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Witness Name: Nigel Edwards
Statement No.: 1
Exhibits: NE/1-NE59
Dated: 24 February 2023

UK COVID-19 INQUIRY

WITNESS STATEMENT OF NIGEL EDWARDS

I, Nigel Edwards, will say as follows: -

I am Chief Executive of the Nuffield Trust for Research and Policy Studies in Health Services (known as the Nuffield Trust), a position I have occupied since 2014.

The Nuffield Trust

1. The Nuffield Trust is a charitable trust, registered with the Charity Commission as charity number 209169, and a company limited by guarantee registered in England with company number 00382452. It was founded as the Nuffield Provincial Hospital Trust in 1940 by Viscount Nuffield (William Morris), the founder of Morris Motors. The Nuffield Trust's charitable objects are "to promote the prevention or relief of sickness and the advancement of health of the people of the United Kingdom, in particular through the promotion of improvements in the quality of healthcare and health policy."

2. The Nuffield Trust pursues these charitable objects by carrying out research and policy analysis on health and care, running discussions and seminars, offering commentary and expertise via media, social media and in the UK and devolved parliaments.

3. Its strategic plan (2020-2025) sets out three core objectives for the Nuffield Trust's work:

- improving the evidence base that leads to better care by undertaking rigorous applied research and policy analysis
- using our independence to provide expert commentary, analysis and scrutiny of policy and practice
- bringing together policy-makers, practitioners and others to develop solutions to the challenges facing the health and social care system.

4. The Nuffield Trust's headquarters are on 59 New Cavendish Street in London. It has 47 full-time equivalent staff, with expertise in research, policy, communications, operations and strategy.

5. From hereon, in this witness statement, I will refer to the Nuffield Trust as "we".

Pandemic preparedness and planning

Our work prior to 2020

6. As a think tank predominantly concerned with health and care policy, our research and analysis on the NHS did not examine pandemic plans or preparedness in the years prior to the pandemic. Indeed, a search of the Nuffield Trust's published output during that period reveals that the only reference to pandemic planning prior to January 2020 was an opinion article about lessons from the 2017 cyber-attack (NE/01), during which pandemic planning was mentioned as an example of the work NHS organisations routinely do.

7. The reason for our lack of focus on pandemic preparedness and planning was twofold: first, our main expertise as a think tank was public policy on health and care, not the detail of operational plans or the spread of infectious diseases; and second, the NHS was widely thought to be well-placed to plan and prepare effectively for a pandemic, and in fact had been praised in the independent review by Dame Deirdre Hine following the 2009 swine-flu pandemic.

8. As with our work on health, prior to Covid-19, much of our work on social care focused on defining and highlighting significant systemic flaws and on drawing attention to what England should learn from other countries to build a more resilient system. We did not specifically refer to preparedness for, or the impact of, a

pandemic in the system but we repeatedly expressed our concern that the social care system was fragile and already struggling to cope.

Our work since 2020

9. Since January 2020, much of our work pivoted towards making sense of the pandemic and its impact on NHS and social care. While a large part of that focused on "explainer" content to aid understanding of health and social care in the context of Covid-19, and on the policy challenges in recovering from Covid-19, there were some notable outputs that are of relevance to Module 1 and the questions in your letter. These are set out below, broken into sub sections on the NHS and social care in turn.

The NHS

10. Throughout 2021 and 2022 we carried out two related pieces of work looking at lessons from the pandemic on infection prevention and control and building design (NE/02) and the experience of smaller hospitals (defined as hospitals with 350 to 700 beds) during the first wave of the pandemic (NE/03).

11. In our work on smaller hospitals (NE/03), we found that while all organisations had pre-existing plans for managing influenza outbreaks, no hospital we spoke to had pre-existing plans for a sustained pandemic, with interviewees identifying that their organisations lacked the skillset required to plan adequately for a long-term pandemic.

12. Our report on infection prevention and control (NE/02) found that many hospitals paid a price for previous decisions to reduce the space available for staff, circulation, storage, beds, and spare capacity – for example in oxygen supply. Our smaller hospitals work (NE/03) highlighted that flaws in the supply of oxygen were a real problem during the first wave and a problem that had not been picked up in pre-pandemic planning.

13. Other pinch points identified in both pieces were the design of hospital buildings, the age and condition of the NHS estate, a lack of single and isolation rooms, difficulties in segregating patients, appropriate changing and staff rest facilities (these could be a source of infection) and design issues which prevented good ventilation. There

were also problems in the supply of "kit" (such as PPE) and workforce shortages. The design and layout of emergency departments (ED) and critical care units was a particular issue.

14. In the summer of 2020 we joined forces with the Health Foundation and King's Fund to run a series of roundtable discussions for a recently established Health and Social Care Taskforce at Number 10 and HM Treasury. The focus of these was largely out of scope for this module (looking at recovery from Covid—19) but one session was held, on 25 August 2020 to look at pandemic planning and resilience. This is detailed at paragraph 88 below.

Social care

15. We are currently undertaking an NIHR-funded study jointly with LSE (NE/04) and, as part of that are examining what needs to be prioritised as part of a programme of reform to aid recovery from Covid-19 and to build resilience in future. One element of our Covid-19 study has, in hindsight, reflected on how prepared the social care system was for a pandemic. This has involved interviewing sector representatives and reviewing preparedness documents. We made the following observations that prior to Covid-19:
    a. It is notable that NHS facilities were required to meet NHS core standards for emergency preparedness but no equivalent requirement existed for care homes. This is in contrast to some other countries we have studied (Japan, for instance, has required care facilities to have formal emergency plans in place since 2000).
    b. There were a number of missed opportunities to consider social care in wider preparedness exercises. Exercise Alice which explored the challenges associated with a MERS-CoV outbreak was restricted to health. Exercise Cygnus examined the impact of a flu pandemic on social care and identified a number of recommendations to address shortfalls in pandemic planning in the sector, in particular drawing attention to the lack of social care attention at COBR meetings. It is not evident that the shortfalls were addressed following the exercise.
    c. Much of prior preparedness activity was focused on an influenza outbreak and it appears that the risk of an infectious disease such as Covid-19 (with asymptomatic transmission) was not anticipated. An NHS England influenza paper (NE/05; date unknown, but probably around 2018), for instance,

suggested that capacity in care homes 'could be increased through installing extra beds in each room or using communal areas for nursing support'.

d. As Covid-19 infections spread across the globe, it was clear that England was learning from how things were unfolding in other countries in terms of health service delivery (for instance, the commissioning of extra ventilators). Sector representatives that we interviewed said that it was not evident that the same learning was happening in social care and we have seen no documentation to suggest it was happening despite press reports of terrible situations unfolding in care homes in Italy and Spain.

16. In the early weeks of the pandemic, social care was further disadvantaged by the singular focus on the NHS. While many of the decisions made – for instance around rapid hospital discharge – were logical in the context, too little attention was paid to the ability to cope of the environments into which people were to be discharged in terms of their ability to isolate, access to PPE and appropriate training of staff in infection prevention and control.

17. An action plan for social care was not published until 15th April 2020 (NE/58), a month after the national lockdown was announced and at the point that mortality in care homes was already peaking. Our research suggests that an absence of senior social care voices at the important forums where such decisions were being made was a key factor. At the time Covid-19 hit, there was no DHSC director general specifically for social care in post. During our research (NE/04), interviewees commented on the fact that the DHSC social care team was modest in size and lacking the operational expertise required for understanding how the sector would cope.

18. Complex structures and a lack of clarity over where responsibility lay for social care had an impact on how well prepared the government was to respond to Covid-19. The NHS has NHS England to coordinate centrally but social care has no equivalent. Add to this the large number of providers (around 14,000 in over 20,000 locations), not all of which provide regulated services, and the fact that services are commissioned by local authorities, the NHS and private individuals.

19. Confusion over where responsibility lay was exemplified in PPE procurement and distribution in the early weeks of Covid-19. Individual providers (many of whom were financially precarious – see paragraph 70 on funding) were initially left to procure

PPE on the open market and to contend with rising prices, raising important questions about where responsibility should lie. The roll out of testing was also not seamless because of confusion over which government department was leading it within social care.

Resilience

20. Health system resilience, according to the European Observatory on Health Systems and Policies, to which we are a contributor, is defined as "the ability to prepare for, manage (absorb, adapt and transform) and learn from shocks" (NE/06). They define a shock as "a sudden and extreme change which impacts on a health system".

21. In theory, a well-funded well-governed healthcare system with adequate staffing, providing high quality and accessible care to a largely healthy population, using the best available data and technology, should be able to withstand a shock. Our work has detailed the reality that this was not the case for the social care system and that the health service was not as resilient as it should have been. Our work during this time documents declining resilience, leaving the health and care systems under resourced and over-capacity and in a poor state going into the Covid-19 pandemic.

22. Much of our work prior to 2020 concerned itself with analysing and understanding the health and social care system's ability to deal with the challenges posed by demographic, fiscal and seasonal pressures in the decade prior to the pandemic, rather than specifically its resilience for a pandemic. It would be impractical to detail every instance where we highlighted problems in its ability to withstand these pressures and does not meet the criteria set out in the documentation supplied to us about this Module.

23. Indeed, it is important to distinguish between the resilience of the health and care systems to deal with the *initial shock* of Covid-19 and the resilience of the system to *recover* from Covid-19. The bulk of our work is most relevant to the latter, and therefore more appropriate to Module 3 of the Inquiry's work.

24. Therefore, I will offer an overview of our perspectives on resilience where they relate to the three key areas highlighted in Section 4 of the Module 1 Outline of Scope (capacity, resources and levels of funding, any impact arising from the UK's

departure from the European Union) and where it provides useful context for the system's ability to cope with the initial shock of Covid-19.

25. While many of the issues of resilience (staffing shortages, short-termism in funding) apply to both health and social care, the story is not the same for the NHS as it is for social care. Therefore, I will attempt to clearly highlight which sections are concerning the NHS and which are concerning social care.

26. In specific response to the mention in your letter of 18 January of pre-existing vulnerabilities of different groups, I also outline relevant work carried out prior to the pandemic on health inequalities.

Capacity

27. An important part of the resilience of the health and social care systems was whether or not they had the capacity – physical space, equipment, staffing and data infrastructure - to deal with the immediate surge in demand created by the first wave of Covid-19. Our research suggests that for healthcare, some notable strengths of the system (equity of access, high-quality data) were undermined by poor workforce planning, low investment in capital (buildings and equipment) and a lack of capacity in community and step-down care. These were long term issues not amenable to a quick resolution in response to the surge

28. Despite these weaknesses, the NHS adapted quickly in the early weeks of the pandemic to reconfigure services to free up and create additional intensive care bed capacity, postpone or divert non-Covid-19 patients elsewhere and draft in thousands of additional professional staff.

29. For social care, our Covid-19 study (NE/04) found that the ability of the system to cope in the face of Covid-19 was undermined by a preceding decade of low funding, an absence of strategic workforce planning, limited investment in physical infrastructure, a lack of comprehensive reliable data and lack of clarity over where accountability lay for the response.

<u>International evidence on capacity</u>

30. The UK's health systems went into the Covid-19 pandemic with higher bed occupancy rates and fewer doctors, nurses and capital assets than most other developed country health systems (NE/07). For example, Germany had over three times the hospital beds and nearly twice as many nurses per person than the UK. .

31. In 2015, 2018, 2020 and 2022 we published international comparisons of UK healthcare (NE/08, NE/09, NE/07, NE/10). In each of these we presented a balanced view of relative strengths and weaknesses of the UK's NHS compared to other systems. In our 2018 report *How Good is the NHS?* (NE/09), published as part of the BBC's programming for the NHS at 70, we highlighted areas of strength (equity of access, protection from financial hardship and managing certain long-term conditions), as well as weaknesses (poor resourcing, fewer doctors and nurses, among the lowest numbers of hospital beds and CT and MRI scanners).

32. In our 2020 analysis of how different health systems were coping with resuming health services during the pandemic (NE/07), we found that in addition to spending less on capital investment, the UK was towards the bottom of the league table in terms of the availability of key staff and bed capacity. We argued that "Going into the Covid-19 crisis, the NHS had consistently failed to train and retain sufficient staff to keep pace with demand, leading to chronic workforce shortages and vacancies in key areas. It also had relatively high occupancy rates of acute care beds, meaning that it had less flexibility than other health systems to deal with a surge in demand" (NE/07).

33. The government's response to our international comparisons work was generally via media comments and response, usually stating facts about the Government's record or referring to counter studies but not addressing the weaknesses in resilience we highlighted. For example, in response to our 2018 report highlighting concerns over cancer outcomes, the Government response stated: "We are taking strong action to help people live longer and healthier lives – cancer survival is at a record high while smoking rates are at an all-time low, and the independent Commonwealth Fund has ranked the NHS as the best and safest healthcare system in the world out of 11 countries." (NE/11) This response does not mention the problems highlighted in the Commonwealth Fund analysis in relation to, for example, waiting and outcomes more generally.

34. In response to our 2020 report on resuming services, the Government said: "The action we have taken ensured that the NHS was not overwhelmed, even at the virus's peak, so everybody could get the best possible care. This report rightly notes the resilience, speed and hard work with which NHS staff responded to the pandemic and our NHS continues to mobilise like never before to deliver care in new ways to thousands more people. We are backing the NHS with a record cash funding boost of £33.9 billion extra by 2023/24 and the largest hospital building programme in a generation – and the Prime Minister recently announced a further £3 billion to relieve winter pressures on A&E and emergency care." (NE/12) The building programme is still in preparation and the cash increase failed to compensate for many years in which that the spending per person on the NHS, when adjusted for inflation and changes in age structure had grown very slowly.

35. Our work was well-received by Arms' Length bodies, particularly NHS England, who referenced our 2018 report prominently, including in the 2018 NHS Long-Term Plan (NE/13), welcomed our July 2020 publication looking at resuming services and contributed funding towards our 2022 analysis of health system recovery from Covid-19. The findings of the 2020 and 2022 analyses were presented via a private seminar with NHS England's Strategy Directorate, to discuss structural challenges that the NHS had going into the pandemic relative to other countries, and what the implications might be for system recovery.

36. On social care, is worth noting that that unlike most other developed nations, England (we refer specifically to England in our social care work as the other UK nations have devolved powers over their systems which has led to some divergence in structure) has failed to bring about any substantial reform to the funding or design of the social care system over the preceding two decades despite urgent calls for reform dating back to 1999.

Quality of care

37. As well as our international work, our QualityWatch programme, funded by the Health Foundation, was set up in 2013 to track care quality in the NHS and social care over time. Through updating hundreds of indicators of care quality, we have been able to form an in-depth understanding of the impact of pressures on the system and how this affects patients. While much of this work falls into the category of understanding pressures on healthcare rather than specifically on pandemic

resilience, our Annual Statements of care quality did enable us to highlight areas of particular concern and relevance regarding health system capacity.

38. Waiting times are a good indicator of health system capacity, and the story over time is one of declining capacity to see and treat patients in a timely way. In 2015, our Annual Statement detailed growing concern over the NHS's capacity to treat patients, with waiting lists growing and targets being missed. At the time we said: "Demand is outstripping capacity at present, as it did last winter, and very focussed action that addresses the pinch points is needed now... The warning lights on care quality that we observed last year now glow even more brightly. So far we have seen a gradual decline in some elements of quality. The problem with complex systems under high levels of stress is that they can suffer sudden and catastrophic collapse – often without a lot of warning" (NE/14).

39. Our 2016 Annual Statement went further: "Slowing improvement in some areas of quality, combined with longer waiting times and ongoing austerity suggests the NHS is heading for serious problems. It seems likely that a system under such immense pressure will be unable, at some point, in some services, to provide care to the standards that patients and staff alike expect" (NE/15)

40. Analysis published last year by QualityWatch showed that the total waiting list for elective (planned) care was steadily increasing before Covid-19, from 2.5 million in April 2021 to 4.5 million in February 2020. We estimated that if pre-pandemic trends had continued, the total waiting list would likely have been 5.4 million in May 2022 compared to the 6.7 million it was (due to the elective backlog). This illustrates that constrained capacity was a feature of the NHS long before Covid-19 hit. (NE/16)

Workforce

NHS

41. Our analysis found that prior to the pandemic, NHS staffing numbers did not keep up with demand. Our research has detailed policy failures such as fragmented policy responsibility for the NHS workforce, poor and constrained workforce planning, reductions in workforce funding (See paragraph 64 below), restrictive Brexit and immigration policies (see paragraph 76 below), declining rates of retention and growing numbers of clinical staff leaving the NHS before retirement. This placed the

NHS in a vulnerable position going into the pandemic, resulting in the rapid efforts to get staff to rejoin the emergency staffing register seen in the early weeks of the pandemic.

42. In 2018/19 we worked with other health think tanks (Health Foundation and King's Fund) to offer analysis and policy proposals on the NHS and social care workforces. Our modelling detailed a potential gap of 250,000 NHS staff by the end of 2030 if trends continued. (NE/17). We identified concrete policy proposals to tackle this situation, many of which were well-received and some have been acted upon by Government (such as providing cost of living grants to support students undertaking degrees in nursing, midwifery and allied health professions). However, as this paper was published almost exactly a year before the first lockdown, progress had not been rapid enough to prevent the need for emergency action when the pandemic hit.

43. A particular area of concern was the nursing workforce. The surge in capacity needed to handle the additional demand on hospitals presented by the Covid-19 waves required both beds and nurses – both in short supply in the NHS. In the nine years prior to the pandemic, Nuffield Trust analysis showed that the number of hospital admissions increased by around 2% annually in the 9 years up to 2020, while the number of nurses increased by only 0.3% a year (NE/18). We also highlighted "a pervasive optimism bias" in recent history whereby the NHS would tend to overestimate the number of nurses that would be available and underestimate the number needed, which contributed to a failure to act sooner to boost the supply (NE/20). Our work with the other think tanks detailed a potential shortfall of 108,000 nurses by the end of this decade (NE/19).

Social Care

44. Workforce challenges in the social care sector were well-known before Covid-19 yet little had been done to address them. There had been no dedicated, long-term social care workforce strategy since 2009. In our work with the Health Foundation and King's Fund (NE/19), we sought to highlight concerns over high vacancies, high turnover, low pay and poor conditions. In the year before Covid-19 hit (2018/19), care worker turnover rates were around 40% and there were in the region of 115,000 vacancies. Around one quarter of staff were on zero hours contracts.

45. In a briefing ahead of the 2019 election (NE/44), we sought to stress the concerning state of the social care workforce, drawing attention not just to the current number of vacancies but also the need for many additional posts to address unmet and undermet need. We estimated that, at that moment in time, at least 50,000 additional care workers were needed just to provider a basic level of support to people aged over 65 who had a high level of need but were accessing no support whatsoever.

46. The state of the social care workforce had far-reaching consequences for how able the sector was to cope in the face of widespread infection. Implementing guidance around isolating and cohorting symptomatic/Covid-19-positive care home residents, for instance, was difficult in a context where vacancy rates pre-Covid-19 meant staff were already stretched. Rising sickness rates among staff further exacerbated these challenges. Low pay and a reliance on zero hours contracts meant that many in the workforce worked across several locations and, sometimes, sectors.

47. Although infection spread as a result of staff moving between settings was identified as a risk in a document about influenza outbreaks, prepared by Public Health England in 2017 (NE/21), there was no such recognition of this risk with regard to Covid-19 within the adult social care action plan (published in April 2020) (NE/22). A further factor that was overlooked was the inconsistent access to sick pay among this workforce. When workers were required to isolate if they developed symptoms (with no priority access to testing above what was available to the general public), the quarter of workers on zero hours contracts faced losing two-thirds of their weekly income. This was an oversight later acknowledged by the CMO at a session of the Health and Social Care Select Committee on 21 December 2021 (NE/25).

48. There is a long-standing and heavy reliance upon unpaid carers to fill in the gaps around publicly-funded support. Budget cuts and tightening eligibility criteria in the decade before Covid-19 had seen access to care become ever more limited. Data on who is an unpaid carer was patchy which meant that communicating with them and supporting them during Covid-19 was complex. Support for carers in the years before Covid-19 had dwindled with 13,000 fewer receiving direct support than in 2015/16 (NE/23).

Capital: buildings and equipment

NHS

49. The NHS responded to its comparatively low bed base, lower critical care capacity than international neighbours and smaller number of MRI and CT scanners with agility during the early weeks of the pandemic, converting operating theatres into temporary intensive care facilities and using staff and resources flexibly. But our analysis suggests that that task could have been eased if more of our hospitals had a greater proportion of reconfigurable space. We also found that infection prevention and control was made more difficult by the ageing NHS estate and a lack of long-term planning and investment.

50. One clear example of this is that since the 1970s, NHS hospital building schemes have sought to reduce costs by squeezing the size of internal areas and circulation space needed to aid the flow of patients through buildings. This has meant that, unlike many other countries, the UK has very few hospitals with a majority of single patient rooms and many hospitals are made up of older buildings with shared accommodation and few single and isolation rooms. Overly parsimonious design also caused difficulties in modifying buildings and ventilation systems to improve air changes to reduce cross infection risks.

51. Our July 2020 paper *Here to Stay* (NE/24) detailed the consequences of this for the first wave of Covid-19: interviewees told us that physical space constraints and shortages of handwashing basins may mean that additional facilities would have to be created to "don and doff" PPE, sometimes at the expense of actual bed spaces. One Chief Executive described the serious logistical difficulties posed by narrow corridors (often another result of cost savings) which required a whole corridor to be closed for a period whilst transferring a Covid-19 patient from one part of the hospital.

52. The poor quality of the NHS estate, coupled with the demand pressures on the system, detailed in paragraph 38 above, also posed particular problems for effective social distancing. Many emergency departments were working well above their design capacity prior to the outbreak and did not have waiting areas that allow for social distancing. In November 2020 we published analysis showing a growing proportion of Covid-19 cases were acquired in hospital - around 1 in four cases in December 2020 (NE/59). This has since declined but highlights the challenges of

containing a highly infections airborne disease in hospitals grappling with ageing facilities.

53. The UK's struggles with acquiring PPE during the pandemic are well documented but were not the focus of Nuffield Trust work. However, our work on smaller hospitals (NE/03, detailed in paragraph 13 above) identified some key concerns regarding access to equipment, especially PPE and kit for ventilator support. This research identified varied experiences between hospitals in obtaining and distributing kit and managing shortfalls, with tensions identified between central mechanisms (both and a national and hospital level) and reliance on informal networks of contacts and the endeavours of individual staff, who often went to extreme lengths to obtain supplies.

Social care

54. In social care, a lack of sustained funding (see paragraphs 69-72 for more on this) for social care, and instead a reliance on sporadic injections of cash, over the preceding decade had not created fertile ground for investment in infrastructure. This meant that the residential care estate was not fit for purpose for managing a pandemic such as Covid-19.

55. Outdated buildings in residential care – many of which are small, converted houses with few en-suite facilities – were common in the sector. As a result (and further compounded by staff shortages), care homes were not well set up for isolating or cohorting infected or symptomatic residents. It is not clear that this was well enough understood before the policy was implemented to rapidly discharge people from hospital into care homes without testing for Covid-19. There has been much controversy over the extent to which that policy seeded infections in care homes.

Data infrastructure

NHS

56. The NHS's capacity and ability to collect and publish data at a national level, much of which is publicly available, was an area of strength when considering pandemic resilience and capacity prior to 2020, particularly when set against the situation in social care (see paragraph 61). Data on workforce numbers, performance (including A&E attendances and admissions) and waiting times was - and remains - published

regularly and in an accessible format. Access to other datasets (such as Hospital Episode Statistics) is available with appropriate approval. Other data resources, such as the General Practice Data for Planning and Research scheme were in an advanced stage of development when the pandemic struck.

57. An example of the NHS's data capability being used to positive effect to enhance pandemic resilience was in West Berkshire, detailed in a set of case studies we produced for the World Health Organisation (WHO) (NE/39). Prior to the pandemic, the West Berkshire Clinical Commissioning Group was a testing site for a new approach to population health management which used data to identify patients with a high risk of complications and hospital admissions for diabetes and who were making poor use of the standard NHS offer. When the pandemic began, the population health management team set about using this approach to identify patients at risk of Covid-19. Starting with general practice patient records, analysts created and analysed a combined database that included linked data from different sources on issues such as residents needing assisted bin collections, sheltered housing, care needs, and food and medical supplies. They were able to identify 2500 residents who needed to be prioritised in the first wave. Within days, these residents received need-assessment phone calls from health and social care teams. A similar approach was taken in Durham (NE/39).

58. Despite these areas of excellent practice and availability of high quality national and local data, there was wide variation in how well electronic data was used across the NHS. Inconsistent digital maturity and capability, complex governance and accountability arrangements, concerns around data protection and a lack of join-up between different sectors (such as primary and secondary care) all prevented the ability for the NHS to use the data it collects most effectively.

59. In addition, high profile controversies surrounding the use of data in the NHS (such as care.data) in the years prior to the pandemic had damaged public trust and confidence in how information is accessed and shared in the healthcare context. Our international research (NE/26) showed that in countries where there is greater public confidence in the use of data and digital technology is widely used to access public services, the use of digital technologies to support health care is less controversial, and is widely expected and accepted.

60. A specific challenge, which came to the fore during the pandemic – were the significant limitations in how data on ethnicity was collected and coded within key healthcare datasets (NE/27). This limited the ability to use this data to identify issues and effective responses to healthcare inequalities. There was an absence of ethnicity data in data sources such as death registrations (from which mortality statistics are derived), poor coverage in primary care data and outdated ethnicity codes within hospital data.

Social care

61. Prior to Covid-19, social care lagged behind the NHS in terms of data and uptake of technology. The dispersed nature of its commissioning, delivery and funding meant that there was no single national database or even comprehensive records at local authority level about who was drawing on care or who was working in care (either as a professional worker or as an unpaid carer). This absence of information made it difficult to track basic data such as sickness rates among workers or mortality levels among people in contact with social care services. It also made communication with the 14,000 providers in the sector difficult and slowed down coordination of the response (e.g. distribution of PPE).

Resources and levels of funding

NHS

62. Our work over the decade running into the Covid-19 pandemic has told a story of worsening health and social care finances, with overall funding not keeping pace with the needs of the population, a lack of long-term investment in capital projects and a series of short-term, "sticking plaster" approaches to balancing the books or plugging deficits. We believe that this caused the NHS to enter the pandemic in a less resilient state than was ideal.

63. On overall funding levels, we have consistently shown that levels of funding for healthcare have not kept pace with the needs of an ageing population. In 2014 we highlighted that spending per person had fallen when adjusted for the age of the population (NE/30). More recently we showed that, once adjusted for the age of the population, health funding was largely flat in the decade running up to the pandemic (NE/31). This has reduced the Government's ability to invest in long-term priorities

like prevention and public health, new models of care, NHS buildings and equipment, and training and investment in the workforce – all of which would have placed the NHS in a stronger position to deal with Covid-19.

64. A particular example of the shortcomings of this approach to funding was highlighted by the Government redefining "health" spending as "NHS" spending from 2015, protecting the NHS budget at the expense of the wider Department for Health and Social Care budget. The latter budget being the one that covers public health, staff training and capital spending – all areas of critical important to pandemic resilience. Indeed, the particular failure to ring-fence the public health budget and resultant reduction in capacity may be one reason that the Government had to outsource the Test and Trace programme.

65. We highlighted the problems with this approach through a variety of different channels, including a joint briefing with the Health Foundation and King's Fund after the 2015 spending review (NE/32) blogs (for example NE/33) and comment articles (for example NE/34) and in meetings with Government.

66. Another example of the short-term thinking running through much of the policy around health service funding and finances was highlighted in our work on the underlying deficit facing NHS Trusts - the gap between the recurrent funding they received and the cost of treating patients (NE/35). Through highlighting the impact on non-recurrent savings and one-off cash injections, we were able to identify an underlying deficit of around £4bn in 2017/18. (NE/36). Government initially said in a media response they did not accept this analysis (NE/37), but later adopted the concept briefly in NHS Improvement financial reporting (NE/38), which was subsequently discontinued.

67. The result of NHS organisations having to manage their finances in this "hand to mouth" way was twofold: an inability to invest in longer-term capital projects (exacerbated by repeated raids on the capital budget in the period leading up to the pandemic), leaving them poorly placed to cope with the infection control measures required in the pandemic; and a reduction in their inability to invest in the sort of transformational change set out by NHS England in the 2014 Five Year Forward View and 2019 Long-Term plan, which aimed to better join up healthcare, move care out of hospital and improve care for long-term conditions.

68. In the years prior to the pandemic, we repeatedly emphasised the trade-offs implicit in pursuing "transformation" alongside large NHS provider deficits. In a 2016 blog, we highlighted that the provider deficit situation meant funds intended for investment in prevention and new models of care were being diverted. It warned that if plans to reduce acute hospital activity did not happen, there would be insufficient headroom to cope with an epidemic or the fallout of a No Deal Brexit. (NE/40). In 2017 we warned that "unsustainable levels of deficit means trusts are less resilient to sudden shocks, like the impact of a bad winter or the costs of providing temporary staff" (NE/41).

66. The problems of short-termism are also reflected in our 2021 analysis looking at the impact of Covid-19 on health spending in the first year of the pandemic across OECD countries (NE/42). We found that in 2020 UK government health spending per head of population (not age adjusted) grew by nearly 22% -- second only to Estonia among European OECD countries reporting data. This is compared to roughly 4% increases in Germany and Sweden. Our relative surge in health spending can reflect a number of contextual factors, including differences in accounting across countries, different rates of Covid-19 transmission at different points in the pandemic, and varying levels of stocks of personal protective equipment with which to respond to the crisis – meaning the volumes purchased and prices obtained will have affected health budgets differently.

67. But it might also point to stronger infrastructure and stability that health systems had going into the pandemic. A large proportion of the UK's additional spend in the early phases of the pandemic went towards the Test and Trace programme, whereas countries like Germany entered the crisis with stronger public health infrastructure and were therefore able to make use of local laboratories and existing capacity, so may not have had to make the same level of investment to respond to the emergency. Likewise, we found that countries that spent a larger share of their economic wealth on health over time – like Austria, Germany, Sweden, Norway, and the Netherlands – appeared to have more stable levels of fundings in the first year of the pandemic. The inverse is true for countries with relatively lower levels of government health spending – and may have needed to make more emergency funding available.

Social care

69. Our work running up to Covid-19 had consistently highlighted concern around cuts to funding for the social care sector. Our 2016 report into the state of social care for older people set out the impact of austerity on people in need of care (NE/43). Our 2019 pre-election briefing (NE/44) again drew attention to the impact of cuts to budgets and expressed concern at the halving of government funding for local authorities[24] which had resulted in a real-terms drop in spending power of 29% at a time when overall demand for care rose. In the year 2019/20, spending on social care had reached its highest levels since 2012/13 but still sat at 4% below 2010/11 levels. Before Covid-19, there was growing consensus that social care needed higher levels of funding.

70. Our work on the social care provider market (NE/45) found that the squeeze on the amount of money flowing into social care had an impact not just on how many people could access publicly-funded care but also on the rates that local authorities were able to pay for care. Providers were regularly paid rates for care that were below sustainable levels. This had created a very unstable provider market with frequent exits from the market and contract hand-backs. As a result, many providers of residential care charged self-funders higher fees (around 40% on average) to subsidise council-funded clients.

71. In areas with low numbers of self-funders, it was not uncommon for providers to pull out completely leaving behind 'care deserts'. At the start of Covid-19, therefore, the provider market had little spare capacity to absorb extra demand. Low fees had also fuelled the workforce shortages and offered little potential for providers to attract more staff to expand capacity.

72. Our work (NE/45) has also highlighted that the short-term nature of funding for social care had left the sector with little resilience in the face of a crisis. Rather than being awarded a long-term settlement that recognises cost pressures, the sector has been subject to sporadic injections of cash (NE/46) Coupled with the fact that local authorities are obliged to balance their budgets annually, there has been little room to take long-term strategic decisions and to invest in service provision or innovation.

73. The lack of certainty about funding has also not encouraged providers to invest heavily in improving or developing services (NE/45) The majority of the provider market is made up of small and medium sized providers and many of them had few reserves to absorb the extra costs of PPE, staff sickness and (in the case of residential care) lower occupancy rates until emergency government funding was provided. The atomised nature of the sector also meant that there was little central infrastructure to support small providers, which generally have limited back-office capacity, to apply for support grants or other help.

Impact of leaving the European Union

74. The UK's exit from the European Union had an impact on the resilience of the health and social care systems to withstand the pandemic in three distinct areas: workforce especially in social care; the resilience of supply chains and our ability to access medicines and supplies; and the requirement to refocus Government and ALB policy and executive time towards preparing for EU exit, diverting attention and capacity away from health and social care.

75. The Nuffield Trust's Health and International Relations Monitor (HIRM) project, supported by the Health Foundation, has tracked the impact of our departure from the European Union on health and healthcare. The insights that follow are drawn largely from this work.

76. On the workforce, our most recent analysis "Health and Brexit: six years on" published in December 2022 (NE/47), suggests that across medicine, nursing and social care, there has been a decline in EU recruitment and registration since the EU referendum in 2016. While the Government's drive to rapidly increase recruitment from the rest of the world has compensated for the slowdown in EU workers, this is not enough to fully compensate for the shortages in the nursing workforce.

77. The social care workforce was particularly badly hit by Brexit, with a drop in EU and EFTA nationals which has not been compensated by wider recruitment. Before Covid-19 struck, the social care sector was heavily dependent on migrant labour. An estimated 98,710 migrant workers joined the formal care workforce between 2009 and 2019. In London, 2 in 5 care worker jobs were filled by non-British workers (NE/48). In the years immediately preceding the pandemic, before UK exit from the

EU, this migrant workforce growth was entirely driven by migration from the EEA, with non-EU workers stabilising.

78. Just as Covid-19 was beginning to spread around the world, we published a blog (NE/49) drawing attention to the risk of introducing a points-based immigration system in the social care sector post-Brexit. We had raised the risks of this approach previously in 2018 (NE/50) The Migration Advisory Committee, at this point in time, raised the potential for workforce vacancies to be filled by domestic workers but that, for this to be possible, low rates of pay in the sector needed to be addressed. Reflecting these warnings, the period since 2019 has seen a flattening off and then a slight decline in the EEA workforce. As a consequence the number of EEA social care workers has likely fallen, and Skills for Care estimates that it was lower in 2021/22, the second year of the pandemic, than in 2019/20. This was highly undesirable in the context of an overall workforce failing to grow during this period. A narrative about care work being "low-skilled", perpetuated in the migration debate, exacerbated perceptions that care work was not valued.

79. NHS England emergency planning capacity was substantially redirected towards preparing for a no deal Brexit during 2018 and 2019. Notably, the medical director and Strategic Commander for emergency preparedness and acute medicine, Professor Sir Keith Willett, was given an additional remit to prepare for no deal Brexit, managing a large team and issuing regular guidance.

80. There is clear evidence that the resilience of the UK's medicine supply chains has deteriorated since the EU referendum, with implications for cost and availability. Since 2016, the number of price concessions that the Department of Health and Social Care has to issue when pharmacists cannot find medicines at the list price has consistently been elevated 2021. Previously, the number of these was at or below 20 a month, but it now regularly exceeds 50 and recently spiked to above 100 for several months. The likely driver for this is Brexit's effect on the value of Sterling, as was noted in a 2017 National Audit Office report investigating this trend.

81. Other indicators of shortage, such as Serious Shortage Protocols and supply disruption notifications, have shown spikes during Covid-19 and the period of the UK's exit from the Single Market. Our research shows that these are mirrored to some extent in France, Germany and Italy, illustrating trends related to Covid-19 and high inflation in 2022 (NE/47). However, problems in the UK are especially

consistent, and for some individual areas of shortage, notably blood specimen collection tubes during 2020, statements from suppliers support a role for trade and staffing problems associated with the UK's departure from the EU (NE/50). The overall picture is one in which Brexit has combined with the pandemic itself to reduce resilience in this area. The Nuffield Trust noted in an article in 2019 that leaving the single market, even with a deal in place, was likely to increase the costs of maintaining medicine supply for the NHS (NE/51)

Engagement with Government

82. While not discussing pandemic preparedness as such, we warned Government ministers and NHS England officials on several occasions that the NHS was unsustainably close to capacity limits and vulnerable to shocks in the years immediately before the pandemic began.

83. In May 2018 my colleague presented the findings of her analysis on NHS trust deficits to the health and care spending team at HM Treasury, highlighting the problems of the gap between NHS activity and recurrent spending (NE/52).

84. On the 17th of July 2018, I wrote to Matt Hancock MP on his appointment as Health Secretary (NE/53). I noted that there was a "serious shortage of staff and unsustainably high levels of bed occupancy," which needed to be the starting point of an emerging long-term plan for the service.

85. On the 11th of June 2019, I met with the Minister of State for Health, Stephen Hammond MP. I raised the issue that NHS staffing in several areas was in a state of crisis, with a risk of losing the long-term commitment of the workforce, and that this needed to be addressed through pay and workforce planning. The Minister asked for a note on issues with NHS digital and analytic personnel, which we provided.

86. On August 20th 2019, I met with NHS England EU Exit Strategic Commander and Emergency Medicine and Preparedness Medical Director Keith Willett, and raised the challenges potentially posed by Brexit for resilience, including EU export controls and other aspects of supply chains.

87. On September 3rd 2019, we circulated a letter to MPs, senior NHS England officials, and the Department of Health special advisors, Richard Sloggett and Jamie Njoku-

Goodwin, on Brexit and NHS pressures, along with the King's Fund and Health Foundation (NE/54). We noted that "Health and care services are already struggling to meet rising demand for services and maintain standards of care, not least in advance of an expected difficult winter," with a risk that a no deal exit would exacerbate this through effects on supplies, staffing, and demand.

88. On August 25th 2020 we were invited to a meeting with other think tanks by civil servants working on the Health and Social Care Taskforce to consider NHS resilience from winter, and in future pandemic waves. The agenda stated that "in scope for minimising harm from pandemics" was "Health and social care resilience to cope with surges in demand and minimise mortality and morbidity; planning, response and recovery. This includes flexible approaches to service delivery (including reallocating staff, digital, discharging, out-of-hospital care), changes to resilience with changes to baseline capacity, arrangements to quickly add surge capacity if needed, data flows on demand/capacity/access, minimising impacts from postponed care, a robust and well-supported workforce, strengthening vulnerable systems by place, local system partnerships".

89. At this meeting, our Head of Public Affairs Mark Dayan described the vulnerability associated with running beds and workforce close to the limit at all times, as did representatives of the King's Fund.

Pre-existing vulnerabilities of different groups

90. Much of the work we have done on healthcare inequalities is most relevant to Module 3 of the Inquiry as it focuses on how the pandemic impacted upon people experiencing disadvantage or discrimination. However, some key areas of our work offer some insights into the extent to which pandemic planning and preparedness took into account the vulnerabilities of different groups.

91. As social care users are often experiencing vulnerabilities – whether related to age, disability, or multiple conditions, our work looking at pandemic planning and preparedness on social care highlights a failure to adequately involve social care in the pandemic planning process. This is detailed in paragraphs 15 to 19 above.

92. We also published work highlighting inequalities between the least and most deprived areas when accessing or experiencing healthcare, which were covered

prominently and acknowledged by Government. While not specifically about health system resilience, these analyses identified known weaknesses in the way in which people from different deprivation deciles accessed and experienced healthcare. With the benefit of hindsight, our work highlights areas where more focused attention prior to the pandemic might have alleviated some of the unequal impact that the pandemic had on different groups in society.

93. In December 2017 we published an analysis of hospital admissions for children and young people, comparing admissions over time for those from the most and least deprived areas (NE/55). Our findings revealed that children from the most deprived areas were significantly more likely to end up at A&E or need hospital admissions for asthma and diabetes than the least deprived. We also highlighted that the gap admissions for asthma had worsened over time, with the poorest school-aged children more likely to be admitted to hospital in an emergency for asthma than they were 10 years prior. Our analysis was featured on the front page of the Observer newspaper, including a Government response re-emphasising their commitment to tackling health inequalities.

94. In 2018 we published an exclusive analysis with the Financial Times highlighting discrepancies between the standard of GP care people receive in poor areas compared to their counterparts in richer areas (NE56). We highlighted that there were significantly fewer GPs per heard in poorer areas than rich, and a worse experience of GP services in deprived areas. NHS England's response was to acknowledge these issues and highlight the forthcoming Long Term Plan.

95. 2020, immediately prior to the pandemic we published an analysis through our QualityWatch programme (NE/57)identified that people living in the most deprived areas of England experience a worse quality of NHS care and poorer health outcomes than people living in the least deprived areas. We highlighted a widening inequality gap between the richest and poorest areas in waits for A&E services, experience of GP services, hospital admissions for pressure sores and waiting times for hip replacements. While too close to the pandemic to influence planning, the analysis was well received within Government bodies, with the Care Quality Commission and Public Health England showing interest in its findings.

Conclusion

96. This witness statement has sought to provide my view on the UK's pandemic planning and preparedness based on evidence gathered and published by the Nuffield Trust after the pandemic. On resilience, where the majority of our work has focused, I have focused on the three areas detailed in the Module 1 Outline of Scope – capacity, resourcing and impact of EU exit.

97. While the NHS benefited from better infrastructure and systems to plan for and prepare for a pandemic than social care, the overall picture for both sectors was one of funding not keeping pace with need, short-termism and inadequate investment in the sorts of things that might have helped make them more resilient to the pandemic (buildings, equipment, staff, improved care models). Social care was left particularly vulnerable.

Statement of Truth

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

Signed Personal Data

Dated: 12th April 2023