragraph 352 of Andrew Goodall's initial statement provides information on who the monitor was shared with, including some stakeholders outside the Welsh Government, as well as setting out arrangements for how KAS briefed officials on the latest monitor content.

Data Monitor Themes and Content

46. The format and content of the monitor was decided by officials in KAS, with input from the Covid-19 Preparedness Bird Table. The monitor was not intended to provide comprehensive coverage of every data source available. Instead, each theme was curated to provide a well-rounded assessment of key topics based on available data. The earliest versions of the monitor mostly focused on data from PHW, DHCW and public sector management information. This was rapidly expanded to include the wider range of topics noted below. A review of third sector data availability led to a number of additional sources being included during 2020.

⁴ [Correspondence – Office for Statistics Regulation \(statisticsauthority.gov.uk\)](https://www.statisticsauthority.gov.uk/correspondence/)

47. The following provides an overview of the themes from the data monitor. These themes were chosen as they were felt to be logical groupings which covered the range of impacts from Covid-19 for which data were available. The following section does not provide a comprehensive list of the sources used throughout the monitor. The Covid-19 public inquiry has requested copies of the data monitor which will allow for more detailed exploration of these themes and their content.
- i. Cases, deaths, and vaccination: this theme covered some measures of the direct health-related harms from the pandemic such as infection rates and mortality, drawing on surveillance data from PHW and official statistics from ONS. It was expanded over time to include more metrics related to testing (including turnaround times), contact tracing and Covid-19 vaccination. The theme initially included some international comparisons of mortality, but these were removed in 2020 as they were not felt to be widely used. Multiple sources were used for some topics – for example both PHW and ONS data on Covid-19 prevalence and mortality. This was in order to provide the most well-rounded assessment of trends, given that each source had strengths and limitations in terms of coverage and timeliness.
 - ii. Health and social care: this theme summarised some of the pressures experienced by the NHS and social care. It included measures of Covid and non-Covid related hospital activity; calls to 111, NHS Direct and emergency ambulance services; NHS staff absence and measures of Covid-19 related to care homes. The data used in this theme drew heavily on NHS management information and data provided by Care Inspectorate Wales, as well as a new collection of timely NHS staff absence data. Changes in definition and coverage of NHS hospital data were highlighted in the monitor in order to ensure the trends were interpreted correctly.
 - iii. Shielded and vulnerable people: data from the public sector, third sector and private companies was used in this theme to understand potential impacts on vulnerable people and the services provided for these groups. This included analysis of the shielding list and services for shielding people (e.g. food parcel delivery, supermarket ordering slots); status of social services; homelessness and rough sleeping; violent crime and hate crime; payments made through the discretionary assistance fund and use of advice services such as Citizen's Advice and the Live Fear Free domestic abuse helpline.
 - iv. Attitudes and behaviours: data from a range of surveys was used to demonstrate trends in public opinion and behaviour, for example on awareness of and reported adherence to Covid-19 regulations. This was

complemented by data on travel and mobility from the public and private sector.

- v. Economy and labour market: this theme summarised the economic circumstances and harms of the pandemic, using traditional official statistics such as GDP and employment, alongside more timely measures based on card spending and business insight surveys from ONS. The use of support schemes for businesses (both Welsh and UK Government schemes) was also monitored.
- vi. Public services: this theme included Covid-19 related data on activities and impacts on a range of other public services. This included school attendance; Covid-19 cases in higher education institutes; fixed penalty notices and environmental health enforcement; data on prisons; Fire and Rescue Service absence data.

48. In order to produce and develop the data monitor, KAS statisticians did extensive research on the availability of data, drawing on networks of analysts across the public sector and beyond. The content of the monitor regularly evolved to meet new and emerging needs. Regular attendance at ExCo and the Birdtable allowed KAS to identify new topics of interest to include in future monitor updates. Feedback was regularly requested on the monitor to ensure that its content remained helpful and relevant for monitoring trends and understanding impacts. In January 2021 the Chief Statistician and two other KAS officials met with the First Minister to seek his feedback on the monitor, the informal record of which is attached **GJM2BKAS01/27–INQ000271858**. Feedback was also sought from other Ministers. As a result of this feedback, changes were made to the data monitor including removing more detailed data items such as local health board level data on admissions, hospitalisations and ICU patients. This, and other less well used items, were removed in order to manage the overall size of the data monitor and ensure it focused on key messages. Local level hospitalisations data was considered more detail than was necessary for the data monitor, which aimed to provide a summary assessment of key trends. Officials in the Health and Social Services Group provided Ministers with regular more detailed briefing on hospitals data.
49. Data sources that provided timely insight were prioritised in the monitor. In many cases, these sources had not gone through the same level of quality assurance that would be expected of official statistics. However, they provided valuable, rapid insight

on a wide range of impacts from the pandemic which could be used alongside other evidence to inform decision-making by officials and ministers.

Transition to the Covid-19 in Wales interactive dashboard

50. On 19 April 2021, the Covid-19 in Wales interactive dashboard was published on the Welsh Government Website⁵ an example of which I now attach as exhibit **GJM2BKAS01/28–INQ000271845**. Over the coming weeks this began to replace the internal data monitor (although some small parts of the data monitor were retained where they contained data that was not yet in a format that could be added to the dashboard). The decision to replace the monitor with a public dashboard followed a light-touch review by KAS officials of a number of Covid-19 compendium data products and dashboards. This identified that there was no single coherent public-facing overview of the key Covid-19 data in Wales which brought together monitoring data on direct Covid-19 harms, indirect harms, and social and economic impacts (in the same way that the data monitor did for an internal audience). As most of the well-used data sources from the monitor were at that point in the public domain, the decision was made to transition the monitor to a public facing dashboard. This was considered to be in line with the principles of the Code of Practice for Statistics as it ensured greater transparency of the data used to support decision-making. When the dashboard was launched, OSR were asked to provide informal feedback to help ensure it met expected standards and identify areas for improvement.
51. The format of the dashboard differed from the monitor – it was an interactive dashboard, rather than the static slide pack used for the monitor. With the transition to the dashboard, the opportunity was also taken to review and rationalise the content of the data monitor and as a result some topics were removed. These were either where data could not be shared outside government or where the topic was no longer considered relevant or high profile. Examples of items removed at various points include information on testing turnaround times, stocks of personal protective equipment, data on Covid-19 in prisons and more detailed analysis relating to Universal Credit claimants. Despite these changes, the overarching themes used in the public-facing dashboard broadly mirrored those used in the previous data monitor and much of the key content remained.

⁵ [COVID-19 in Wales | GOV.WALES](#)

Covid-19 Analysis

52. Prior to the first national lockdown in March 2020, KAS were supporting key decision-makers with analysis to support their understanding of the impact of non-pharmaceutical interventions. The Chief Statistician was first invited to one of the first preparedness meeting with senior officials on 6 March 2020, and immediately engaged over the weekend of 7-8 March with input from economists to provide supporting analysis on the emerging proposals around NPIs.
53. This initial work was in response to wider UK civil contingencies requests for supporting evidence around the impact of NPIs on people, families, and public service delivery. The analysis produced included descriptive statistics such as population estimates by age, numbers of carers, numbers receiving social care, the social care workforce, poverty, the public sector workforce, third sector workforce, and digital inclusion. Further analysis was also provided on potential economic and public service impact of different NPIs. These are exhibited at **GJM2BKAS01/29-INQ000271855** and **GJM2BKAS01/30-INQ000271853**. This was summarised and submitted to UK CCS. Exhibits **GJM2BKAS01/31-INQ000352954**, **GJM2BKAS01/32-INQ000352956** and **GJM2BKAS01/33-INQ000352958** show the relevant documents submitted to UK CCS by the then Director for Covid Crisis Co-ordination.
54. Following this initial work KAS, either proactively or in response to commissions from policy officials, TAC or Bird Table, produced a series of analyses to support planning and decision making around NPIs. This included:
- an analysis of what we knew about homeworking in Wales, both in terms of pre-covid prevalence and ability to work from home if needed, which I exhibit at **GJM2BKAS01/34-INQ000271854**
 - analysis of statutory sick pay, zero hours contracts and self-employment, which I exhibit at **GJM2BKAS01/35-INQ000271852**
 - levels of community support, informal caring and volunteering, which I exhibit at **GJM2BKAS01/36-INQ000271850**
 - loneliness and social isolation, which I exhibit at **GJM2BKAS01/37-INQ000271849**
 - households with older people, which I exhibit at **GJM2BKAS01/38-INQ000271851**

- industry analysis of sectors where businesses were forced to close by initial government decisions in March 2020, ahead of the first national lockdown, which I exhibit at **GJM2BKAS01/39–INQ000271459**
55. Prior to the first national lockdown, KAS used published data on cases and deaths due to Covid-19 via the published PHW or CMO statements. At this stage KAS were not actively involved in reporting or briefing significantly on the spread of the Coronavirus, since this was being led by PHW and TAC, although KAS were making initial contact with PHW on the need to share data in usable formats to support analytical work within Welsh Government. PHW had a transparent process in place to report on and publish daily data related to Covid-19 cases and deaths, and given its remit they were the most appropriate organisation to publish this information directly. This allowed KAS to focus on other priority areas of work that were more central to its remit.
56. KAS did not routinely provide analysis or receive regular data on international travel. KAS occasionally received slide packs from ONS on its Covid-19 international passenger survey. However, KAS did not routinely receive data in order to inform an assessment of risk to Wales's public health from inbound international travel. Analysis and evidence relating to international travel was led by the Technical Advisory Cell and the international travel policy team. The Chief Statistician tried to facilitate better public access to data on international travel by engaging via email with Home Office analysts and suggesting they transparently publish data on international arrivals from the passenger locator form and I attach by way of example an email dated 15/09/2020 referring to contact between the Chief Statistician and the Home Office as **GJM2BKAS01/40–INQ000271578**. I have not been able to locate any further records relating to this matter. This was a topic where there was clear public interest in statistics, but it was not within the gift of KAS to make this data publicly available. To the best of my knowledge, the Home Office did not publish data from passenger locator forms during the following months.
57. KAS did not have a significant role in work on international comparisons. Significant literature did exist internationally on the relative trends in Covid and its impact and these were summarised regularly by other members of the Technical Advisory Group. ONS and Public Health Wales played the lead role in international mortality analysis and KAS engaged with those organisations as needed for the latest position to feed into relevant briefings and analytical documents (for example, the TAG briefing paper

on Examining Deaths in Wales associated with Covid-19) which I exhibit at **GJM2BKAS01/41–INQ000252532**.

58. The following provides an overview of specific pieces of analysis requested by the Covid-19 Public Inquiry.

Retrospective analysis of testing prior to discharge to care homes

59. From mid-May 2020, significant interest emerged in the discharge of patients from hospitals to care homes during the early period of the pandemic. This resulted in a number of written questions from Senedd members and media queries, and data were being pulled together in a piecemeal fashion. The written questions were published on the Senedd website⁶ and an example of which is set out in exhibit **GJM2BKAS01/42–INQ000271827**. The data required to support an understanding of testing prior to care home discharges and subsequent outcomes were not available in one place. It required analysis across the Admitted Patient Care dataset and the Laboratory Information system (both held by NHS Wales Informatics Service (“NWIS”)).
60. During this time the Director General for Health and Social Services and the Chief Statistician agreed it would be beneficial to pull together a full and coherent analysis of care home discharges and testing, between March and May 2020. As a result, in June 2020 NWIS were requested to pull together a full data set consisting of discharged patients, their Covid-19 testing status, and whether they had subsequently died (using Office for National Statistics data) This analysis was produced by KAS in June and July 2020, and a draft was shared with key officials in Welsh Government and the TAC.
61. A final version of the report was circulated to Ministers, senior officials, and special advisers in July 2021, I exhibit this at **GJM2BKAS01/43–INQ000271757**. Statisticians advised at this point that the report should remain as internal analysis for two reasons (although this should be revisited if there was renewed interest in the topic):
- i. The pertinent information had already been made available in answers to written questions from Senedd Members and in response to media enquiries. It was therefore felt to offer limited additional public value.

⁶ [Written Question - WQ81560 - Welsh Parliament \(senedd.wales\)](https://www.senedd.wales/)

- ii. Research by Public Health Wales and Swansea University Medical School had been published since the analysis was started which provided a more comprehensive account of risks factors and outbreaks in relation to discharges from hospital to care homes. I exhibit that analysis at **GJM2BKAS01/44–INQ000271828**.

Estimates of the number of children of key workers

62. In mid-March 2020, education and childcare policy officials requested analysis on the number of children of key workers in order to inform decision-making on schools and childcare settings.
63. Statisticians used UK government guidance on key worker occupations to develop a list of key worker occupation codes. Data from the ONS Annual Population Survey was then used to estimate the number of children in Wales that had one, both or a lone parent employed as a key worker. Estimates were broken down into pre-school, primary school and secondary school age groups, and sub-Wales geographies. There were multiple iterations of the analysis as methods were refined and further policy detail was made available. As it was not possible to precisely define some key worker occupations statistically, advice was offered on the uncertainty in the data and how to interpret the estimates. This advice is exhibited at **GJM2BKAS01/45-INQ000352961**.
64. The analysis was shared with the then Director for Covid Crisis Co-ordination as well as special advisers and officials in education, childcare and public health policy, in order to be used in Ministerial advice and discussions with the UK Government and is attached as exhibit **GJM2BKAS01/46–INQ000271848**.
65. Welsh Government statisticians shared methods and definitions with analysts in the UK Government Department for Education (“DfE”), in order to learn from each other at pace and apply consistent approaches where possible. The Office for National Statistics later produced its own analysis on key workers. KAS statisticians worked collaboratively with ONS to share methods and provide quality assurance of ONS’s estimates for Wales.

Estimates of the size of vulnerable groups

66. In April 2020 the Welsh Government's Non-Shielding Vulnerable People Co-ordination Team commissioned analysis from KAS to estimate the size of vulnerable groups in Wales other than those that were shielding.
67. Statisticians worked with policy officials to identify and categorise types of vulnerable groups, as well as sub-sets of these groups considered to be "most vulnerable". The categories of vulnerability evolved over time, but typically focused on:
- i. Covid-19 health risks – including people isolating with Covid-19, people with moderate health risks, formerly shielding groups;
 - ii. Non-Covid-19 health risks – representing people more dependent on health and social care;
 - iii. Financial risks – such as people in poverty prior to the pandemic, people experiencing income reduction related to the pandemic; and
 - iv. Social risks – including digital inclusion, community support, loneliness and wellbeing, groups that are socially marginalised.
68. Statisticians identified suitable data sources to estimate the size of each these groups. Sources included official statistics, surveys, management information and data from the third sector. In many cases, it was not possible to provide an estimate that exactly aligned with the definitions of vulnerability used so a number of proxy data sources were used. For example, to estimate those households at greatest financial risk, several sources of survey information on financial worry and difficulty paying bills were triangulated and combined with information on those living in the most deprived areas. There was considerable overlap between populations in each of the vulnerable groups, so advice was provided on how to use and interpret the data in light of this likely double counting. This advice is exhibits in the next paragraph.
69. Following a Ministerial discussion on 10 April 2020, policy officials working on supporting vulnerable groups were asked to produce a paper defining wider 'at risk' / vulnerable adult groups, who of these might need support and what that support might consist of. A summary of the analysis described above was included as an annex to this paper, dated 14 April 2020 and is now attached as exhibit **GJM2BKAS01/47–INQ000271856**. From July 2020 a regular, more comprehensive slide pack of estimates was produced and updated every 6-8 weeks, ending in May 2021. An example of the Slide Pack is attached as exhibit **GJM2BKAS01/48–INQ000271857**. Slide packs were shared with:

- i. the Welsh Government cross-departmental vulnerable people working group;
- ii. the Technical Advisory Group and its socio-economic harms sub-group;
- iii. the Welsh Local Government Association;
- iv. the Wales Council for Voluntary Action; and
- v. Public Health Wales.

Monitoring impacts on children and young people

70. KAS undertook a wide range of activities to monitor the impact of the pandemic on children and young people. This formed part of the evidence base used by the Children and Young People's sub-group of the Technical Advisory Group, as well as providing evidence and analysis to policy officials and Ministers for decisions (including those related to opening and closing educational establishments).

71. Data collection from schools was a key source of evidence on impacts experienced by children in education. Paragraphs 332 and 372 of Andrew Goodall's first statement to the inquiry set out the arrangements for collecting and analysing new timely data on pupils in education settings. As well as the regular daily and then weekly publication of data on school attendance, additional analyses were provided throughout the specified period which investigated:
 - i. attendance by pupil characteristics such as gender, ethnicity and school year group;
 - ii. vulnerable children present in school (including, for example, pupils eligible for free school meals, pupils with special educational needs, pupils whose first language is not English or Welsh, pupils attending special schools)
 - iii. sessions missed due to remote learning;
 - iv. variations by local authority area;
 - v. length of absence and persistent absence; and
 - vi. comparisons of attendance during and before the Covid-19 pandemic.

72. The above analyses were generally requested by and shared with policy officials and relevant Ministers in order to monitor policy, inform decision-making and assess impacts.

73. With regard to post-16 education, analysis was produced by KAS to support the development of the Post-16 and Transitions Plan which I exhibit at

GJM2BKAS01/49–INQ000271756. The analysis modelled costs of additional support for learners and to assess impacts. Examples of analysis include:

- i. Collection and monthly publication of data on apprentices who had been furloughed or made redundant;
- ii. Analysis of learner numbers by provision type (e.g. FE, work based learning), deprivation and ethnicity.
- iii. A substantial analytical report on outcomes for learners in post-16 education affected by the Covid-19 pandemic, with breakdowns by age, ethnic group, gender and deprivation. That report is exhibited at **GJM2BKAS01/50–INQ000271830.**
- iv. Investigating the impact of changes to examinations and assessments on learners' choice of post-16 pathway, by analysing progression from year 11 to post-16 learning. This included whether learners switched programmes or dropped out of learning, by free school meal status.

74. Between May 2020 and July 2021, KAS statisticians worked with policy officials to produce a vulnerable children and young person's dashboard. This brought together data from a wide range of sources in order to monitor in one place evidence on the differing impacts of the pandemic experienced by children and young people. The data drew on sources such as regular official statistics, other government data collections and data from third sector organisations such as Childline and the NSPCC. The dashboard included data broken down by areas of harm for vulnerable children and young people, including harms to mental health, physical health, education and safeguarding. It also included socio-economic data, such as households with children receiving Universal Credit, as well as a summary from a survey of children commissioned by the Children's Commissioner for Wales. The dashboard is exhibited at **GJM2BKAS01/51–INQ000271820.**

“Risk levels” of the NHS Covid-19 app

75. From late September 2020, KAS adopted responsibility for updating the local “risk levels” that were used in the NHS Covid-19 app. Previously this had been led by the Welsh Government's Technology, Digital and Transformation Directorate. The use of the app had only recently begun so there was little formal process in place to agree risk levels at the point that KAS took on this responsibility.

76. The app allowed users to enter their postcode and see the risk level for their area – initially either low, medium and high. Risk levels were determined at a local authority level.
77. KAS advice on risk levels was based on the rolling 7-day average Covid-19 incidence and positivity rates provided by Public Health Wales. The thresholds for low, medium, and high levels were aligned with incidence thresholds set by the Health Protection Advisory Group (“HPAG”).
- i. Low: <25 cases per 100,000 people over the last 7 days
 - ii. Medium: 25 to <50 cases per 100,000 people over the last 7 days
 - iii. High: 50+ cases per 100,000 people over the last 7 days, or the area is a local health protection area (i.e. a local lockdown)
78. KAS reviewed the daily incidence and positivity rates and provided advice to the Covid Intelligence Cell (“CIC”) on whether any risk levels should change for each local authority. An example of this is exhibited at **GJM2BKAS01/52–INQ000271607**. The decision on whether to change a risk level was the responsibility of HPAG, based on a recommendation from CIC. CIC made its recommendation based on the analytical advice from KAS alongside other sources of intelligence available to CIC. KAS then fed back any agreed changes to officials responsible for the NHS Covid-19 app, in order to implement the changes.
79. Risk levels were set at a local authority level, however the geographic areas used by the app were based on postcode districts. Postcode districts do not align with local authority boundaries, so KAS provided advice on the best fit of postcodes to a local authority area.
80. The approach to setting the risk level changed over time. In December 2020, it moved from a local authority risk level to an all-Wales risk level in order to align with the alert levels 1-4 in the Welsh Government’s Coronavirus Control Plan. In May 2021, KAS ceased any involvement with the NHS Covid-19 app.

Monitoring vaccination take-up across the UK

81. From January 2021 KAS maintained a spreadsheet capturing vaccination performance in each of the four countries of the UK. The spreadsheet either sourced data directly from other nations or from the UK Covid-19 dashboard. It included data and charts initially on first vaccination doses and then expanded with the roll-out of

the vaccination programme to cover second doses and boosters. Data on daily and cumulative totals was included for each nation, along with an estimate of the per cent of the population that was vaccinated (using a denominator derived from mid-year population estimates).

82. The spreadsheet was circulated every day until late August 2021, at which point it changed to a weekday only circulation. In April 2022 this changed again to a weekly circulation before regular updates ceased in August 2022. The spreadsheet was shared with Ministers, special advisers, policy officials, communications officials, and officials from Public Health Wales in order to monitor the vaccination roll-out in Wales in the context of other UK nations. Figures from this document were regularly used publicly, for example in Covid-19 press briefings and example published on 07/11/2022 is attached as exhibit **GJM2BKAS01/53–INQ000271822**.

Data Access and Data Sharing

83. To provide the analytical support required by policy makers, Ministers, and TAC during the pandemic a wide range of additional data sources had to be obtained and accessed. In general, the pandemic made the acquisition of new data sources less challenging than it had ever been, with organisations willing to work together to ensure evidence was available to support decision making. This included the establishment of new short-term data collections on homelessness, social services, and schools to support our understanding of the impact of Covid-19 on the demand and resilience of those services. At a national level, ONS were able to set up one of the biggest surveys in the UK within weeks to track the prevalence of Covid infections.
84. The pandemic also resulted in a rapid expansion of new data sources, in many ways accelerating the developments in government data use which were being taken forward on a less urgent basis prior to the pandemic. Therefore, across the Government Statistical Service, consistent use was being made for the first time of location data from smartphones, and real-time credit card data held by commercial operators. In terms of schools in Wales, a weekly data collection was rapidly established by Data Cymru to provide insight into school attendance by vulnerable children during lockdown periods. By the time of return to school in the autumn term of 2020, KAS had set up a more automated process with the Hwb learning platform team which enabled daily flows of data without adding burden to local authorities.

85. The central role of the Chief Statistician and the close relationships across Wales and with the rest of the GSS was an important factor in enabling data sharing and acquisition. The GSS networks and existing relationships ensured the Chief Statistician could rapidly work with other peers across the UK as required. For example, working with ONS on developing the approach to the Covid-19 Infection Survey or accessing sensitive real-time data, or working with Department for Transport on access to mobility data. Most significantly of all, by virtue of the requirement of the pandemic the Chief Statistician was able to successfully make the case to ONS for the release of 2011 Census data into the SAIL databank, a request which previously had not been considered very favourably. This was significant because the 2011 Census, although almost a decade old, provided very detailed records on the population of Wales, including data on some protected characteristics. Through the SAIL databank, records from the 2011 Census could be securely linked to records from a wide range of other data sources. As referred to in paragraph 97, this facilitated academic research related to Covid-19, for example, on inequalities in coverage of Covid-19 vaccination.
86. The biggest challenges were in situations where existing relationships were fairly nascent. For example, there was not a close working relationship between KAS and PHW, particularly with the surveillance team in PHW. This proved to be one of the most important relationships over the period of the pandemic and yet it was challenging to develop the timely appropriate flows of data in the right format to support the analytical work of KAS. This led to significant manual work across the system, such as being unable to access a regular feed of raw data on testing and therefore PHW providing an extract for us on a regular basis to enable KAS to produce the official statistics outputs.
87. Different priorities across different organisations could also lead to difficulties. For example, with PHW focused on using data for surveillance purposes, it was often not a priority of theirs to support responses to media requests, or support Ministerial briefings, whereas statisticians in Welsh Government were being asked to urgently provide the data to support such situations.
88. Within Welsh Government, there were security constraints in place to protect the internal IT infrastructure which led to barriers in sharing data. Welsh Government did not enable cross-organisational sharing of information via Microsoft tenancies, which meant access to dashboards or large datasets from DHCW had to be done either

through workarounds such as manual emailing of files, or a virtual desktop approach which limited ability to download data. This became a particular issue for access to real-time data on contact tracing from the DHCW CRM for Test Trace Protect. As well as leading to duplicate storage of data it meant analyst time was spent on manual effort to retrieve, store and re-analyse data within Welsh Government systems rather than allowing direct access to the raw data or dashboards.

89. In future emergencies, multiple cross-departmental access to datasets would reduce the data sharing burden. We would agree the lack of data engineering capacity was a barrier at the time. Primarily KAS employed statisticians and social researchers rather than dedicated data scientists or data engineers, and this was also true across the wider Welsh Government. This meant we lacked the skills to process data in the most efficient way and create automated data “pipelines” for large datasets to reduce the data manipulation burden on analysts. We did over time manage to automate some data flows as we brought in some expertise from partner organisations, for example in automating the processing of daily hospital capacity data, but having these skills in place at the start of the pandemic would have saved considerable time for analysts. As well as the PHW example noted above, the lack of data engineering capacity and external data sharing capability within Welsh Government led to the external commissioning of a dashboard developed by the Technical Advisory Cell to provide intelligence within Welsh Government and across NHS and Local Resilience Fora. There were also a number of other dashboards developed for specific purposes, and a more mature data infrastructure could have avoided duplication and more streamlined data provision.
90. Within the health and social care sphere the DHCW-led National Data Resource project provides an important potential mechanism to achieve this in future. The National Data Resource (NDR)⁷ is a digital transformation programme which aims to make it easier to join up health and social care data from multiple sources. The programme uses principles such as open architecture, open platforms and common data standards, which better enable IT systems and digital services to talk to each other. The NDR data platform aims to enable a single digital health and care record, which should improve the ability to access, share, link and use data within health and social care in Wales.

⁷ <https://ndr.cymru/>

91. Another specific area of challenge was around access to data from the Department for Work and Pensions. The functions of DWP are not devolved to Wales. In April 2020 we requested timely information from DWP including on Universal Credit and other unemployment benefits, by different characteristics and regions of Wales. This was to help understand the real-time economic impact of the pandemic, and to estimate additional pressure on support services. Whilst some data was provided very early, the data feed was not consistent and not to the detail requested. This issue was raised in the early weeks of the pandemic both at Inter-Ministerial groups and the Inter-Administration Committee for statistics but took several interventions at Ministerial and Chief Statistician level for a routine flow to be provided to Devolved Governments. This was despite UK Ministers' agreement for data to be provided, and data being available at a UK level within the UK Government CCS dashboards. It was not resolved until June 2020.
92. On the positive side, the work of KAS and the wider "One Wales" evidence approach benefited significantly from the foundations laid over the previous decade and more in developing a trusted secure research environment for data linking in Wales (the SAIL Databank), along with the partnerships which had been developed around SAIL including through Administrative Data Research Wales (ADR Wales). Furthermore, the funding provided by UKRI via ADR Wales enabled KAS to purchase a tenancy on Swansea University's UK Secure e-Research Platform (UKSeRP) giving Welsh Government analysts access to analytical packages (e.g. Python and R) not widely available in the Welsh Government at the time. As a result of these foundations TAC and KAS were quickly able to utilise data linking to support the analytical work required. SAIL management streamlined their governance processes to ensure rapid approval for projects, and analyses were produced within weeks (sometimes days) to inform policy making. Examples included significant analysis around the shielded patient list to help understand the number of teachers and school children shielding, the age and demographic mix of the shielded patient list and their access to green spaces. The work on teachers was itself an example of how barriers were removed to use data for the most appropriate purposes. These data came from the new School Workforce Census in Wales (SWAC), which had not been published. But in agreement with the Chief Statistician, data were provided ahead of formal statistical publication to SAIL to ensure rapid analysis for policy making. This dataset was to prove important for understanding the role of schools in Covid-19 transmission. SAIL analysts used it alongside Pupil Level Annual School Census (PLASC) and Covid-19 testing data to explore infection pathways in schools. I exhibit that at

GJM2BKAS01/54–INQ000271833. Then at a later stage in the pandemic, KAS undertook an analysis of SWAC linked to vaccination data to investigate school staff vaccination uptake. That analysis is exhibited at **GJM2BKAS01/55–INQ000271814**.

93. Digital Health and Care Wales took the lead role in collecting daily returns from Local Health Boards and NHS Trusts and would be best placed to advise on the challenges around the variation in local data systems and acquiring data. We can comment as users and recipients of those data, particularly in the context of beginning to publish weekly reports on NHS capacity from April 2020. Paragraphs 362-363 of Andrew Goodall's initial statement describes some of the challenges in using daily NHS management information. We recognised the challenges this set for data providers to ensure the quality of data being provided, and this was described in a Chief Statistician's blog in June 2020. I exhibit the Chief Statistician's blog at **GJM2BKAS01/56–INQ000271779**, and the blog post by Ed Humpherson, Director General for Statistics Regulation which is referred to in this Chief Statistician's blog post at **GJM2BKAS01/57–INQ000353525**. To balance the need for timeliness against perfect quality we addressed this by being transparent and clear to users of statistics on data quality, revisions, and changes.
94. One specific challenge which arose due to different systems and approaches being used across Wales was highlighted in the rapid review of Covid-19 related deaths reporting, as described, and exhibited in paragraph 373 of Andrew Goodall's original statement (exhibit **AGM2BWG01/052–INQ000066087**). A key element of this issue was the lack of consistent use across Local Health Boards of an electronic form developed by PHW for the purpose of reporting Covid-19 related deaths.

Equalities and Vulnerable Groups

95. A wide range of work was undertaken during the pandemic to understand the impact on different population groups, some of which is set out elsewhere in this statement. However, there were also constraints on what analysis could be produced, and how quickly, depending on the availability of data. A key challenge identified early on was the quality of data held by the NHS on ethnicity and the availability of Covid mortality data by ethnicity. The challenges around the quality of NHS data are described in paragraphs 26-32 of the report from the First Minister's Black, Asian and Minority Ethnic Covid-19 socioeconomic subgroup, which provides specific recommendations around future capture of data. I exhibit that report at **GJM2BKAS01/58–INQ000227599** The report also highlighted the lack of recording

of ethnicity on death registrations in England and Wales and notes this was raised formally by Welsh Government to the Home Office in May 2020.

96. A number of steps were taken during the early months of the pandemic to improve the position with regards to mortality data. In May, Public Health Wales incorporated an ethnicity flag into their rapid surveillance e-form and completion of this was monitored weekly as part of assurance meetings between PHW and the Chief Statistician. From May, ONS began to publish deaths by ethnicity across England and Wales using linked mortality and Census data. Welsh Government statisticians liaised closely with ONS on this work and pressed for ONS to provide and publish summary statistics for mortality by ethnicity in Wales, despite the small numbers involved. As a result, ONS did publish these figures on numerous occasions. An example of such figures for the period 2nd March 2020 to 15th May 2020 is attached as exhibit **GJM2BKAS01/59–INQ000271842** and for the period 01 March 2020 to 1st December 2021 is attached as exhibit **GJM2BKAS01/60–INQ000271859**.
97. The concerns around the quality of ethnicity data in NHS records was also a key part of the case to the UK Statistics Authority Research Accreditation Panel for allowing 2011 Census data for Wales to be linked to the SAIL databank. This allowed 2011 ethnicity data to be matched to NHS records which significantly improved the coverage of ethnicity recording available for analysis. This dataset was key to the development of an 'ethnicity spine' available for Covid-19 analysis in SAIL, including analysis of vaccination coverage by ethnicity. That analysis is exhibited at **GJM2BKAS01/61–INQ000271832**. This was then available to inform the Welsh Government's vaccination equity strategy.
98. These issues are not unique to Covid-19. Issues with incomplete ethnicity and other equality records are a regular barrier to analysis. This is particularly true in Wales, where some specific population groups can be very small and therefore it is impossible to capture sufficient data via surveys and we are reliant on often incomplete administrative data.
99. For example, the 2021 Census data which is attached as exhibit **GJM2BKAS01/62–INQ000271825** shows that 93.8% of usual residents of Wales identify within the high-level ethnic group of 'White' with 6.2% identifying with another ethnic group. However, whilst 2.9% of the population (89,000 people) identify as

'Asian, Asian Welsh or Asian British' and 1.6% (49,000 people) identify within the category 'Mixed or multiple ethnic groups' less than 1% of the population (28,000 people) identify as "Black, Black Welsh, Black British, Caribbean or African' with a similar proportion identifying with an 'other ethnic group'. The sample size for the National Survey for Wales, 12,000 in a normal year (increased to 15,800 for 2020-21) is not sufficient to provide detailed analysis for such small subgroups of the population, though periodically datasets have been combined across years to enable more precise estimates for some subgroups. Similarly, the Annual Population Survey run by the Office for National Statistics has a sample for Wales which, even when rolling 3 years of data together, does not produce robust estimates of the size of the 5 broad ethnic groups by age group except for the White ethnic group.

100. The impact of this is that analysis for some population groups has often been limited to broad categories which do not demonstrate the differences within and between groups or where there is intersectionality. Examples of this can be seen in the statistical work to support the Covid-19 Black, Asian and Minority Ethnic advisory group, referred to below, where a number of sources were only able to be broken down into the two categories of White and Black, Asian and Minority Ethnic.
101. Nevertheless, as I highlighted in my final blog in July 2020 the pandemic shone a light on the issue, and the impact it can have on understanding differential impacts. As described under "Lessons learnt", Equality, Race and Disability Evidence Units have now been established within Welsh Government to support work in this area.
102. Despite the issues described above, KAS aimed to consider equalities issues in analysis where it was possible. This was not necessarily through the weekly Data Monitor, as the purpose of the Monitor was headline analysis of key trends at a whole population level. Some of this was through primary analysis within KAS – for example a significant amount of work was produced on the labour market, analysing employment by industries affected by closure during lockdown by equality groups as well as other labour market outcomes by ethnicity and whether people were disabled.
103. KAS equalities team also provided regular updates to policy officials and the Covid-19 Black, Asian and Minority Ethnic advisory group on the full breadth of analysis undertaken on equalities either via KAS or other organisations. Those updates are exhibited at exhibit **GJM2BKAS01/63–INQ000271781**. KAS were also providing analyses to support the work of a steering group commissioned by the

Welsh Government's Disability Equality Forum to consider and report on the impact of Covid-19 on disabled people in Wales. This report was published in on 11th March 2021 and I exhibit it at **GJM2BKAS01/64–INQ000271826**.

104. Through the innovative approach to capturing school attendance data on a daily basis from the autumn term of 2020 we were able to ensure these data captured characteristics such as age, gender, ethnicity, additional learning needs, English as an additional language and socio-economic status. These data were published and analysed to understand the impact of the pandemic on school attendance by population group.
105. In redeveloping the approach to the National Survey for Wales to be able to continue to collect data during the pandemic (we moved it from face to face to telephone) we ensured the achieved sample size remained at the same level to allow for analysis by protected characteristics. Although the monthly data could not be analysed according to detailed population groups (due to the small number of responses at that level) we were able to pull together a dataset across the period 2020-21 to allow more detailed analysis of relevant topics. Given the change in mode to telephone there were concerns there may be an impact on responses from people with hearing impairments, but analysis of the data suggests this did not happen. In fact, analysis suggested there was no difference in the composition of the sample in terms of equality characteristics between the pre-Covid survey and the Covid telephone survey.
106. We also undertook specific data collections or acquisition to ensure we understood the impact on vulnerable groups. This included a new weekly data collection on homelessness and rough sleepers to monitor how many people had been moved into emergency accommodation, and a checkpoint survey of social care services. As described in paragraph 91 we also sought data feeds by demographic characteristics from the DWP to ensure we understood how many people had been moved into Universal Credit and demand for support services.

Cross UK Relationships

107. Paragraph 389 of Andrew Goodall's first statement to the inquiry sets out the formal mechanisms for engagement and coordination across the UK on statistical matters, as well as information on engagement and collaboration between KAS and ONS during the specified period (paragraphs 394 to 397). The following provides further

detail on liaison by KAS with UK Government departments and the other devolved administrations in relation to the Covid-19 response.

Liaison with the UK Government

108. Paragraphs 385 to 388 of Andrew's Goodall's statement served under reference M2B/ WG/01 to the inquiry set out the role KAS played in engaging with the UK Government's Civil Contingencies Secretariat ("CCS"), including the sharing of aggregate data from the Welsh Government to CCS for the daily dashboard return. The daily return was a significant undertaking and in the earliest stages of the pandemic there was often daily contact between KAS and CCS to agree arrangements. Weekly meetings were established to review progress and provide an opportunity to clarify requirements.
109. The size of the daily return grew rapidly as CCS regularly requested new data items, some of which were not always readily available for Wales. Examples of statistical information not readily available included a range of data related to care homes such as numbers of "live outbreaks", staff absence and an evaluation of PPE supply. A steer was sometimes sought from senior officials, special advisers, and Ministers on whether to agree to new requests (in the context of prioritising our scarce analytical resources) but generally officials looked to work positively with CCS and provide data where it was available and could be accommodated alongside other priorities. CCS returns became a clear focal point of attention from UK Government officials, but this sometimes led to significant pressure on teams in KAS who were providing support for a large number of different areas. This pressure failed to recognise the different resources available across the administrations and the different priorities faced by their analysts who, unlike in CCS, were also directly supporting TAC and policy areas. The role of the KAS Covid-19 hub, for example, would have been covered by multiple different teams and departments in the UK Government.
110. The process for completing the daily return was mostly manual and resource intensive and involved completing an Excel spreadsheet. The UK Department for Health and Social Care ("DHSC") also maintained a separate daily sitrep which the Welsh Government contributed to by completing a PowerPoint slide. KAS took steps to automate parts of the daily returns process from our side but changes to the return formats without advance notification often disrupted this. There was also very little metadata provided which meant that the definitions for data items were not always clear at the outset, or were set without adequate consultation with KAS, and this took

time to resolve which was frustrating for all parties involved. This also posed a risk of misinterpretation by assuming data across the four nations was comparable when that was not always the case.

111. Over time, some of the daily returns were consolidated. For example, the DHSC return was incorporated into the CCS daily return. The CCS return also initially formed the basis of the Welsh Government's return for the coronavirus.data.gov.uk dashboard. (In time, some data for the public dashboard was provided via an open data feed from stats.wales.gov.wales⁸). This reduction in duplication was welcomed. Future approaches to data sharing of this nature should consider more structured and automated ways of collaborating and sharing information.
112. There was regular liaison between KAS and other UK government departments throughout the course of the pandemic. The UK Department for Transport ("DfT") was instrumental in providing contacts for timely transport data and supplied KAS with regular mobility data. Analysts in DfT were happy to respond to additional requests from KAS, for example on cross-border movements. Information was mostly provided from DfT to KAS in the form of slide packs initially, but this did not hamper its use (compared to, for example, sharing data sets). The slide packs provided analysis and commentary of the data, which was welcome as it provided rapid insight that could be re-used and avoided the need to repeat this analysis in-house. In time, spreadsheets were supplied as well as slide packs. Slide packs were also regularly received from the Department for Business, Energy and Industrial Strategy, which again were useful for identifying and sharing key trends and analysis.
113. There was regular engagement with Public Health England (and then UKHSA) on the set up and continued development of the coronavirus.data.gov.uk dashboard to ensure that data for Wales could be supplied for the dashboard and that it was accurately described and communicated. There was also regular and ad hoc engagement with PHE on specific topics throughout the specified period which are covered further below.
114. Liaison with the Joint Biosecurity Centre ("JBC") was mostly led by the Technical Advisory Cell. The Chief Statistician was a member of the internal Welsh Government working group which was set up when the JBC was being formed. The

⁸ [Catalogue \(gov.wales\)](https://gov.wales)

Chief Statistician also occasionally attended working level 4 nations meetings and “show and tells” with the JBC to identify opportunities for learning and collaboration. The Chief Statistician also provided views and feedback to Welsh Government officials on papers ahead of JBC meetings (for example, on papers for the prioritisation panel). To the best of my knowledge, these views have not been formally recorded but are likely to be reflected informally in emails.

115. Generally, relations between analysts across governments were positive and productive. However, there were some occasions where the position of UK Government departments conflicted with that of the Welsh Government which impacted upon the work of KAS. The most notable of these concerned the publication of data on vaccine stocks and wastage, referred to briefly in paragraph 393 of Andrew Goodall’s first statement to the inquiry. In the early stage of the vaccine roll out there was significant public interest in the level of vaccine stock allocated to each country. The Welsh Government, as part of its vaccination strategy, had committed to be transparent on vaccine stock allocated to Wales and the amount of vaccine “wasted”. The intention was for KAS to begin regularly publishing this information from late January 2021, however BEIS officials requested that this information should not be published, noting security and commercial concerns. Following a steer from the then Minister for Health and Social Services, only vaccine wastage figures were published on 26 January 2021 (i.e. no stocks data). Several weeks of negotiation with senior officials followed (including with vaccination programme SROs), with the Chief Statisticians from both the Scottish and Welsh Governments making the case for publication of vaccine stock data, given its substantial public value. The matter was escalated to Ministers and discussed as part of 4 nations Ministerial calls in February 2021. An agreement was reached and from 14 March 2021 KAS began to publish vaccine stocks data for Wales on a weekly basis. Scotland also published similar data, but the UK Government and Northern Ireland Executive did not.

UK-wide liaison, including with other devolved administrations

116. The Chief Statistician regularly and routinely engages with and collaborates with their counterparts in other devolved administrations, formally through the Inter-administration Committee but also regularly outside this forum on a range of statistical matters. The description in paragraph 115 on vaccine stocks publication is

an example of the type of collaborative working between KAS and analysts in other devolved administrations during the pandemic.

117. Throughout the specified period, there were a number of working groups established which brought together analysts from across the UK nations in order to share plans and promote coherence of statistics. Paragraph 392 of Andrew Goodall's first statement notes the arrangements for a 4 nations working group on vaccination statistics. Similar groups also existed on testing and contact tracing statistics, and mortality statistics. These groups were often informal and therefore minutes were not always produced for all groups. The minute from the first meeting of the mortality group dated 2nd April 2020 is exhibited as **GJM2BKAS01/65–INQ000271862**. Further recorded minutes of this group have been provided to the public inquiry. The brief note from the first meeting of the vaccination statistics group on 4th December 2020 is provided as exhibit **GJM2BKAS01/66–INQ000271606** and further recorded minutes and notes from this group have been provided to the public inquiry. Likewise, the records relating to the testing and contact tracing group have also been provided to the inquiry. These groups were instrumental in bolstering good relationships between analysts, sharing priorities, building an awareness of methods and definitions used by each nation and helping to produce comparable UK-wide statistics as far as was possible (or advising on differing levels of comparability, where comparable statistics could not be produced).
118. In the later stages of the pandemic, lead analysts from across the UK met on an ad hoc basis to share plans about how their statistical publications were evolving, for example, reducing the frequency of some sets of statistics. These discussions usually involved statisticians from governments and public health bodies in each country. As data from each nation was being provided to Public Health England (and then UKHSA) for the UK dashboard, this was an important mechanism for understanding and planning for the impact on UK-wide statistics. These discussions were informal, and minutes were not regularly produced.
119. There were some missed opportunities early in the pandemic to harmonise definitions across the UK. For example, there were differences in how data on Covid-19 related admissions and hospitalisations were measured for each nation, with Wales the only nation to include “suspected” cases for some measures. These differences can sometime stem from genuine differing local operational needs, but it demonstrates the importance of involving analysts early in data collection

development to try to avoid (or plan for) these matters as far as is possible. This improved to some extent with vaccination statistics, where there was UK-wide analytical engagement prior to publishing routine statistics, but even then, some differences remained. This experience has been learned from and acted upon as part of the statistical response to the invasion of Ukraine, where analysts across the UK collaborated on the publication of a single set of statistics on Ukrainian arrivals in the UK.

Communication of Data and Statistics

120. Paragraphs 370-379 Andrew Goodall's statement served under reference M2B/WG/01 describes the KAS role in publishing statistics and research. The Code of Practice for Statistics provides a clear framework for ensuring statistics are meeting the public need and there is a duty on statisticians to ensure statistics and statistical commentary are transparent and meet user need – to meet the principles of trustworthiness, quality and value. To support these principles the publication of statistics is impartial and under the independent responsibility of the Chief Statistician. In practice this means statistical publications need to have clear commentary; methods and definitions are well explained; and any quality issues with the data are transparently presented. Therefore, a key first line of defence against misinformation is the high quality and impartial production of official statistics, and ensuring any additional data which are published are done so according to the voluntary compliance of Code of Practice principles (as described above).

121. As described in paragraph 33, KAS statisticians played a key role in ensuring data used publicly by Ministers were robust and fit for purpose through the formal clearance mechanisms in place. This ensured where Ministers were using data in press conferences, in the Senedd, or in response to queries, the data were the latest available and based where possible on information which was publicly accessible. As described elsewhere if new data were used, where there was benefit in doing so, those data were published as part of a routine ad-hoc statistical publication process to ensure it was available transparently and equally for all. The introduction of daily Ministerial press conferences was a specific challenge, given the public interest and the need for Ministers to be responding to events in a timely manner. Statisticians supported the drafting of press conference scripts and were involved until the last minute ensuring data were accurate. As the approach to press conferences developed, KAS statisticians provided a series of supporting charts to display the

latest data and these were subsequently published on the gov.wales⁹ website. Again, this ensured transparency in the data being presented to the public. KAS statisticians also advised on and quality assured the use of Wales data in press conferences by the UK Government, as described in paragraph 388 of Andrew Goodall's M2B/WG/01 statement.

122. However, it is clear that misinformation can occur regardless of the best endeavours of government statisticians. Whilst the Chief Statistician cannot control what is said by others, we did take other steps beyond the published statistical outputs to help ensure the public debate was as informed as possible. This included the Chief Statistician's blog posts which were mentioned in paragraph 383 of the initial statement. As described, these blogs were used to offer explanation and insight on statistical issues where there was the potential for confusion or misuse. The blog post on changes to testing policy in particular was an attempt to avoid misinterpretation of the heavily used daily cases data from PHW. That is exhibited at **GJM2BKAS01/67–INQ000271843**.
123. Where appropriate, statisticians also supported technical briefings with the media on specific topics. In June 2020 the Chief Statistician and Head of the Covid-19 analysis hub met with the head of statistics in BBC News to describe the approach to NHS data in Wales and how it compared from a definitional point of view with other UK countries. The Chief Statistician(s) took part in a number of technical media briefings, for example on contact tracing statistics, vaccination statistics and the re-introduction of NHS performance statistics, as well as supporting TAC in a technical media briefing on indicators. The slides used in the technical briefing on contact tracing from 10 September 2020 are provided as an example. These are exhibited as **GJM2BKAS01/68–INQ000271763**.
124. As described in paragraphs 365 to 369 of Andrew Goodall statement served under reference M2B/WG/01 the professional leadership of the Chief Statistician across the analytical community was also an important role in ensuring data and evidence were presented to the highest standard. For example, the Chief Statistician facilitated a discussion between the Office for Statistics Regulation and PHW on the presentation of data on vaccination status of hospitalised Covid-19 patients in order to take

⁹[Slides and datasets from the coronavirus briefings | GOV.WALES](#)

proactive steps to reduce the opportunity for misuse. The equivalent report from the UK Health Security Agency had been used for misinformation purposes.

125. Whilst these steps did not actively counter misinformation, they were critical actions to ensure data and evidence were presented appropriately and in support of the public good. KAS responded factually to queries concerning availability, definitions, or the presentation of data, and, where there was an apparent need for clarification, put actions in place. The Chief Statistician did not and could not intervene directly with external commentators or specific social media users, as it would not have been clear where to draw the line between factual corrections and getting drawn into public debates on policy. The wider “fact checking” community is a critical part of this environment, to provide scrutiny and to independently address key misconceptions.
126. Statisticians did not encounter challenges in publishing data as Ministers and senior officials recognised and welcomed the need to be transparent around the pandemic and its impact. In fact, Ministers were on a small number of occasions frustrated at being challenged around the availability of data when they were clear they expected it to be published routinely. Examples include a delay in publishing Covid case rates at lower levels of geography or publishing the newly established data series on deaths in care homes.

Lessons Learned and Actions Taken

127. KAS has undertaken or contributed to a number of lessons learned exercises over the course of the pandemic. The following are provided as exhibits:
- i. KAS contribution to the Welsh Government Health and Social Services Group lessons learned exercise, from August 2020. (This was conducted when KAS was still part of the HSS Group). I exhibit that at **GJM2BKAS01/69–INQ000271847**.
 - ii. A follow-on exercise from the above, focusing on matters relevant to Statistical Services that were outside the scope of the HSSG exercise, from September 2020. I exhibit that at **GJM2BKAS01/70–INQ000271846**.
 - iii. Improving Health and Social Care Statistics: Lessons Learned from the Covid-19 Pandemic, Office for Statistics Regulation, October 2021. I exhibit that at **GJM2BKAS01/11–INQ000271834**.
 - iv. A review of the Statistical Services contribution to the Covid-19 response, from June 2022. I exhibit that at **GJM2BKAS01/71–INQ000271817**.

- v. A September 2022 progress report by KAS on lessons learned. I exhibit that at **GJM2BKAS01/72–INQ000271818**.
128. The Chief Statistician was also interviewed as part of the Welsh Government Civil Service lessons learned exercise coordinated by the Covid-19 Transition Board. A transcript or note from this interview was not retained (in line with the privacy notice) but relevant findings were included in the final report which is exhibited at **GJM2BKAS01/73-INQ000090539**. The Government Statistical Service also conducted a lessons learned exercise in January 2021 and developed a subsequent action plan in April 2021. Those are exhibited at **GJM2BKAS01/73a–INQ000353527**.
129. Good practice was recognised in the internal exercises, including the early involvement of KAS in the Welsh Government response; the vast range of new statistics and analysis that were produced and transparently published; the commitment of KAS staff in contributing to the Covid-19 response; and the good working relationships developed internally (e.g. with communications teams, special advisers) and externally (e.g. with PHW, DHCW, ONS). Good practice from the external report by OSR is covered in paragraph 39 of this statement.
130. KAS and the Welsh Government have taken proactive steps to address a number of the findings from lessons learned exercises, which are set out below.

Strategic approaches to evidence

131. In April 2021, an ExCo evidence workshop was held which provided an opportunity to reflect on the step change in the thirst for and use of evidence during the Covid-19 pandemic, as well as the growing demand for evidence in other policy areas. The workshop considered how to continue to embed good practice in evidence seen during the pandemic and how to address organisational weaknesses. One of the recommendations from this workshop was to pilot a Strategic Evidence Board, to provide strategic leadership and direction on the use of evidence.
132. The Strategic Evidence Board was established in early 2022, with its first formal meeting in May 2022. Its terms of reference are exhibited at **GJM2BKAS01/74–INQ000187542**. As set out in the terms of reference, the board is chaired by the Chief Operating Officer and its role is to bring together professional evidence and science leads, and policy profession and customer representatives

from across Welsh Government to provide leadership on the development, use, collaboration, and communication of evidence in Welsh Government. The creation of the board also supports one of the lessons identified in the OSR lessons learned report, where senior leaders promote a culture that values evidence and analysis.

133. Another key theme of the ExCo discussion was the “TAC model” used during the pandemic to engage with wider experts and research networks to generate, synthesise and mobilise evidence in government. Part of the remit of the Strategic Evidence Board is to consider how similar models could be applied to other topic areas such as equalities or climate change.

Organising structures in emergencies

134. Opportunities for improved coordination of data and evidence in an emergency have been identified through lessons learned exercises. The establishment of the Covid-19 analysis hub provided a good mechanism for coordinating analytical requests in KAS and engaging with the UK Government on analytical matters. However, there remained some duplication and lack of clarity on some matters in relation to data and analysis across the Welsh Government which could be improved by better embedding data and analysis into civil contingencies structures. A paper for the Welsh Government’s Strategic Evidence Board set out a proposal to address this by establishing a data and evidence function as part of the Civil Contingencies and National Security (“CCNS”) division. This would provide enhanced capacity and capability to plan and respond to the data requirements of future emergencies, as well as embedding data and evidence in the Welsh Government’s emergency response structure. The recommendations from this paper were accepted and KAS and CCNS are now working to establish this team. This includes making connections with and learning from the experience of the UK Government’s National Situation Centre. That paper is exhibited at **GJM2BKAS01/75–INQ000271844**.
135. Another point of learning from the pandemic was the importance of involving analysts in emergency preparedness exercises. As at March 2023, KAS have since been involved in two exercises which have helped test emergency responses.

Analytical resourcing

136. A number of factors related to analytical resourcing were identified in lessons learned exercises. The paper for Strategic Evidence Board referred to above also set out plans for a reservist model for analytical staffing requirements during an emergency.

This seeks to address some of the people and wellbeing concerns experienced during the pandemic response, especially those experienced during the spring and summer of 2020. (Action was taken to address this at the time, by creating additional posts from Covid-19 funding for statistics and analysis to support the pandemic response.) The Chief Statistician has also advocated, through the Analysis Function team in ONS, for improved coordination of analytical resourcing across the UK during emergencies, which was identified as a recommendation by OSR.

137. A lack of capability and capacity in operational research in the Welsh Government was identified. Although capacity is still limited, a community of practice has been formed in the Welsh Government to support professional development and make connections with operational researchers in other parts of government. This has proved useful during the response to the invasion of Ukraine, where the Welsh Government was able to draw on operational research skills from both the Department for Transport and ONS to support quality assurance of modelling.

Equalities

138. Issues with the availability and use of equalities evidence have been set out earlier in this statement and gaps in data on ethnicity were also identified in OSR's lessons learned report. The Welsh Government's Programme for Government included a commitment to "create a Race Disparity Unit alongside an Equality Data Unit to ensure an inclusive evidence base to inform decision making in government". KAS has worked collaboratively with the Welsh Government's Communities and Tackling Poverty division to establish the Equality, Race and Disability Evidence Units which, as at mid-March 2023, now comprises 16 people. Building on the experience of the pandemic, the units are focused on improving equality evidence for use in decision-making both within the Welsh public sector and beyond.
139. Additionally, through the Administrative Data Research Wales programme, the Chief Statistician has pushed for timely access in SAIL to microdata from the 2021 Census, which will facilitate data-linking research on inequalities. The data was received by the SAIL Databank in January 2023 and applications to access this data are now being opened (as of March 2023).

Leadership and coordination of health and social care statistics

140. The OSR lessons learned report identified a need for stronger leadership and coordination of health and social care statistics (although noting that this was most

acutely needed in England). The lack of well-established relationships in KAS with health bodies like PHW has also been noted in this statement and in internal lessons learned exercises, along with PHW's limited experience and capability on official statistics matters. Throughout the course of the pandemic positive steps were taken to continue to build the relationship with PHW. This included weekly informal coordination meetings at senior and working levels. While statistical resourcing in PHW remains a decision for PHW, the Chief Statistician has continued to use her system-wide leadership role to make the case for enhanced statistical capability in PHW, as well as connecting PHW officials with statistics heads of profession in public health bodies in England and Scotland. As part of the development of PHW's surveillance plan, PHW committed to recruiting some additional expertise to support them to become more compliant with the Code of Practice for Statistics, noting that the pandemic had increased their awareness of the importance of considering public understanding and transparency in reporting. KAS officials also now meet regularly with DHCW to coordinate on statistical matters and support them in their responsibilities as an official statistics producer.

141. As described earlier in this statement, there were examples of good practice in statistical engagement across the UK during the pandemic. This continues to be embedded into current ways of working, with a monthly meeting now taking place between the heads of health statistics in each UK nation. This provides an opportunity to horizon scan, share plans and identify collective ways to address common issues from the outset. KAS has also expanded its involvement in the UK Health Statistics Steering Group (formerly the English Health Statistics Steering Group), in order to improve comparability and coherence of health statistics across the UK. One recent focus of this work has been on the comparability of NHS performance measures.

Digital and data

142. Lessons learned exercises also identified some matters in relation to digital and data skills and capability. There was a recognition that access to analytical tooling (e.g., R and Python) improved over the course of the pandemic, but there remained challenges in sharing and accessing data from external organisations in the most efficient way (for example, from bodies like PHW and DHCW – see paragraphs 86-88 above).

143. The response to the invasion of Ukraine has since improved data management processes, and the digital and data workstream of the WG2025 internal corporate improvement programme is intending to address matters around digital collaboration, including the secure sharing of data. The Ukraine response has benefited significantly from building on the ways of working developed during Covid-19 on digital and data. Most notably the leadership role taken by the DDAT profession on data on those shielding and their close working with analysts to ensure the operational data were available for analysis and publication. The same approach has been taken, and built upon, for Ukraine with a virtual team across DDAT directorate bringing together digital, data and analytical staff on a twice weekly basis which has ensured the data used for analysis and modelling on Ukraine is available from the digital platforms set up. This has been helped by the DDAT structural changes mentioned at paragraph 11 of this statement.

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

Glyn Jones

Dated: 8th December 2023