Witness Name: Professor Sir Michael McBride
Statement No.: **M02C-CMO-002**
Exhibits:
Dated:

UK COVID-19 INQUIRY

WITNESS STATEMENT OF PROFESSOR SIR MICHAEL McBRIDE

I, Professor Sir Michael McBride, will say as follows: -

1. I, Professor Sir Michael McBride, Chief Medical Officer ("CMO") for Northern Ireland ("NI"), make this statement in response to the request from the UK Covid-19 Public Inquiry ("the Inquiry") dated the 30 November 2023 under Rule 9 of the Inquiry Rules 2006 (SI 2006/1838), requiring me to provide the Inquiry with a witness statement in respect of specified matters relating to Module 2C.

2. This statement is in addition to my previous witness statement (M2C-CMO-01) to which I will refer and expand on specific matters of interest to the Inquiry. I have written this statement to the best of my recollection of events and key decisions as they occurred and to provide important relevant context which I hope will be of assistance to the Inquiry. As requested, the focus of my statement is on significant events and matters which arose for decision. I am very conscious that there are a range of other issues which will be of material interest to those directly and indirectly impacted by the pandemic and the action and timing of actions taken. Where I have not covered these in this statement, this is not in any way to diminish these matters. Some of these will relate to matters in which I was not significantly involved and some of these matters are covered in other statements to this module including the corporate statements to which I have contributed. I have however indicated my awareness and knowledge of work that others were leading on to be of assistance to the Inquiry.

3. I have reviewed relevant Ministerial submissions and Departmental records available to me. I have drawn on my previous personal witness statements and my significant input to the Department of Health's ("the Department") Corporate Statements with respect to Modules 1, 2C, 3 and 4 of the UK Covid-19 Public Inquiry. I have also referenced relevant sections within the UK CMO Technical Report of the Covid-19 pandemic in the UK [**MM2/1 INQ000177534]** to which I personally contributed. I have sought to avoid duplicating evidence previously provided to the Inquiry however I have highlighted key aspects which in my view provide important context and to assist the Inquiry.

4. Given complexity and the pace of events, the number of key decisions made and the passage of time, it is inevitable that some of my recollections may be incomplete. Where my recollection is less clear, I have considered the available written records to assist me. Given the sheer pace of events particularly over the initial weeks and months prior to the reallocation of staff to support the rapidly escalating situation, many of the early updates to the Health Minister, Executive Ministers and senior officials in other Departments were provided verbally and I do not hold a record of these. In recognition of this and to assist me in responding to the Inquiry I have sought input from policy and professional colleagues within the Chief Medical Officers Group (CMOG) and across the Department to help prompt my recall of events and have indicated where I have done so. In all circumstances, the recollections and observations in the statement are my own.

5. In developing my witness statement, I have fully considered other disclosures to the Inquiry some of which I am seeing now for the first time, and which contain comments attributed to me. I have indicated what I believe are limitations of what are presented as contemporaneous formal minutes of key meetings and notes of said meetings including where comments are attributed to me. In some circumstances I have indicated the limitations of my knowledge or ability to provide interpretation of certain documents or views expressed. As requested, to assist the Inquiry, in some instances, I have sought to suggest to whom some questions might be redirected as others may be better placed to respond.

6. There are a number of areas where I have further reviewed and sought to expand on information already provided, in my personal statements to Module 1, Module 2C and Module 3 or Module 4 or in my input to Departmental corporate statements to those other modules. Where this is the case, I have not sought to repeat in full earlier responses however there is some common content from those statements in this statement.

7. I have reviewed and considered informal messages on social media platforms which have been exhibited. I have not attempted to interpret the thinking of others and, although these messages may be incomplete, I have provided relevant context and background that I recall where I believe this may be appropriate and potentially of assistance to the Inquiry. Such communications were in my view a useful and understandable mechanism to ventilate and decompress in what was the most challenging of periods for all concerned. While a matter for the Inquiry, in my view there are limitations and risks of over interpretation and such messages should not become a distraction or given undue weight as opposed to formal communications, advice, decisions and the action that was taken so that learning is identified.

8. Where I am unable to recall the specific details, and or the written records are incomplete or absent I have indicated what would have normally occurred in the context of the circumstances in question. As indicated earlier, the absence of complete and comprehensive written records was particularly the case very early in the pandemic between January and March 2020, prior to realignment of Departmental resources to ensure notetakers were present at key meetings which I attended. Where this is the case, I have indicated what I recall and what normally would have happened and have made this clear in my statement. Also given the passage of time I am unable to recall the number or details of unscheduled meetings or briefings.

9. My role as CMO was to provide medical and scientific advice with the support of the CSA, primarily to the Department and the Health Minister and other Departments when requested. While in practice I was giving advice directly to the NI Executive (the Executive) this was with the agreement of the Health Minister.

This is an important distinction. My advice was always independent, and I was supported by the Health Minister in giving that advice freely. It is also worth noting that I had not previously attended Executive meetings prior to the pandemic. Throughout the pandemic the Department, the CSA and I also provided a range of health data to the Executive. This included information provided to the NI Hub and the Executive Covid Taskforce when established. For example, data on numbers of confirmed numbers of people with Covid-19, the number in hospital or intensive care, or the number of outbreaks in care homes. This information was updated and published daily including publicly on the Covid-19 Dashboard. The weekly R paper contained further information including how rapidly the pandemic was growing or reducing in NI as compared to elsewhere in the UK and the Republic of Ireland ("RoI") and included advice from the CSA and I. The NI Modelling Group modelled a number of scenarios of the potential future trajectory of the pandemic to inform Executive decisions. Both the R paper and modelling were prepared with the most up to date data available so as to inform Executive consideration and decisions as was requested by Ministers. While there were significant benefits in the provision of such modelling with the most up to date data as possible this did mean that this could only be provided close to formal meetings of the Executive.

10. My area of professional and technical expertise as CMO does not extend to objective formal assessment of the effectiveness or otherwise of Executive structures, arrangements for decision making, political considerations or public messaging or actions which may or may not have impacted upon public confidence or adherence to public health advise. Equally some matters which may be of interest and relevance to the Inquiry are however out with my professional knowledge and expertise to provide an informed view and I do not feel it is appropriate for me to comment on the performance or leadership of those not reporting directly to me.

11. In this statement, insofar as I can, I have provided my views on the wider context with respect to the state of the health service in NI at the outset of the pandemic, its fragility and reasons for that and factors which may have impacted on the implementation of significant service reform and transformation and efforts to improve the health and wellbeing of the population. I am conscious that in doing

so in some areas I am exceeding my area of professional expertise, but I have provided this information, based on my own assessments, in an effort to assist in the task that this Inquiry is undertaking.

12. While I do not wish to repeat my observation and reflections in my first witness statement to the Inquiry, M2C-CMO-01, at paragraphs 249 to 251, it would be remiss of me not again to recognise those lost and those who lost so much and are still living the direct and indirect consequences of the pandemic. It is my earnest hope that the legacy from our collective experience is that the Inquiry identifies the real learning from the Covid-19 pandemic so that we are better prepared and better able to mitigate the adverse consequences of the actions taken and their disproportionate impact across society.

The Health of the Population in NI and Health Inequalities

13. While genetic make-up plays a part in people's chances of leading long, healthy active lives, many more factors interact to influence health and wellbeing at various stages in their lives. The international evidence demonstrates that, while health and clinical services contribute around 20% to improving health outcomes, health is to a much larger extent affected by economic, social and environmental factors, as well as health behaviours. Many of these factors are outside the direct remit of the Department and we must therefore work with other parts of Government and society to generate change. Making Life Better (MLB) 2013-2023 is the Executive's overarching strategic framework to improve health and address health inequalities. It is a whole system, strategic framework for public health which specifically helps to address Outcome 4 (People live long, healthy, active lives) of the Northern Ireland draft Programme for Government.

14. MLB built on the first NI public health strategy, Investing for Health (IfH). In 2002 the Executive recognised the importance of the social, economic, physical and cultural environment to health and published a cross-cutting public health strategy, IfH. This was the first cross-executive strategy and was led by the Department. A review of IfH (2010) highlighted key areas of success, for example the extent to which local stakeholders had been energised and inspired to work for health

improvement, providing a good foundation on which to build. It also found that much of its approach remained relevant, but that the current, more developed evidence base and the changed socio-economic context needed to be reflected in an updated public health strategy.

15. MLB was therefore developed on the evidence that health and wellbeing, and health inequalities, are shaped by many factors, including age, family, community, education, workplace, beliefs and traditions, economics, and physical and social environments. Put another way, inequalities in health outcomes arise because of inequalities in the conditions in which people are born, grow, live, learn, work and age. Health inequalities remain a particular challenge – in order to improve health outcomes for our whole population, there is a need to tackle the wider social determinants of health and reduce inequalities in these wider determinants.

16. Through strengthened co-ordination and partnership working in a whole system approach, MLB seeks to create the conditions for individuals and communities to take control of their own lives and move towards a vision for NI where all people are enabled and supported in achieving their full potential. The aims of MLB are to achieve better health and wellbeing for everyone and reduce inequalities in health.

17. MLB is structured around 6 themes and 18 supporting key long-term outcomes. The themes are:

- Giving every child the best start;
- Equipped throughout life;
- Empowering healthy living;
- Creating the conditions;
- Empowering communities and
- Developing Collaboration.

18. A Ministerial Committee for Public Health (MCPH) provides strategic leadership, direction and coherence with other key strategic programmes and structures when

the Executive is functioning in NI. The Committee agrees shared goals and priorities and oversees implementation on behalf of the Executive. The Committee is chaired by the Health Minister and supported and informed by the All Departments Officials Group (ADOG). As Chief Medical Officer (CMO) I chair the ADOG and the group is comprised of senior officials from all Departments, the Food Standards Agency (FSA) and Public Health Agency (PHA). It informs and makes recommendations to the Ministerial Committee; co-ordinates collaborative working at departmental level; supports action as appropriate; and monitors and reports on progress.

19. MLB is supported by a number of the Department led strategies that are designed to help improve population health and wellbeing through targeting specific areas where health inequalities are most prominent in our society. These include policies on:

- Obesity Prevention;
- Substance Use Strategy;
- Suicide Prevention; Protect Life 2 Strategy;
- Tobacco Control;
- Skin Cancer Prevention; and
- Breastfeeding Strategy.

20. The Department is also represented on a number of cross-government boards and jointly supports the implementation of a number of cross-cutting strategies and programmes which address the underlying social determinants of health. These include, just by way of example:

- Department for Communities (DfC's) strategy to increase participation in sport and physical activity;
- DfC's Anti-poverty Programme including homelessness, food poverty and fuel poverty and neighbourhood renewal;

- Department of Education (DE) and the Department's Children and Young People's Emotional Health and Wellbeing in Education Framework;
- DE's Children and Young People Strategy;
- DE's "A Fair Start" Programme Board and Stakeholder Reference Group which is helping to develop a Reducing Educational Disadvantage Programme;
- Department of Justice (DoJ's) Interface Programme;
- The Department /Department of Justice Improving Health within Criminal Justice Strategy;
- Department for Economy's 10x Economic Vision including a renewed focus on inclusive growth;
- Department for Economy's Widening Participation Forum refreshing the approach to widening participation in higher education;
- Department of Agriculture, Environment and Rural Affairs (DAERA's) Tackling Rural Poverty and Social Isolation Programme and
- DAERA's forthcoming Food Strategy.

21. The evidence-base around addressing the social determinants of health and reducing health inequalities is largely unchanged since that work commenced. However, some wider changes should be considered in regard to wider Government policy drivers and structures to deliver collaborative gain given the cross-government actions that are required to address health inequalities and to improve life and healthy life expectancy from a health in all policies perspective. In addition, it is undoubtedly the case that the impact of the pandemic, its influence on wider behaviours and the socio-economic environment, and the ongoing cost-of-living crisis is having a negative impact on health and other social outcomes now which requires a whole of government approach.

22. Work had commenced on a mid-term review of MLB in 2019. This process, and other strategic work on MLB, had to be paused due to the pandemic given the need to prioritise the response to Covid-19 both within the Department and across the wider system. However, it is important to note that work to implement the

framework, delivering on its underpinning public health strategies, and to address inequalities on the ground, continued during this period primarily led by the Public Health Agency. A programme of work also commenced late 2020 on the development of an Integrated Care System for NI with a focus on improving health and well-being outcomes and addressing health inequalities.

23. In this context, the Department's Permanent Secretary agreed that for the forthcoming period, rather than use resources and capacity to review MLB, the Department would instead focus on a small range of collaborative actions and programmes that can be delivered across Government Departments and sectors to improve outcomes for our population. These actions in many cases, if not all cases, will also assist in addressing outcomes on which various other government Departments lead in NI. It is also helpful to note that, while dated 2013-2023, the framework wasn't launched until 2014 and therefore its full 10-year timeframe would finish at the end of 2024.

The Health of the Population in NI

24. The relative health and wellbeing of the population of the UK and associated health inequalities varies significantly across the UK because of socioeconomic, wider societal factors and other demographic characteristics. In general, I don't believe that there were any factors peculiar to NI. However, Professor Siobhan O'Neill and Professor Nichola Rooney noted in the Lancet in 2018 regarding Mental Health in Northern Ireland that psychiatric morbidity in Northern Ireland was 25% higher than the rest of the UK, a legacy of over 30 years of conflict [**MM2/2 INQ000425502** (DoH Ref: MMcB/0100)]. In terms of life expectancy, the Office for National Statistics (ONS) have recently published data on life expectancy in the UK for the years 2020 to 2022. The ONS data for UK countries showed Life expectancy at birth in 2020 to 2022 was estimated to be:

- in England, 78.8 years for males and 82.8 years for females
- in Scotland, 76.5 years for males and 80.7 years for females

- in Wales, 77.9 years for males and 81.8 years for females
- in Northern Ireland, 78.4 years for males and 82.3 years for females

25. The convention for life expectancy as it is based on a three-year average is to use the middle year as the reference year, i.e. 2020-2022 would be referred to as 2021 life expectancy (although it is often just referred to with the full three-year moniker). The ONS Data shows that Life expectancy has fallen across the UK and all four home countries over the past four years (2018 to 2021):

Life Expectancy at Birth (years)										
	2016-18		2017-19		2018-20		2019-21		2020-22	
Region	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
UK	79.2	82.9	79.3	83.0	79.0	82.8	78.7	82.7	78.6	82.6
NI	78.7	82.4	78.8	82.6	78.7	82.4	78.5	82.3	78.4	82.3
England	79.5	83.1	79.6	83.3	79.2	83.1	79.0	82.9	78.8	82.8
Wales	78.2	82.2	78.3	82.2	78.1	81.9	78.0	81.9	77.9	81.8
Scotland	77.1	81.1	77.1	81.1	76.8	81.0	76.6	80.8	76.5	80.7

26. Life expectancy in NI is higher than in Scotland and Wales but lower than for England and whilst life expectancy has fallen in all four countries the larger decrease in England over the past four years means that the gap in life expectancy, for both men and women, between England and NI has narrowed.

27. Of particular relevance in respect of the pandemic, the consequence of the introduction NPIs and lockdowns was the estimated 25% greater mental health need in NI as compared to other parts of the UK. Research suggested that some of this relates to the legacy of is what is known as the "The Troubles" in NI.

28. On 29 November 2023, the Department published the "Health Survey (NI): First Results 2022/23" report. This Health Survey has run annually since 2010/11. The 2022/23 survey included questions relating to general health, mental health and wellbeing, smoking and drinking alcohol. The sample size for the survey was 3,582

individuals aged 16 and over and provides some statistical analysis of the underlying health of the population. The full report is available at https://www.health-ni.gov.uk/sites/default/files/publications/health/hsni-first-results-22-23.pdf [**MM2/3 INQ000425503** (DoH Ref: MMcB/0101)].

29. There was some impact of the coronavirus (Covid-19) pandemic on data collection and for the 2020/21, 2021/22 and 2022/23 years the Health Survey Northern Ireland moved from face-to-face interviewing to telephone mode which may have altered how some people responded to the survey. Details on the changes and potential impact can be found in the Notes section at the end of the press release. The key findings from the survey are outlined below:

- Long term Conditions

  - In 2022/23, almost three-quarters of respondents (72%) rated their general health as very good or good; very good or good self-assessed general health declined with age from 90% of 16–24-year-olds to 51% of those aged 75+.

  - Almost a third (31%) of respondents reported having a longstanding physical or mental health condition that reduces their ability to carry out day-to-day activities; this proportion has remained at a relatively similar level since 2015/16. This is in the context were consistently every year from 2013/14 approximately 40% of the population have reported a physical or mental health condition or illness which is expected to last 12 months or more.

- Mental Health

  - A fifth (20%) of respondents had a high GHQ12 score, which could indicate a mental health problem (The General Health Questionnaire (GHQ-12) is a self-administered questionnaire designed to detect persons that are symptomatic or at risk of developing the common, non-psychotic mental

health problems associated with depression, anxiety, somatic symptoms, and social dysfunction). This 20% figure was significantly lower than the 27% reported in 2020/21, however it is similar to 2021/22 (21%). Males (18%) were less likely than females (22%) to have a high GHQ12 score and respondents in the most deprived areas (28%) continue to be more likely to have a high GHQ12 score than those in the least deprived areas (17%). Of note when considering GHQ12 by age the proportion of those aged 35 to 74 scoring highly on the GHQ12 increased significantly between 2019/20 and 2020/21. While the proportion scoring highly on the GHQ12 returned to pre-pandemic levels for those aged 35 to 44, those aged 45 to 74 remained higher. The proportion of those aged 16 to 34 scoring highly on the GHQ12 decreased significantly between 2019/20 and 2022/23. Over this time, there was no significant change for those aged 75+.

- Around a third (32%) of respondents reported having concerns about their own mental health in the past year (15% definitely; 17% to some extent). This was lower than the findings in 2021/22 (35% overall: 15% definitely & 20% to some extent). Around three-quarters (73%) of respondents felt that their mental health had stayed the same over the last twelve months, while 14% thought that it had got better and 13% thought it had got worse. Females (14%) were more likely than males (11%) to say that they felt that their mental health had got worse. Younger respondents were more likely to report that they felt that their mental health had got better than older respondents. Almost a fifth (16%) of those living in the most deprived areas felt their own mental health had got worse in the last twelve months, compared with 10% of those living in the least deprived areas. A higher proportion of those living in urban areas (15%) than those living in rural areas (10%) felt their own mental health had got worse in the last twelve months.

- <u>Loneliness and Wellbeing</u>

- Around a fifth of respondents (19%) exhibited signs of loneliness by scoring highly on the UCLA loneliness scale- (The UCLA Loneliness Scale is a self-report questionnaire developed to measure feelings of loneliness and social isolation in adults). Respondents living in urban areas and those in the most deprived areas were more likely to exhibit signs of loneliness than those in rural areas and the least deprived areas respectively.

- In 2022/23 the proportion of respondents reporting very high levels of happiness (35%) and satisfaction with life (31%) and very low levels of anxiety (38%) were similar to findings in 2021/22. The proportion reporting very high levels of feeling the things they do in life are worthwhile (38%) increased from 34% in 2021/22. All these rates remain below pre-pandemic levels.

- <u>Smoking and Alcohol</u>

  - In 2022/23, 14% of respondents were current cigarette smokers; this is a decrease compared with the 2021/22 finding of 17%. Smoking prevalence has decreased from 24% in 2010/11. Around a quarter (24%) of those living in the most deprived areas smoke (down from 40% in 2010/11) compared with 7% of those living in the least deprived areas (down from 14% in 2010/11).

  - Around one in ten respondents (9%) reported that they currently use e-cigarettes or vaping devices (up from 7% in 2021/22). Males (10%) were more likely than females (8%) to report current use. Use decreased with age, ranging from 17% of those aged 16-34 to 1% of those aged 75 and over. Those living in the most deprived areas (13%) were around twice as likely to use e-cigarettes as those in the least deprived areas (7%). Similarly, those living in urban areas (11%) were more likely to use e-cigarettes than those living in rural areas (6%).

- Over three-quarters (77%) of respondents aged 18 and over reported that they drank alcohol. This was similar to 2021/22 (79%). A quarter of male respondents (25%) reported drinking above recommended weekly limits (14 units per week), while this was true for around a tenth of female respondents (9%). Male drinkers (16%) were more likely than female drinkers (10%) to report drinking on three or more days per week.

30. The latest survey figures from the respective UK health surveys for 2022/23[1] show that 31% of the NI adult population had a limiting long standing illness (LLSI). In comparison, Scotland and Wales had similar but higher proportions reporting a LLSI (37% and 36% respectively). England report acute sickness rather than LLSI in their Health Survey so are not directly comparable.

31. The health profile of the NI population described in the Bengoa report in 2016 which I have covered in more detail in paragraphs 61 to 70, has remained broadly consistent as reflected in data from the NI annual Health Survey. The Bengoa report stated:

- 1 in 5 people had a long-standing health condition;
- 60% of people were overweight (37%) or obese (23%);
- Almost one in five adults in Northern Ireland showed signs of a mental illness;
- 10.3% of the population claimed Disability Living Allowance; and
- The population was getting older.

32. Data from the 2011 Census showed that 20.7% the population had a limiting long standing illness. As the census is conducted only every ten years, no census data is available for 2019/20, the 2021 Census noted that almost 1 in 4 people (24.3%) had an illness or condition that limited their day-to-day activities. Figures based on the adult population only (16+) are available from the annual Health Survey NI and these have remained broadly unchanged since 2015/16 with around 40% reporting

[1] 2022 in Scotland

a long-standing illness and around 30% having an illness/condition that limited their day-to-day activities. This is survey data and is subject to sampling error and the questions to which survey participants responded are not identical to the questions posed in the 2011 census from which the 20.5% figure is derived.

33. The 2019/20 Health Survey NI found that 65% of people were either overweight (38%) or obese (27%). The equivalent survey results for 2015/16 found that 61% of people were either overweight (35%) or obese (27%). Again, this is survey data and subject to sampling error.

34. The health survey NI data shows that the proportion of the population indicating possible signs of mental illness in other words the proportion scoring highly on the GHQ-12 (remained fairly similar between 2015/16 (18%) and 2019/20 (19%).

35. The Personal Independence Payment[2] (PIP) was introduced in NI in June 2016 to replace the Disability Living Allowance[3] (DLA) for working age claimants. The process of moving working age claimants from DLA to PIP took place from June 2016 to November 2019. Data for 2019 taken from the Department for Communities' Professional Services Unit (PSU)[4] benefit data shows that the sum of DLA and PIP (11.5%) would appear to be the closest aligned comparison to the Bengoa report's figure (although this figure itself may not be wholly comparable).

36. The NI Statistics Research Agency publish annual mid-year population estimate data. The most recent publication dated June 2023 reported that "Over the decade from year ending mid-2011 to year ending mid-2021 the median age (i.e. the age at which half the population is older, and half is younger) of the Northern Ireland population has increased from 37.4 to 39.8 years. It is projected that from mid-

[2] NIDIRECT explains that the Personal Independence Payment can help with extra living costs if you have a long term physical or mental health condition or disability or if you have difficulty doing certain everyday tasks or getting around because of your condition.

[3] NIDIRECT explains that Disability Living Allowance is a tax free benefit for people with disabilities who need help with mobility or care costs

[4] PSU is the Professional Services Unit within the Department of Communities providing that Department with statistical and research services.

2027 onwards the older population (people aged 65 and over) will be larger than the number of children (i.e. people aged 0 to 15 years)."

The provision of health and social care services in NI and system reform

37. I have considered the state of the health and social care services in NI, how they compared with other parts of the UK and to what extent the absence of the Executive may have impacted on wider service reform and more generally how this may have impacted on the capacity and capability of health and social care services to respond to the pandemic and its consequences for health care provision. While the views expressed are my own from my experience as CMO they also reflect my previous experience working in the health service as a clinician, Trust Medical Director and Chief Executive. I am conscious that others may be better placed to provide more detailed informed comparative analysis and may have other equally valid views which many not necessarily accord with my own. However, I believe that my assessment of the state of the health system in NI provides important context when considering the comments made by the former FM, Baroness Foster in her statement to Module 1 of the Inquiry which I have considered and are quoted in paragraph 559 below.

Principle Challenges facing Health and Social Provision in January 2020

38. In January 2020, with respect to health and social care provision, NI had a health and social care system needing long overdue fundamental structural reform to meet the changing and increasing needs of the population. Without this reform it was and remains my professional view that it will not be possible to meet the needs of an ageing population who are living longer, which in itself is a considerable achievement and one to be celebrated, however ageing with more long-term conditions while ensuring that we all age well and continue to live well. Nor in my view will it be possible to ensure that children get the best start in life and grow and thrive achieving their maximum potential and fully realising their life opportunities. These challenges are not unique to NI.

39. While initial preparatory work on much needed wider system reform, including a number of services reviews such as those on cancer and neurology, had made good progress, these had yet to be implemented. Consequently, the health service in January 2020 was increasingly unable to meet the changing and increased health needs of the population we serve, with demands for care exceeding its ability to provide access to that care in a timely way with consequently unacceptable waiting times with too many people waiting in pain and distress. This was, in my view causing increasing concern and frustration and I believe moral distress among healthcare professionals, managers and senior leaders who were increasingly troubled at the impact on the population and their inability to respond to meet those needs.

40. Moreover, there was fundamental need to invest more in population health to address health inequalities and improve health and wellbeing life expectancy. This requires a fundamental shift with a greater focus on prevention, early intervention, and anticipatory care models. More investment in screening and diagnostic services and new treatments was also required. With the then and current financial constraints and funding model, with much of the existing resource locked into current service provision models and short term one-year budgets, the ability to make the shift and realignment needed to enable the necessary change and longer-term strategic planning was in my view significantly constrained. Put simply there was not the resource nor flexibility in the funding model to continue to fund existing services while redesigning and building new more appropriate service models.

41. In addition, the current structural model meant that too many services were fragmented and at risk of delivering suboptimal outcomes with inherent inefficiencies and loss in productivity with too few staff trying to provide services across too many sites for optimal outcomes. The financial challenges compounded significant workforce challenges with the Department not having sufficient recurrent resources to invest in the future workforce required. At the outset of the pandemic there were significant vacancies across all professional groups and an unsustainable reliance on locum and agency staff who were deployed at significant additional cost. In 2020, recent industrial action, concerns about staffing levels

and recognition and remuneration at that time had combined to eroded professional confidence that things would improve.

42. While this might appear a very somber assessment of the challenges and constraints one of the greatest assets that NI has is the commitment and dedication of those working at all levels across health and social care. In my view, were it not for their resilience and continued commitment and innovation, the situation in NI prior to the pandemic could have been even worse. In large part it was that commitment and dedication which sustained the pandemic response with those delivering health and social care often doing so at personal detriment, given the unrelenting nature of the demands and risk to themselves. In my view it is unquestionably the case that the challenges faced by all those working right across health and social care will only be addressed by fundamental change and redesign of health and social care and recurrent investment. This will require the support of the public, professionals, managers and leaders at all levels working with representative organisations to inform and support that change. These long overdue changes are primarily policy decisions for Ministers, as was indicated in Sir Liam Donaldson's review of health and social care in NI "The Right Time the Right Place" published in December 2014, on which I advised the then Health Minister: "*There are longstanding, structural elements of the Northern Ireland care system that fundamentally damage its quality and safety. The present configuration of health facilities serving rural and semi-rural populations in Northern Ireland is not fit for purpose and those who resist change or campaign for the status quo are perpetuating an ossified model of care that acts against the interests of patients and denies many 21st Century standards of care. Many acutely-ill patients in Northern Ireland do not get the same standard of care on a Sunday at 4 am as they would receive on a Wednesday at 4 pm and, therefore, a two-tier service is operating. It may be that local politics means that there is no hope of more modern care for future patients and if so this is a very sad position.*" (page 39, 5.2.1) [**MM2/4 INQ000425504** (DoH Ref: MMcB/0102].

System Fragilities

43. I have considered observations made by the Health Minister in April 2021 that "pre-existing fragilities in our system also undoubtedly hampered our response to the pandemic" [**MM2/5 INQ000148325**]. I cannot be entirely clear what the Health Minister was referring to, I surmise some of the potential factors he may have been considering and have sought to reflect these in my own observations.

44. Between 2017 and 2020 in general terms, in the absence of the Executive, the Department had very limited ability to take any long-term strategic decisions which was further compounded by the absence of a multi-year budget, which in turn inhibited longer term strategic planning due to uncertainties in relation to recurrent funding. While initial preparatory work on much needed wider system reform including several services reviews as described earlier had progressed, the changes required to deliver on the outcome of these reviews had yet to be implemented. Therefore, the health service was increasingly unable to meet the changing health needs of an ageing population in a timely way with demands exceeding its ability to meet those demands one example of this being the unacceptable waiting times as a consequence. Moreover, there was a fundamental need to invest more in population health, in prevention, early intervention and anticipatory care models, in diagnostic and new treatments, and the current financial constraints and funding model constrained this shift. Whilst policy and professional colleagues in social services and nursing would be better placed to make the comments, I believe that the same statements about lack of investment can be made in respect of adult social care, learning disability services, family support and children's services and community mental health services. While NI has an integrated health and social care system with health and social care provision the responsibility of health Trusts, many would argue that the full benefit of that integration has not been realised and that funding of social care services have for many years suffered because of the more visible profile of hospital waiting lists and delays at Emergency Departments.

45. During the pandemic there were significant efforts and work to expand capacity in the hospital sector and in social care partly based on surge plans which as head of the strategic cell I had asked to be developed. However, the limitations in wider system capacity meant that regrettably, the response to the pandemic, required

significant downturn in planned elective activity. This was further later compounded by infection prevention control (IPC) requirements to reduce the risks of Health Care Acquired Infections (HCAI) outbreaks in healthcare settings, and this impacted on a wide range of community, primary care and hospital services including screening services. For example, an area of particular concern was whether there would be sufficient healthcare capacity in terms of beds and in particular the availability of respiratory and ICU capacity to care for those requiring respiratory support and ventilation. During the first wave, acute hypoxaemic respiratory failure was almost universally seen in severely unwell patients with Covid-19 and initially there was an emphasis on early intubation. Experiences in Italy and China reported high mortality in patients requiring intubation and ventilation and highlighted the potential risk that ICU capacity might be exceeded. There was more limited ICU capacity in NI than in some other parts of the UK and Europe per head of the population. On 1 March 2020 there were 88 critical care beds in NI. There were a further 18 cardiac intensive care beds and 12 paediatric intensive care beds.

46. There were a number of system changes and challenges in the years prior to the pandemic. In November 2015, the decision was taken by the then Health Minister, Simon Hamilton to close the Health and Social Care Board (HSCB)[5]. This was confirmed by the then Health Minister Michelle O'Neill in October 2016 as part of the wider transformation agenda, with the intention of enhancing strategic system leadership, improving integration, and making the decision-making process more streamlined. In February 2020 the Health Minister, Robin Swann, endorsed the decision to migrate functions and staff from the HSCB by 31 March 2022.

47. During this time work was underway to close the HSCB which remained as a separate entity until its dissolution under the Health and Social Care Act 2022. The functions of HSCB were in the main transferred to the newly established Strategic Planning and Performance Group (SPPG) located within the Department with SPPG subsequently reporting directly to a Deputy Secretary within the Department, rather than as an ALB. Throughout this time and presently, although

[5] https://www.health-ni.gov.uk/news/hamilton-outlines-ambitious-vision-health-and-social-care-northern-ireland

SPPG now sits within the Department's structure, it has retained its responsibilities as a key member of the Health Silver tripartite structure and its role in the planning and commissioning of health and social services and performance management of those services remains largely unchanged. The transfer of responsibilities for the former HSCB to SPPG took place on 31 March 2022 and while I understand this proved to be relatively a straightforward transfer it did represent a major system change in the period leading up the pandemic and was associated with some turnover in staff.

48. In the just over three-year period prior to January 2020 (from October 2016) the vacant CEO post in the PHA had not been substantively filled following the retirement of the last incumbent. The then CEO of the HSCB was fulfilling the responsibilities of both roles with the additional support of two newly appointed although experienced Deputies, one in the PHA and one in the HSCB. The Department in discussion with the Chair of the PHA agreed the appointment of a CEO in the PHA by the secondment of an interim experienced CEO to the PHA at the outset of the pandemic.

49. I on behalf of the Department, Health Minister and Departmental Accounting Officer, acted as the senior Departmental sponsor to the PHA in the years prior to the pandemic and up until the end of 2023. This included ensuring the maintenance of effective relationships through regular engagement and formal sponsorship meetings ensuring the right balance between PHA operational independence and appropriate and proportionate oversight and governance [see Exhibits – MMcB6000, MMcB6001 and MMcB6002], I am therefore able to describe in more detail the position with the PHA in the period 2017 to 2020. More generally levels of PHA staffing and capacity, especially at senior level and public health consultant level, had been a concern to the Department since 2017, following the loss of experience due to the Voluntary Exit Scheme. These concerns had been raised by both the Department and PHA from 2017 in Sponsorship Review Meetings chaired by me, and in Accountability Meetings chaired by the Permanent Secretary. Further concerns regarding the PHA's capacity to fulfil its statutory duties were again raised by the Department in 2018, and assurance was sought from the PHA CEO at both the Sponsorship Review

Meeting of 20 November 2018 and the Mid-Year Accountability Meeting held on 12 December 2018 when I noted that it was vital to ensure resources were in place to effectively deal with any potential threat or event. Departmental colleagues advised of their concerns in early 2019, noting that the staffing situation in PHA had deteriorated in the Health Protection, Screening and Health Improvement teams as a result of staff leaving, long term sick leave and maternity leave. I directed the PHA to work with the Director from Population Health to develop a summary of the current position and a subsequent action plan for resolving the situation. I agreed that PHA Staffing would be a standing agenda item for future SRM (and Pre-SRM) meetings at the SRM held on 12/6/2019.

50. Both the Permanent Secretary and I expressed concerns and sought further assurance that the PHA could deliver its core functions effectively during a sustained time of crisis when we met the PHA at the End of Year Accountability meeting in August 2019. PHA staffing and capacity remained an issue of concern throughout the rest of 2019, with further work undertaken by the PHA to develop an action plan to reduce vacancies in Health protection and ensure staff competency available to progress the ongoing programme of medical specialty workforce reviews. The PHA developed an action plan to address concerns and was beginning to implement and deliver this plan prior to the start of the pandemic.

51. At the final Sponsorship Review Meeting of 2019, the then PHA CEO advised that the Agency were still concerned with the position regarding Health Protection staffing and advised that the focus of recent interviews had been on Health Protection posts, at that time there were 4 offers of employment with vacancies reduced to 3 from 8. PHA staffing was again added as the only substantive agenda item at the Mid-Year Accountability meeting, scheduled for 20 January 2020, due to continuing unresolved concerns arising from the preceding Sponsorship Review Meeting.

52. Although I am not in a position to provide the same level of detail with regard to the HSCB, I believe that the HSCB also suffered from a combination of the loss of experienced staff due to the Voluntary Exit Scheme and when trying to recruit staff will have suffered from the uncertainty arising from the publicly announced

decision to close the HSCB. The absence of the Executive and functioning Assembly meant that it was not possible to deliver on the Health Ministers decisions to close the HSCB, leaving the organisation and its staff to some extent in limbo although there were extensive efforts made by the HSCB and the Department to provide appropriate assurances.

53. The concerns about the resilience of both the PHA and HSCB were reflected in an email I received from one of my team [**MM2/6 INQ000425506** (DoH Ref: MMcB/0103)] on 3 February 2020 in which she said "*HSCB and PHA have less capacity and less resilience than in 2009. To my knowledge at most 2 senior people in HSCB and PHA were involved with swine flu and that was not a lead role. High level of interim appointments at director level (and below) with several more senior staff leaving in next 2 months. Arguably HSCNI also has less capacity and resilience.*"

Health Service Transformation and Resilience

54. I have considered evidence that the Health Minister gave to the Northern Ireland Assembly Health Committee on 5 November 2020 when he expressed the challenges of providing care for people with Covid-19, continuing to deliver elective planned services and at the same time transforming those service given "…*our health system has been underfunded and understaffed for the past 10 years. We cannot adapt or flex up, no matter how much I have wanted to...*"

55. It is my view that had implementation of extant policy and reform to health services been more advanced than was the case in January 2020 the health service in NI may possibly have been better able to respond more effectively to the pandemic and this may have also limited to some extent the significant negative impact on the ability to provide more elective health services during the pandemic and potentially would have reduced the extent and or duration of the downturn in planned elective care.

56. The expert panel report titled "Systems, Not Structures: Changing Health and Social Care" published on 25 October 2016 (Bengoa Report) [**MM2/7 INQ000191267**] highlighted the substantial health inequalities in NI and the impact on the operation of the Health and Social Care system and recommended a transformational reform of NI health services. In response, in 2016 the Department published 'Health and Wellbeing 2026: Delivering Together' [**MM2/8 INQ000185457**] setting out the Department's response to the recommendations included in the Bengoa Report and the steps to stabilise, reconfigure and to transform Health and Social Care services. While I can have no objective evidence of the counterfactual, a fundamentally transformed health and social care service in January 2020 as envisaged in these reports with a focus on improved population health and the wider health system would certainly not have been disadvantageous.

57. Because of delays in progressing necessary reform, as I indicated in my oral evidence to the Inquiry during Module 1 hearings, I believe that health and social care system and services in NI in January 2020 were less resilient than they were during the H1N1 pandemic in 2009. Again, I cannot objectively or evidentially cite the absence of significant reform of health services as negatively contributing to service provision during the pandemic. However, it is my professional view that had wider reform been implemented earlier, quite possibly services may have been more resilient with greater ability to flex and adapt.

58. That said, any health service reformed or otherwise, in my view, would have been challenged such were the extent of the unprecedented pressures required to respond to the pandemic. With respect to policy, I believe that much of the right policies were in place or being progressed, the challenge has been and remains the timely and effective implementation of policy. Some of these constraints are structural and organisational and others relate to a lack of securing political, public and professional support for the necessary change and reform of service and the funding challenges of annual budget cycles which makes effective planning to implement change challenging as well as the need for sufficient funding to support transformation. Given the many policy reviews of health and social care services in

NI over many years it is not policy and strategic plans, rather implementation which was been illusive and found lacking.

59. As indicated in my earlier M2C-CMO-01 statement, at paragraph 78, in the three years up to January 2020, when NI was without the Executive, the Department's officials had undertaken significant initial work to progress new models of service delivery working with colleagues in the HSCB, PHA and wider HSC. During this time, I was the Senior Responsible Officer (SRO) working closely with the Deputy Secretary of Health Care Policy Group and his team. This initial work included, for example, plans for the establishment of day elective centres. Some of these models were already established and helped mitigate to some extent the adverse consequences of the pandemic on access to elective and diagnostic services and undoubtedly was of assistance in the development of green/non-Covid-19 sites. It is not certain whether this work specifically would have been further advanced, or whether the Department more generally would have been better prepared to respond to the consequences and additional pressures of Covid-19 if Ministers had been in place between January 2017 and January 2020. I am unaware of any objective analysis to determine the impact on our pandemic response caused by the absence of the Executive.

60. If the Executive had been in place during the 3 years between 2017-2020, it is possible that a greater degree of health transformation would have taken place, in keeping with the recommendations of the Bengoa and Delivering Together Report, and that the Health Service might possibly have been better placed to continue with core work, both before, during and after the pandemic and possibly to have recovered health services more quickly afterwards.

Implementation of System, Not Structures: Changing Health and Social Care (Bengoa Report)

61. While there had been progress to address some of these enduring challenges in health and social care provision it was against this background that the report titled "Systems, Not Structures: Changing Health and Social Care" was published on 25 October 2016 (Bengoa Report) [**MM2/7 INQ000191267**]. This report highlighted

the substantial health inequalities in NI and the impact on the operation of the Health and Social Care system and recommended a transformational reform of NI health services.

62. Health and Wellbeing 2026: Delivering Together sets out the Department's response to the recommendations included in the Bengoa Report.

63. Since the launch of 'Delivering Together 'in October 2016, three reports on the progress of the ring-fenced transformation funding projects have been published in 2017, 2019 and 2021. These reports are available at: https://www.health-ni.gov.uk/articles/progressreportintroduction. The evidence contained within these three progress reports, particularly the most recent report, confirms that this programme of activity continues to deliver on the requirements to stabilise, reconfigure and improve our health and social care services.

64. While I had, prior to the pandemic, acted as Senior Responsible Officer for the reconfiguration of health services and several service reviews, it was simply not possible for me to maintain responsibility for this programme of work, respond to the demands of the pandemic response, and now respond and to support the Covid-19 Inquiry. Therefore, the responsibility for this programme of work transferred to the respective heads of Health Care Policy Group (HPG) and the Strategic Performance and Planning Group (SPPG) within the Department.

65. The Department has for example also published strategies for mental health, elective care and cancer services and has moved to the implementation stage of the review for urgent and emergency care, following on from a consultation earlier this year. In addition, the Department has progressed a review of Pathology Services and an Imaging Services Review and is in the process of implementing an integrated health and social care record systems across the health service and a new Laboratory Information System (LIMS).

66. Together, with Health and Wellbeing 2026, these strategies articulate a trajectory aimed towards delivering on the recommendations of the Bengoa report in NI. Delivering this agenda will require sustained recurrent funding and public and

professional support for the change required and political decisions to fully implement.

67. In October 2020, the Health Minister approved a programme of work on the development of an Integrated Care System (ICS) model in NI. Work is currently underway by SPPG to develop and implement the ICS model. It is intended that the ICS will provide the future framework for commissioning health and social care services based on collaboration and partnership at both area level (Area Integrated Partnership Boards) and regionally (Regional Integrated Care System Partnership Forum). This will see key stakeholders from Health and Social Care come together with representatives from local Councils, the Voluntary and Community Sector, and service users and carers to identify, understand and consider the needs of the population. The groups will focus on key areas of priority, identifying the collective assets and resources available and considering how they can be used to deliver improved outcomes for that population.

68. In practice, the absence of the Executive did have an impact generally on new policy and legislation being developed. This was particularly the case when such policy or legislation was cross-cutting and or potentially controversial. The extent of the exercise of functions by the Department in the absence of Ministers from 2017 to 2020 was limited by relevant Court judgements and by the provisions of the Northern Ireland (Executive Formation and Exercise of Functions (EFEF)) Act 2018. It is not immediately clear to me whether the enduring problems in the Health Service in NI would have been addressed and or more progress could have made with structural and service reform with the Executive in place. Nor do I know of any objective assessment as to whether having a Minister and Executive in place would have necessarily resulted in an agreed programme of reform given the challenges in securing agreement to progress such reform previously despite reviews such as "Transforming Your Care;" and "Right Time, Right Place;" ["Transforming Your Care" [**MM2/9 INQ000425508** (DoH Ref: MMcB/0104)] and "Right Time, Right Place;" [see **MM2/4 INQ000425504** (DoH Ref: MMcB/0102)]. Others may be better placed to comment and provide an informed view. However,

it is clear that the absence of Ministers did mean there was no means of securing a political consensus about necessary and in my view long overdue HSC Reform.

69. The Bengoa Report [**MM2/10 INQ000185456]** and the Delivering Together report [**MM2/8 INQ000185457**], published in 2016, just before the three-year absence of the Executive, were produced against a backdrop of rising demand for health and social care services, and an associated deepening shortfall in Health and Social Care actual capacity to meet these demands and too many people in NI having to wait too long for treatment. Therefore, waiting times in NI had become by far the worst in any region of the United Kingdom and this remained the case at the start of the pandemic. The recommendations and actions within these reports included a renewed focus on population health, reconfiguration, and workforce.

70. In the absence of Ministers and the Executive between 2017 and 2020, the Department did undertake significant preparatory work prior to the Covid-19 pandemic to review high priority services identified in Delivering Together and to progress plans for wider health service reform in order to develop policy proposals for consideration by an incoming Health Minister at a point in the future. While this work involved comprehensive reviews and public consultations in a range of key areas including stroke, breast assessment, unscheduled care, elective surgery and pathology services, this stopped short of final policy decisions and therefore implementation in the absence of local political structures. That said it would have taken time for the necessary initial preparatory work to be undertaken in advance of any decisions by Ministers. It is likely such reform and transformation would also have required significant recurrent investment and in addition the reallocation of existing resource although these are matters are out with my professional expertise. Some of the work, underway before the pandemic in which I played a significant role, included plans for the development of elective care centres. In response to the urgent need to protect elective capacity during the pandemic, these plans were expedited with the announcement of a regional day procedure centre at Lagan Valley Hospital in July 2020. Over the course of the pandemic the Day Procedure Centre at Lagan Valley Hospital provided support for the region across a range of specialties for priority and urgent cases, in response to the downturn in elective across the Trusts.

Restoration of the Executive

Briefing the Health Minister on challenges in health and social care.

71. When I first was appointed CMO in September 2006, NI was under direct rule. Over the subsequent period the Executive was formed in May 2007. There were then periods when the Executive did not meet due to various disagreements between political parties in the years before the Institutions 'collapsed' again between January 2017 and January 2020. There was also no Executive for two years, after the First Minister resigned in February 2022. The Executive was recently formed again on 3 February 2024. The restoration of the Executive on 11 January 2020 involved the appointment of a new Health Minister, just before the start of the Covid-19 pandemic. This restoration followed a hiatus of three years when the Department had operated without a Minister. In my view it was undoubtedly critical to have Ministers and the Executive in place at the start of the pandemic to provide visible leadership and to make policy decisions and progress relevant legislation which has such profound consequences for the population.

72. I have considered from my professional perspective as to whether the reestablishment of the Executive and the appointment of new Ministers had an impact on the quality of decision making. While out with my professional competence and knowledge, in my personal view the fact that the institutions had just been reestablished and the Executive had just been reformed were not ideal circumstances given the level of uncertainty and challenges that the Executive and Ministers faced in respect of decision making. I have however given some examples of early briefing to the new Health Minister and communication and engagement with other Executive Ministers with respect to the pandemic which are illustrative of the working arrangements at that time.

73. As part of their introduction to a Department, once appointed as Minister, Ministers will receive a 'First Day Brief' prepared by officials in their Department. First Day Briefs are intended to give a new Minister a first look at the structure and role of the Department and the immediate issues it is facing. The First Day Brief is not

intended to provide a new Minister with chapter and verse on every aspect of health and social care and every issue facing the Department and nor does it normally include requests for the Minister to make any immediate decisions. More detailed briefing and requests for decisions would normally subsequently be included in submissions to the Minister from individual business areas. What also normally happens is that over the course of their first days in office the Minister will meet with the most senior officials in the Department. My first meeting with the Health Minister, according to my diary was on Wednesday 15 January at 2pm. While I have no written record and I cannot now recall, it is likely that I would have advised the Health Minister that there was an emerging issue in Wuhan in China. However, based on our level of knowledge at the time this would have been a very limited exchange, and it would have been alongside a list of other ongoing work within CMOG.

74. Prior to this meeting the Health Minister would have received the First Day Brief. Two paragraphs were included regarding emergency planning in the section of the First Day Brief [**MM2/11 INQ000425509** (DoH Ref: MMcB/0105)], provided to Minister Swann, which dealt only with 'the role of the Department' in emergency planning. No specific content was included regarding Wuhan/China.

75. This was still the very early days of what two months later the World Health Organisation declared to be a pandemic. When the Executive was reformed in January 2020 arguably the most immediate and pressing issue facing the Health Minister was the need to resolve ongoing industrial action in the health service given the impact on patient services despite mitigations agreed with the trade union representatives. Industrial Action commenced in late November 2019 and included a range of measures, from refusal to cover breaks or absent colleagues to 24 hour strike action. Such measures, in the face of the usual winter pressures experienced annually in HSC, inevitably led to delayed interventions for patients and cancelled appointments and procedures. Resolution of industrial action was a

clear priority for the restored Executive, and was highlighted in the New Decade, New Approach document.

76. In the days after 15 January 2020 things began to move quickly and a first 'Precautionary' meeting of SAGE was arranged for 22 January. On the evening of Monday 20 January, I asked my team [**MM2/12 INQ000425510** (DoH Ref: MMcB/0106)] to prepare a submission to the Health Minister which was issued to the Private Office [**MM2/13 INQ000103626** (DoH Ref: MMcB/0107)] for the Health Minister's attention early on 22 January 2020. As is reflected in this submission a number of actions were already being taken in the background over this period, much of it led by the Public Health Agency in NI and by Public Health England (PHE). The content of this submission and of subsequent submissions and Executive papers prepared by the CMOG team, during the course of the pandemic, would have been routinely approved by a DCMO or the Director of Public Health and then agreed and cleared by myself prior to being forwarded to the Private Office for the Health Minister's consideration.

77. The Department of Health and Social Care in England had convened daily 4-nation teleconferences which officials within CMOG were dialling into, while the Public Health Agency had organised a regional teleconference involving the HSC Trusts to discuss preparation for dealing with suspected cases in NI. There were also a number of subgroups on communications and on virology which the PHA were taking part in and the PHA were working with PHE on producing guidance for Primary Care which would be issued in due course. At this time the PHA were also working to ensure that extant protocols for the assessment, management and potential transfer of patients suspected of having a High Consequence Infectious Disease (HCID) were updated as appropriate and disseminated to the relevant Health and Social Care professionals.

78. At this stage, based on what was known, this was consistent with the emergency response playing out as it was expected to do in light of what was known at the time. In line with this, on 22 January the PHA wrote to me [**MM2/14 INQ000425514** (DoH Ref: MMcB/0108)] to advise me that they had established HSC Silver to co-ordinate the response to what was then known as the Wuhan

coronavirus. This is something which I would have normally explained to the Health Minister when briefing him the following day, and to the best of my recollection, I believe that I did brief him in this regard. From this point I was in regular contact with the Health Minister advising him of the latest developments on a daily basis, often several times in the same day. The following week, on Monday 27 January the Emergency Operations Centre was stood up in the Department and on Wednesday 29 January the Health Minister provided a written statement to the Assembly updating MLAs on the latest position. On 3 February the Health Minister provided an update [**MM2/15 INQ000425586** (DoH Ref: McB/0109)] to Executive Ministers at the meeting that day. The Health Minister had initially received the submission for this meeting on 1 February, however it was updated for 3 February to ensure it included the most up-to-date figures.

The Executive Formation

79. Prior to the WHO announcing that the outbreak of novel coronavirus was a Public Health Emergency of International concern on the 30 January 2020 there had only been two Executive meetings.

80. However, my observation is that the Executive from early in the pandemic sought to work collectively in the best interests of the population of NI keeping with the agreed strategic approach in The Coronavirus Action Plan of 3 March 2020 [**MM2/16 INQ000057508**] that had been agreed to insofar as possible to take steps to prevent severe disease, excess deaths and to prevent the health service being overwhelmed. Later in the pandemic balancing the health, economic and societal consequences became more challenging given the recognised adverse consequences of the pandemic and in particular the NPIs that were then needed to reduce community transmission.

81. I have no objective evidence that the formation of the Executive and the appointment of new Ministers in the period prior to the publication of this plan, materially impacted on the early pandemic response or the quality of decision making. It is my firm view that having the Executive established and Ministers in post prior to the outset of the pandemic was extremely advantageous given the major decisions required and the profound impact of those decisions across society in NI. I also believe that having the Executive in place at the outset of the pandemic ensured a much more informed and appropriate approach which was cognisant of the progression of the pandemic in NI and the particular circumstances in NI culturally and geographically. It is my view, given the importance of public trust and confidence and the fact that the decisions required during the pandemic impacted so fundamentally on lives and livelihoods, there was significant benefit in these decisions being seen to be taken by the Executive with the visible leadership of NI Ministers.

82. It is of course factually the case that Ministers were relatively new to their respective roles and responsibilities and would not immediately have been or could not have been fully briefed on all aspects of their respective policy responsibilities. As would normally be the case, new Ministers would have been in the process of introductory meetings with their respective professional and policy advisors in their first weeks in office as part of the process of becoming familiar with their Department, and if they had not previously been appointed as a Minister, the role of a Minister and the functioning of the Executive.

83. In the first six weeks of the Executive and Assembly being restored a substantial amount of information was being shared with Ministers and MLAs and officials about the emerging threat of the pandemic to the UK and NI. All of this was unprecedented in the modern era, and I believe that it was the challenge of getting to grips with the enormity of what was happening rather than there being newly restored institutions and a new Minister which had the greatest impact. I believe that it also took a while for there to be a full understanding that this was not just a Health issue. I believe that the same statement could be said of many officials

across other Departments in terms of recognising fully the potential implications of the pandemic in their respective policy responsibilities. The briefings provided to officials from across Departments at events organised by The Executive Office (TEO) in February and early March will undoubtedly have helped ensure that those officials had a full understanding of the potential implications of Covid-19 for NI. However, in those first months after the institutions were restored I personally cannot recall any instance were the Executive and Ministers failed to make decisions or in any way impeded or delayed or failed to support decisions made by the Health Minister, the Department and the HSC in response to the pandemic or to ultimately agree and support recommendations made by the Health Minister or by the First Minister ("FM") and deputy First Minister ("dFM") on the response to the pandemic. Officials in TEO and the Department of Justice in particular were in close communication with the Department and were linked into what was happening at COBR (M) as well as attending meetings of COBR (O) from early February onwards.

84. During February 2020 the Health Minister had the benefit of multiple daily briefings from his officials and professional advisers including myself and my team in his capacity as Health Minister. He also attended multiple meetings including COBR (M) which was initially at the request of TEO [**MM2/17 INQ000425516** (DoH Ref: MMcB/0110)]. I believe that as a result the Health Minister became quickly immersed in and well informed about the detail of what was happening in the UK and here with regards to the pandemic. The Health Minister made considerable efforts to keep MLAs and Executive Ministers well informed about the pandemic and the Department's response. In addition to making urgent written statements to the Assembly on 24 January 2020, 29 January 2020, 3 February 2020 and 28 February, the Health Minister made an urgent Oral statement to the Assembly on 2 March 2020. The Health Minister also provided verbal updates to the Executive at its meetings on 3 February [see **MM2/15 INQ000425586** (DoH Ref: MMcB/0109)], 10 February [**MM/18 INQ000425551** (DoH Ref: MMcB/0111)], 17 February [**MM2/19 INQ000425517** (DoH Ref: MMcB/0112)] and 24 February [**MM2/20 INQ000425518** (DoH Ref: MMcB/0113)] based on submissions which included background information, speaking points and Lines to Take. These briefings along with a

number of Executive papers tabled by the Department but mainly by TEO continued throughout March 2020.

85. The FM and dFM had requested that the Health Minister and I provide an update to the Executive meeting on 2 March. This was the same day as the Health Minister made an Urgent Oral statement to the Assembly [**MM2/42 INQ000425519** (DoH Ref: McB/0114)] and the day before the UK Covid-19 action plan was published. I had not been invited to attend the Executive meetings which took place in February 2020. From my personal perspective the 2 March 2020 meeting was the meeting at which the Executive held its first substantive discussion about Covid-19. At the meeting I provided an update which in effect outlined the potential impacts and observed that the Executive *"...need to plan and prepare for all eventualities."* [**MM2/21 INQ000065694**]. Whilst this handwritten note does not fully or adequately represent the update provided and I have not previously seen or approved it, my reference to the "need to plan and prepare for all eventualities" was to impress upon Ministers the scale of what potentially lay ahead and to impress upon them the need to plan and prepare across all of government given what I anticipated the imminent challenges would be notwithstanding the uncertainties at that time. The submission provided to the Health Minister prior to the Executive meeting on 10 February 2020 contained exactly the same speaking point about the need to "prepare for all eventualities" as part of his briefing to Executive colleagues. The speaking points included in the Health Minister's briefing for the Executive meeting on 17 February 2020 included the following point for the Health Minister to make to Executive Ministers: "*It was clear that if we have sustained transmission and spread and a global pandemic that the impact will be felt across all of government all sectors and wider society*."

86. From early February 2020 I am aware that COBR papers were being directly copied to TEO, along with readouts/action points from meetings of COBR (M) and COBR (O) during this time period, although it was only the Health Minister who was attending COBR (M) Meetings until early March. TEO officials were also attending COBR (O) and receiving papers from those meetings. I am also aware that at some of the COBR (M) meetings the Health Minister was supported by officials from other Departments, specifically the Department of Justice. I also

understand that TEO officials were providing their own submissions to FM and dFM, at least one of which was side copied to the Department [**MM2/22 INQ000425520** (DoH Ref: MMcB/0115)] dated 29 January 2020.

87. The statements and briefings by the Health Minister represented only the tip of the iceberg in terms of the work being progressed by officials and professional staff across the Department and the HSC during the period from mid-January onwards. In addition, there was ongoing direct communication not all of which may be recorded such was the pace of events. For example, I was in daily contact with the Health Minister keeping him informed of a wide variety of matters and ongoing work connected to the response to Covid-19. Whilst some of this work required Ministerial approvals, for example on provisions in proposed UK legislation which the Health Minister asked the FM and dFM to agree as an urgent decision on 15 February 2020 [**MM2/23 INQ000425523 MM2/23a INQ000425524 MM2/23b INQ000391055 MM2/23c INQ000425526** (DoH Ref: MMcB/0116)], given the sheer volume and speed of response required it was simply not practical or possible to include all the information about work being progressed in written updates and briefings given other demands at that time. Staff from the Department, HSC and PHA were dialling in on a daily basis to various meetings with colleagues across the UK. Such was the sheer pace at which events were unfolding that from 24 January 2020 my team developed a 'rolling brief' [**MM2/24 INQ000425530** (DoH Ref: MMcB/0117)] which was continuously updated so that I could have access at any point in time to inform my attendance at the latest meeting. Between 24 January and 4 April 2020 this document was updated over 150 times. This rolling brief was also shared with colleagues for use at meetings which they were attending for example with the Permanent Secretary for a meeting with the Civil Contingencies Group (CCG) at the end of March 2020 [**MM2/25 INQ000425530 MM2/25a INQ000425532** (DoH Ref: MMcB/0118)]. From a Departmental and the wider Health and Social Care system's perspective, there was a high level of urgency and activity and ongoing preparations.

88. Even as the situation and potential extent of the impact of the pandemic was being described to Ministers in briefings, statements from the Health Minister and in the extensive media coverage, I cannot be sure, nor do I believe that I can comment

on whether or not the potential consequences were fully understood by other Ministers and other Departments. As previously indicated in my M2C-CMO-01 in my view there remained to some extent in the early period a perception that this was a "health issue" that would only or primarily impact on the health service.

89. Whilst TEO officials were directly involved in COBR meetings from early February onwards the Department also provided briefings and information in other fora. The Permanent Secretary briefed the Permanent Secretaries Group on 7 February [**MM2/26 INQ000425534** (DoH Ref: MMcB/0119)] when he advised PSG that:

- Urgent consideration is needed across Executive Departments on sector resilience in the face of a growing threat from novel coronavirus. The number of cases reported worldwide is growing daily with the potential to spread and cause economy-wide impacts, as is currently being seen in China.

- I anticipate that the demand for information, guidance and co-ordination is highly likely to increase significantly in coming weeks. This raises issues around both sector resilience and wider strategic coordination across civil contingencies arrangements.

- I do not consider it necessary to activate NI Central Crisis Management Arrangements (NICCMA) at this time, however, this is an evolving situation and preparedness across NI is critical.

- Departments will need to review business continuity arrangements to assess resilience preparedness, capacity and capabilities to assess the likely impact on the delivery of essential services.

- It may be prudent for TEO to consider "convening a multi-agency meeting to assess sector resilience and preparedness.

90. The Permanent Secretary provided a further briefing to PSG on 21 February [**MM2/27 INQ000425535** (DoH Ref: MMcB/0120)] when he advised PSG that:

- Urgent consideration is needed across Departments on sector resilience in the face of a growing threat from Covid-19. The number of cases reported worldwide is still growing daily, with the potential to spread and cause economy-wide impacts, as is currently being seen in China.

- Demand for information, guidance and co-ordination is highly likely to increase significantly in coming weeks. This raises issues around both sector resilience and wider strategic coordination across civil contingencies arrangements.

- It is not necessary to activate NI Central Crisis Management Arrangements (NICCMA) at this time; however, this is an evolving situation and preparedness across NI is critical.

91. On 20 February 2020 one of the Department's DCMOs gave a presentation [**MM2/28 INQ000425536** (DoH Ref: MMcB/0121)] to an event organized by the Civil Contingencies Group (CCG) to which multiple officials from across all Departments were invited. Action points from the meeting recorded by CCG [**MM2/29 INQ000272860** (DoH Ref: MMcB/0122)] under the heading 'Readiness' included a priority that "All organisation to review business continuity plans in light of reasonable worst-case parameters (RWCS)". The Reasonable Worst-Case Scenario presented at this meeting by the DCMO included the following:

- Departments should consider pandemic influenza planning as a starting point to rapidly advance planning for the reasonable worst-case scenario for Covid-19

- The elderly and those with existing health conditions will be disproportionately affected

- These planning assumptions predict excess deaths, massive impacts across government, school closures, rail and road transport issues, and huge costs.

- Case Fatality Rate 1% to 3%

- Reproduction Number 2-3

- Potentially 40%-50% of the population affected

- Absence Rates 10%-20%

92. On 6 March the same DCMO gave a further updated presentation [**MM2/30 INQ000425538 MM2/30a INQ000425539** (DoH Ref: MMcB/0123)] at a TEO Covid-19 event organised for officials from across Departments at which he reiterated the same points, updated the current position in the UK and worldwide and included the SAGE RWCS estimate of 80% of the population being infected and 1% of the infected dying.

93. For further context at this time COBR(Ministerial) (6) Covid-19 – Briefing 2 March, 10:30-11:30 "*As of the 1 March 2020, UKG data shows that 36 cases have been confirmed in the UK, (33 from England, 1 from Northern Ireland, 1 from Scotland and 1 from Wales). Of those 36 cases 21 remain in the care of the NHS and 15 have been discharged from hospital following two consecutive negative results*." [**MM2/31 INQ000091300**]. On the same day the Minister made an oral statement to the Assembly [**MM2/32 INQ000103645]** DoH Ref: PM0042] in which he outlined the immediate steps which had been taken in response to this first positive case in Northern Ireland, including that the individual who had tested positive was "receiving appropriate specialist health care in keeping with expert advice and agreed procedures" and that "contact tracing of those who had come into close contact with the individual since their return from Italy was immediately undertaken by Public Health Agency personnel and that this had been completed on the 28 February and those requiring appropriate advice have been provided with it." The

Health Minister also provided a wider update on steps being taken and highlighted the publication on the same day of the UK Coronavirus Action Plan.

94. At the Executive meeting held on the 10 March 2020, prior to the COBR(M) meeting on the 12 March 2020 where the decision was made to move from the Contain phase to the Delay phase, in my view, there was a growing realisation at the Executive itself of the extent to which the response to Covid-19 was going to have to be more than a health response and that all Ministers and Departments would have a significant role. I believe this is reflected in comments made by the FM in respect of the wider civil contingencies' framework and the dFM in respect of a cross government approach at the Executive meeting on the 10 March [**MM2/33 INQ000065695**]. The briefing provided to the Health Minister on 10 March [**MM2/34 INQ000425540** (DoH Ref: MMcB/0124)] included the updated SAGE Reasonable Worst-Case Scenario that 80% of the UK population would become infected and 1% would die. The Health Minister would already have been aware of this Reasonable Worst-Case Scenario from a paper which was circulated to COBR(M) on 2 March 2020 [**MM22/35 INQ000425541** (DoH Ref: MMcB/0125)]. The same COBR (M) paper had been circulated to TEO Private Office, TEO officials and officials in NI Departments including the Department, Justice, Economy, DAERA, Infrastructure, Education and Finance. As with previous submissions to the Health Minister, prepared for Executive meetings, the briefing for the 10 March 2020 meeting reported that the Cabinet Office was working to the 2019 National Security Risk Assessment pandemic flu planning assumption as the Reasonable Worst-Case Scenario (RWCS). This assumed that the first wave of the pandemic will last approximately 15 weeks with over 50% of the population falling ill and up to 20% off work during the peak weeks. SAGE papers on planning assumptions for the UK Reasonable Worst-Case Scenario up to the end of March noted that "SAGE (Scientific Advisory Group for Emergencies) only provides scientific advice to Government it does not decide what scenario Government should be planning for. The Cabinet Office, Civil Contingencies Secretariat, will advise HMG when they should work to revised planning assumptions."

95. The broadening of understanding that the pandemic was not solely a health issue was reflected in a paper tabled to the Executive by the FM and dFM on 16 March

[**MM2/36** **INQ000023226** **MM2/36a** **INQ000137343** (DoH Ref: MMcB/0126)] summarising the non-health related impacts of the pandemic reflecting inputs from across Departments.

Cross Government Preparedness and Readiness and Awareness

Impact of EU Exit Preparations on Pandemic Preparedness

96. During my preparation for Module 1 public hearings, I became aware of an internal document from The Executive Office dated 20 January 2020 [**MM2/37 INQ000092712**] which stated that "EU exit preparations meant that Northern Ireland was "…more than 18 months behind the rest of the UK in terms of ensuring sector resilience to any pandemic flu outbreak." Having reviewed and considered this document and the context in which it was produced I consider that this comment refers to non-health sector resilience. I understand that this statement related to cross-departmental planning on sector resilience outside of health, a workstream of the UK Pandemic Flu Readiness Board for which TEO had lead responsibility in NI. TEO reported a lack of progress on this workstream, due to the pressures of EU Exit work, to the CCG(NI) Pandemic Flu Subgroup on 24 June 2019. I can only comment on the factual position and then only from a health perspective.

97. Given my previous experience, pandemic preparation was at times viewed as a "health issue" and there was potentially not always a full understanding or acceptance of the potential implications across society and government of a major pandemic. I believe in general this explains why other Departments could have perhaps been better prepared at the outset of the pandemic in January 2020 but understandably they had other significant competing priorities and finite resources available. That is not to say the Department could not have been better prepared and there is significant learning for all of government including the Department in this respect. I do also believe that in part this lower level of preparation by other Departments may explain why there was such a reliance on the Department to assist other Departments in their response during the pandemic. Equally I believe there was not a full appreciation across NI Departments and Executive of the scale

of the response required by the Department to manage the health consequences and at times my sense was that other Departments did not fully understand why the Department was limited in the support it could provide to other Departments.

98. I believe that the internal TEO document dated 20 January 2020 correctly acknowledges that time and resources had been reprioritised in preparation for European Union exit rather than pandemic preparedness. Given the attendant risks to NI prior to the end of January 2020 and the resources available, an unplanned and unmanaged EU Exit did pose a greater immediate risk. However, it is my view that no amount of pre pandemic preparation and planning would have ensured that any department was fully prepared for the extraordinary and unprecedented demands and complexities of the Covid-19 pandemic and the opportunity costs of such preparation and planning on this scale would have been extremely high, given that such preparations are extremely resource intensive and would inevitably come at the expense of other important policy work. Ultimately the prioritisation of such work and the resource requirements remain decisions for Ministers. That is why in my view it is crucial that the learning is identified and implemented while the profound impacts of the pandemic are to the forefront in the minds of all, as there will always be other more immediate and pressing challenges to be addressed by government.

99. Preparations for EU Exit did take the Department's focus away from pandemic preparedness planning and work on the Pandemic Flu Readiness Board (PFRB) programme was paused between November 2018 and November 2019. The Programme Board met for the final time in January 2020, after which the Covid-19 pandemic response then took priority. The PFRB did not meet during the Covid-19 response phase. Work of the CCG(NI) Pandemic Flu Sub-group was similarly paused with the group meeting for the last time in October 2020.

100. Some elements of EU Exit preparations did however create additional public health and system resilience such as improved emergency response capability because of training and exercising of staff across the Department as part of Yellowhammer preparations. As I have covered in more detail below, in my view this generic emergency response preparation placed the Department in a stronger position to

activate the ERP, and to set up and staff the EOC in the early stages of the Covid-19 pandemic.

101. Although most of the required actions had been completed by the end of the 2018/19 financial year, it was noted that a diversion of resources to EU Exit work had created a delay in progress on the draft Pandemic Flu Bill.

102. In March 2018, I had established a NI Pandemic Flu Oversight Group (NIPFOG) (with representation from the Department, HSCB and PHA) to oversee development of HSC Influenza Pandemic Surge Guidance. Further to this, in November 2018, PHA and HSCB had established a Task and Finish Group to develop updated Northern Ireland pandemic flu guidance. The output of that work was the Northern Ireland Health and Social Care Influenza Pandemic Surge Guidance, which was submitted to the Department's Emergency Planning Branch (EPB) in draft form on 1 July 2019. I understand it was determined by EPB that further work was required on this guidance, however this was paused as capacity was redirected to preparation for a potential "no deal" EU Exit throughout the remainder of 2019.

103. Whilst the preparations across the UK for EU Exit did divert some of our focus away from pandemic preparedness planning during the pre-Exit period, many aspects of preparation for the consequences of a potential "no deal" EU Exit were, nevertheless, advantageous from an emergency preparedness perspective. This included the additional training undertaken on emergency planning and response within the Department; enhanced multi-agency command and control training across all NI Government Departments and multi-agency responders; development of a list of Departmental Emergency Operations Centre volunteers, expanding the group of individuals available to mount an emergency response; improvements in the resilience of supply chains; and increased buffer stocks and stockpiles for medicines, medical devices and clinical consumables. As the UK prepared for EU Exit these arrangements were also exercised, including in conjunction with UK colleagues as part of the Operation Yellowhammer preparations. Operation Yellowhammer resulted in increased engagement between the Department, UKG and the Devolved Administrations (DAs). At the

start of 2019, it was recognised as a success in planning for a serious and high impact emergency. Yellowhammer had also prompted an increase in training, information sharing, preparation of contingency plans and correspondence, enhancing collaboration in NI and with the rest of the UK. In my view the relationships created through Yellowhammer were invaluable to future emergency planning, as was the opportunity to test and clarify processes and the cohort of trained staff who stepped in to assist the response to the emergence of Covid-19.

104. Work on pandemic preparedness has now resumed on a four-nations basis, the PFRB was replaced with the Pandemic Disease Capabilities Board (PDCB) which met for the first time in July 2021. An NI PDCB sub-group, jointly chaired by the Department and TEO, was established shortly thereafter. Late in 2022, a new Emergency Preparedness, Resilience and Response Directorate was established within CMOG to lead strategic and policy work in this area within the Department working with a wide range of stakeholders to ensure that effective response arrangements are in place at a local, UK and international level.

105. From disclosures to the Inquiry, I have become aware that on the 25 February 2020 a paper was sent to The Executive Office (TEO) Board in relation to "a strategic review of civil contingency arrangements across Northern Ireland" stating that "the Executive and wider society may not be prepared for, or have the capacity and capability to deal effectively with, an emergency situation should a major contingency present" [**MM2/38 INQ000205712**]. Unfortunately, I was not aware of this paper at the time.

106. Given the timeframe while I am not able to provide an informed view it is possible that this assessment or its prioritisation was commissioned by TEO in response to one or all of; the correspondence sent to TEO on the 6 February from the Department to highlight the need for TEO, and Civil Contingencies Policy Branch (CCPB) to urgently consider sector resilience in the face of a growing threat from novel coronavirus; the Permanent Secretary's briefing to PSG on 7 February; and/or the presentation to CCG by one of the Department's DCMO's on 20 February 2020 [see exhibit **MM2/28 INQ000425536** (DoH Ref: MMcB/0121]. In the letter of 6 February the Department suggested that, to provide reassurances

should an escalation of events require a request to implement NICCMA, it would be helpful if TEO would consider convening a multi-agency meeting in order to inform an assessment of sector resilience preparedness, capacity and capabilities across NI departments and agencies and the emergency services. In the subsequent briefing and presentation, the Department highlighted the need for action as described at paragraphs 113 and 269 below.

107. On 6 February, the Department had also provided TEO with correspondence for issue on my behalf as CMO, also dated the 6 February 2020 to Departments and public authorities [**MM2/39 INQ000425544 MM2/39a INQ000254430 MM2/39b INQ000425546** (DoH Ref: MMcB/0127)]. The purpose of the letter was to enable all Executive Departments and public authorities to prepare to respond to "any and all" potential eventualities arising from the current outbreak and to recommend that each Department had proportionate, appropriate and efficient arrangements in place, consistent with the key public health messages about novel coronavirus.

108. If TEO's review of the NI civil contingencies arrangements was commissioned because of this correspondence, briefing or presentation, it does indicate a positive response by TEO to considering sector resilience under the civil contingency arrangements. TEO completed their review in 2021 and a new framework document, 'The NI Civil Contingencies Framework Building Resilience Together', was published in August 2021. Colleagues in the Department's Emergency Planning Branch (EPB) extensively engaged with TEO in relation to this review and made me aware of some concerns, mainly around the definition of roles and reporting structures. The Department agreed to formally endorse the document at the CCGNI June 2021 meeting, on the understanding that the document would remain "live" and therefore be subject to periodic review, giving the opportunity for further engagement with DoH.

Ministers Awareness of the potential consequences of Covid-19

109. With regards to Ministers understanding and whether or not Ministers fully grasped the potential magnitude of Covid-19 around the 25 February 2020, I am not able to advise on what Executive Ministers understood at this time as I was not asked to

attend Executive meetings during February 2020. However, I have already outlined some of the detail of briefings and other documents which were being shared with Ministers and officials from other Departments during February 2020 in particular. I have alluded to the role of TEO officials in particular with regard to COBR (O) and COBR (M) and CCG. It may be helpful to for the Inquiry to consider the information which was being shared by officials in other Departments outside the Department, including TEO, with their Ministers over the previous four to five weeks. My general observation is that there while there remained some uncertainty it should have been clear to all the level of concern and the potential implications.

110. The Health Minister received his first written submission on Covid-19/Wuhan on the morning of 22 January 2020. My recollection is that over the previous week I had orally briefed the Minister on what we knew. After the Health Minister received the submission on 22 January 2020, an exchange of emails [**MM2/40 INQ000425549** (DoH Ref: MMcB/0128)] between the Health Minister and myself followed around public messaging during which the Health Minister asked me to provide him with an oral briefing the following day. My diary shows that I met with the Health Minister at 3.30 p.m. on 23 January 2020. While I have no personal record of that meeting, I would have briefed the Minister on all of the information available to me at the time, the rapidly developing situation and, as reflected in the submission of 22 January 2020, the considerable work already underway in the Department and across health and social care.

111. The then head of Civil Contingencies Policy Branch (CCPG) within TEO provided a submission to the FM and dFM updating them on the position on 29 January 2020. I believe that this early briefing, which focused on the role of the Department and the Health Minister, reflected my previous experience which was that that the initial understanding within TEO at that time was that this was primarily a health-related issue. This is not a criticism of the official who provided the briefing and I believe that officials within TEO across other Departments including the Department developed a much better understanding of the implications of the pandemic for the whole system in NI over the following weeks as they received briefings and information from the Department and engaged with COBR. I also must fully

acknowledge the efforts of and significant contribution of officials across other Departments including TEO particularly increasingly so from late February and March 2020 onwards.

112. In addition to being updated at Executive meetings by the Health Minister, the FM and dFM and their officials were also, from early February onwards, receiving information at a UK level and from other DAs through COBR (M) meetings. On 5 February 2020 for example, following a COBR (M) meeting the Cabinet office circulated a list of actions from the meeting [**MM2/41 INQ000425550** (DoH Ref: MMcB/0129)]. The distribution list included the FM and dFM, the Health Minister and officials in both the Executive Office and the Department. The list of actions included:

- *"2. DEPARTMENT AND HEALTH AND SOCIAL CARE to collaborate with relevant government departments, local authorities and Devolved Administrations on a communications plan regarding the 2nd UK assisted departure flight, once location of supported self-isolation facility has been confirmed.*

- *PUBLIC HEALTH ENGLAND to prepare and provide public health communications for staff at all ports, similar to that provided to Border Force.*

- *ALL DEPARTMENTS to rapidly advance planning for reasonable worst-case scenario, centrally coordinated by the Civil Contingencies Secretariat.*

- *ALL DEPARTMENTS to include trusted partners in Critical National Infrastructure in reasonable worst case scenario planning, in line with the agreed Cabinet Office communications plan.*

- *ALL DEPARTMENTS and DEVOLVED ADMINISTRATIONS to finalise policy inputs into proposed legislative instrument, including trigger points.*

- *DEVOLVED ADMINISTRATIONS to be invited to upcoming ministerial exercise."*

113. On 10 February the Health Minister updated Executive Ministers at a meeting of the Executive. The briefing for that meeting [**MM2/18 INQ000425551** (DoH Ref: MMcB/0130)] including the following speaking points for the Health Minister:

- *"As you will be aware the novel Coronavirus emanating from Wuhan in China has continued to spread globally. The risk to the UK public however remains at moderate on the advice of the UK Chief Medical Officers.*

- *I took part in a COBR ministerial meeting on the 5 February and it was agreed that all Departments should rapidly advance planning for a reasonable worst case scenario. A letter was issued to TEO on the 6 February advising that they might want to consider convening a multi-agency meeting through the Civil Contingencies Group to assess sector resilience.*

- *The Scientific Advisory Group for Emergencies (SAGE) has advised the UK CMOs that UK testing for novel coronavirus should be widened (from mainland China) and a letter from the Chief Medical Officer alerting the HSC system to this development was issued on 7 February.*

- *In total there are now 4 confirmed cases in the UK and the patients are receiving specialist NHS care. The number of confirmed cases in England is expected to increase as contacts of those already confirmed as positive are identified. Tried and tested infection control procedures are being used to prevent further spread of the virus.*

- *To date there have been no confirmed cases in Northern Ireland.*

- *16 tests have been carried out in NI, 12 were negative and we are awaiting results in the other 4. We are not publicly announcing these tests and given*

the relatively small numbers being tested here at this time, we will continue to provide aggregated UK numbers to protect individual patient confidentiality. My Department issued a statement on the 7th February to counter unhelpful media speculation. We are likely to see increasing numbers having tests over the coming period, this is precautionary. We do not intend to provide a running commentary.

- *It is not unreasonable to assume that at some point we will have a positive case in Northern Ireland.*

- *From today, 10 February there will be 12 centres across the UK capable of carrying out tests. This will include a facility in Northern Ireland.*

- *The FCO repatriated a further 105 British and EU Nationals on 9 February. We understand that 7 Irish Nationals may also be on this flight. All the British and Irish nationals will be supported in isolation at a site near Milton Keynes.*

- *I understand that Department of Health and Social Care will be announcing the Emergency Health Protection (Coronavirus) 2020 Powers today. It will apply to England only. I have asked my officials to consider what additional public health legislation may be of benefit in our efforts to contain the spread of the novel coronavirus once we have cases confirmed in Northern Ireland.*

- *I want to reassure the Executive that my Department and the Public Health Agency continue to work closely with the relevant authorities and public health organisations across the UK and the Republic of Ireland to ensure Northern Ireland is well prepared to deal with the situation as events unfold.*

- *The CMO and my officials have been in regular contact with their contacts in the Republic of Ireland*

- *Emergency Operations Centres have been activated in my Department and the PHA and all relevant websites have been updated with advice for members of the public. The PHA are continuing to work closely with the Trusts, Port Health and primary care colleagues.*

- *There continues to be no room for complacency and my priority as Minister is still to ensure effective measures are in place within Northern Ireland."*

114. On 24 February the Health Minister provided a further update at a meeting of the Executive. A submission to the Health Minister [see Exhibit **MM2/20 INQ000425518** (DoH Ref: MMcB/0113] outlined the then basis of planning for Covid-19 as follows:

- "11. Cabinet Office is currently working to the 2019 National Security Risk Assessment pandemic flu planning assumption as the Reasonable Worst-Case Scenario (RWCS).

- 12. This assumes that the first wave of the pandemic will last approximately 15 weeks with over 50% of the population falling ill and up to 20% off work during the peak weeks. This would lead to a huge surge in demand for health and social care services which would have a knock-on impact on current provision.

- 13. Besides very severe levels of stress on HSC, the level of excess deaths would stretch capacity within organisations involved in the management of deaths. In NI, DoJ, in partnership with other government departments, local councils and funeral directors, is responsible for managing excess deaths. DoJ is currently developing an Excess Deaths Framework and exploring body storage options.

- 14. TEO convened a multi-agency meeting through the Civil Contingencies Group to assess sector resilience on Thursday 20 February. Officials from the Department and PHA were in attendance.

- 15. We understand that two papers will be brought to the next COBR(M) meeting scheduled for Wednesday 26 February. The papers will be on:
  - Public Order, and
  - Excess death planning.

- We have alerted DoJ officials to this and will seek their input in advance of the meeting."

115. The Health Minister's speaking points, included in the submission, were as follows:

- While the number of cases of Covid-19 has continued to rise the risk to the UK remains at moderate on the advice of the UK Chief Medical Officers.

- I took part in a further COBR ministerial meeting on the 18 February to ensure a joined-up approach continues to be maintained across the UK.

- There have been 13 confirmed cases in the UK to date. Five of the patients are receiving specialist NHS care while eight have been discharged. Tried and tested infection control procedures are being used to prevent further spread of the virus.

- To date there have been no confirmed cases in Northern Ireland although it is not unreasonable to assume that at some point we will have a positive case here.

- Any confirmed cases in Northern Ireland will be admitted to the Regional Infectious Disease Unit, ward 7A Belfast RVH if 16 years and over or RBHSC if

the patient is under age 16. I personally assessed our resilience this week during a visit to Ward 7A at the RVH and was extremely impressed by the facilities and highly trained staff.

- I am pleased to note that a multi-agency meeting organised by TEO through the Civil Contingencies Group to assess sector resilience was held on Thursday 20 February. Officials from my Department and the PHA were in attendance.

- As you will be aware, DHSC announced the Health Protection (Coronavirus) Regulations 2020 on 10 February. The Regulations are designed to provide a range of measures to prevent the further transmission of Covid-19, including powers to detain an individual on public health grounds (while this remains an effective intervention) for the purposes of isolation and screening. These powers will apply to England only.

- My officials are working with colleagues in the NI Office of the Legislative Counsel to develop clauses to provide powers to make similar regulations to this requirement to be included in the draft Coronavirus Bill which is due to be taken through Westminster.

- Working closely with the Cabinet Office, my officials have assessed existing legislation against the proposed UK-wide draft Coronavirus Bill and have drafted five additional NI clauses where existing additional legislative powers or flexibilities are required to ensure NI preparedness in the event of a pandemic.

- In addition to measures previously suggested for the Bill, Whitehall Departments have now identified a number of areas where they do not believe they have the necessary statutory or common law powers to respond to fully respond to a Covid-19 outbreak in the UK.

- The list of areas where further legislation might be needed has been developed on a UK wide basis. The needs identified vary between the different

jurisdictions of the UK and The Executive Office is working with Officials across the Executive Departments to establish any impact or additional requirements to the Bill for NI.

- The powers being sought are proportionate to the challenges we will face in responding to a severe pandemic and will only be enacted for the duration of any pandemic after which it would be withdrawn by way of a 'sunset' clause. The exception to this may be the emergency public health powers, including regulation-making powers for isolation, where we have asked Cabinet Office to consider not applying a sunset clause as these powers are currently not available under any other NI legislation but are available to the other UK countries.

- I will return to COBR(M) at the beginning of March for final agreement on content of the Bill and to agree whether to introduce the Bill and provisions at this time, based on the latest scientific advice.

- In the Republic of Ireland, the equivalent legislation for holding patients in isolation is section 38 of the Irish Health Act 1947. It makes provision for detention, but only for certain 'infectious' diseases. Ireland added Covid-19 to its statutory list of infectious disease on 20th February 2020. My officials are currently considering the public health merits of adding Covid-19 to the list of notifiable diseases under the Public Health Act (Northern Ireland) 1967.

- There may be significant financial implications for dealing with Covid-19 in terms of prudent planning & preparation. By way of indication, the Department bid for £55m in 2009 to meet additional expected costs emerging from H1N1 (Swine Flu) in 2009/10. A similar cost (revenue and capital) in responding to Covid-19 may arise in the reasonable worst-case scenario during the mitigation phase.

- I have agreed to update the Chair & Deputy Chair of the Health Committee in relation to Covid-19 on Tuesday 25 February.

- I want to reassure the Executive that my Department the Public Health Agency and the Health and Social Care Board continue to work closely with the relevant authorities and public health organisations across the UK and the Republic of Ireland to ensure Northern Ireland is well prepared to deal with the situation as events unfold.

- Internationally, and in the UK and the Republic of Ireland, we remain in the Containment phase of our response as we seek to prevent sustained community transmission. At the same time we must plan to mitigate the potential consequences for the health of the people of NI and the impact on our health services, other public services and wider society. My priority as Health Minister is to ensure effective measures are in place within Northern Ireland.

116. On 2 March 2020 the FM and the dFM attended their first COBR (M) meeting in person. Previous COBR (M) meetings had been attended by the Health Minister, at the request of TEO [see **MM2/17 INQ000425516** (DoH Ref: MMcB/0110]. The TEO press release following this meeting stated:-

> First Minister Arlene Foster said: "*We have had a very useful meeting of the UK Government's emergency committee with the Prime Minister and colleagues from around the UK to discuss the current situation in relation to the COVID-19 virus.*
> *"I am reassured that the procedures and practices that we have in place across the UK are robust and that the system is prepared for a range of scenarios."*
> Deputy First Minister Michelle O'Neill said: "*It is vital that we work together to prevent the spread of the virus, including close cooperation north-south to tackle the issue. We will continue our engagement with Ministers and health professionals in all jurisdictions on this basis.*
> *"We are very aware of the huge effort by staff across the whole health and social care system who are working hard to protect people, and I thank them for everything they have done and continue to do."*

Health Minister Robin Swann said: *"Northern Ireland is continuing to play an active role in planning for Coronavirus and I have been in close cooperation with my counterparts in both the UK and the RoI to strengthen our approach. We are continuing to prepare for the worst and work for the best and it is important that we continue to remain calm and focused on containment at this point."*

117. I believe that it is reasonable to conclude from the briefing and ongoing communication and engagement referenced above and in addition to widespread media coverage that Ministers were aware and cognisant of the significance of developing events. However, on reflection, I believe that there may be a significant difference in understanding of the full potential implications of something when being briefed by someone else about what was happening, as compared to being in the room when the conversations are happening and when issues and events are being discussed. The Health Minister was in the room actively participating in discussions at COBR (M) meetings from the start of the pandemic and this gave him a full appreciation of the threat being faced and the scale of the action required right across Government and society.

118. There was a noticeable and very welcome ramping up in the Executive response between the start of March and the middle of March when the FM and dFM started to attend COBR (M) meetings, even though they had previously been briefed at Executive meetings and their own officials were participating in COBR. The default position going forward, in my view, is that the FM and dFM should in the future be invited to attend COBR (M) meetings when the mechanism is first initiated, even if another Executive Minister is also attending. By mid-February, officials and professional advisers in the Department were working closely with colleagues across other Departments across a range of Covid-19 related work. This was a period when a 'soft standup' was in place across NI Departments (see paragraph 310). However, the burden of work in response to the pandemic fell on the Department including undertaking some work which in my view could have been taken forward by other Departments. The making of regulations spanning the policy responsibility of all Departments, on behalf of the Executive, for example fell to officials in the Department. The disproportionate impact on Department staff is

something I raised throughout the course of the pandemic, and this was in my view never adequately addressed through the provision of additional staff redeployed from other Departments or by a redistribution of tasks and work from the Department to other Departments. The result was, I observed, a significant negative impact on the well-being staff working seven days a week, 12 to 14 hours a day. This is an area where I believe the arrangements could be strengthened and I believe there should be a plan in place to ensure that a lead Department in future emergencies can be better supported, in particular with the agile redeployment of staff from other Departments as required.

The Outbreak of the Pandemic

Scientific Advice January to February 2020

119. In general, NI was very well connected to UK scientific advisory structures and fully participated in discussions throughout the pandemic epidemic and benefitted significantly from this. However, representation of NI interests with full participation was not always automatic from the outset of the pandemic. Inevitably, discussion focused on the position in England (or more broadly in Great Britian), as was appropriate given the relative distribution of the UK population. Full integration was achieved in some instances for example, appropriate attention was paid to the position of NI in modelling by UK groups, where separate modelling for progression of the pandemic in NI was established from an early stage.

120. There were regular meetings with RoI officials, which were coordinated by myself and my counterpart in the RoI. The meetings were attended by respective DCMOs, policy leads and the CSA in NI. There was limited participation by RoI scientific leads in our joint meetings, but their advice was conveyed through medical colleagues. These meetings, in which I participated were beneficial in understanding transmission of the virus in our respective jurisdictions and the likely general direction of policy decisions, albeit that our role in each case was to give advice, and decisions were a matter for policy and ultimately Minsters. These meetings were underpinned by regular meetings between PHA and their RoI equivalents. RoI colleagues were mainly connected to European networks of

scientific and public health groups, and we were mainly connected to UK networks. Thus, we were able to share scientific insights emerging from our respective networks and I believe this was beneficial.

121. Advice provided by the CSA and myself on health issues to the Executive through the Health Minister was based on data, modelling, scientific analysis and outputs of various scientific advisory groups including SAGE and its various subgroups as described. This included behavioural and social science advice. Advice from other analytical disciplines such as economic advice and educational advice for example was provided to the Executive via the appropriate Department and Executive Minister and was out with my remit and expertise as CMO.

January – March 2020

122. In the first four weeks of January the principal sources of advice were, as would normally be the case in an emerging potential public health threat, Public Health England in conjunction with the Public Health organisations in the DAs – PHA in NI, and respective CMOs and DCMOs informed by the expert consideration and advice from NERVTAG. SAGE had its first 'precautionary' meeting on the 22 January 2020 and thereafter would have been feeding into the advice from the UK CMOs.

123. The Scientific Advisory Group for Emergencies (SAGE) is a UK group, which provides independent scientific advice to support decision-making in the Cabinet Office Briefing Room (COBR) in the event of an emergency. SAGE provides timely scientific and/or technical advice to decision makers to support UK cross-government decisions. SAGE is also responsible for coordinating and peer reviewing scientific and technical advice to inform decision-making. SAGE is usually chaired by the UK Government's Chief Scientific Advisor. During the pandemic NI benefited significantly from the advice and recommendations arising from SAGE meetings. I would wish to acknowledge all those who gave so freely of their time and expertise from which so many benefited.

124. While SAGE can only be activated by COBR any of the Devolved Administrations (DAs) can request assistance from the UK Government for securing or sourcing scientific and technical advice to help inform decision-making on issues within their statutory competence. SAGE provides the main source of scientific advice to UK Government and, where appropriate the Executive in the event of an emergency. The advice and evidence provided by SAGE is developed by assessing and reviewing evidence from multiple different sources and taking account of the views of a wide range of nationally and internationally recognised experts.

125. Given its relatively small size, NI does not have its own Scientific Advisory Group for Emergencies (SAGE) group but relies on the independent scientific advice provided by the UK group and this was the case during the initial months of the pandemic particular in January and February 2020 and indeed remained so throughout the pandemic. As indicated SAGE is a forum which NI does not have the capacity to fully replicate; nor would it be scientifically or technically feasible, nor operationally warranted, to duplicate their work.

126. In an email chain dated the 25 January 2020 [**MM2/43 INQ000047559**] to Professor Sir Christopher Whitty, I stated: "As ever you are/will be doing a lot of the heavy lifting for us and providing much appreciated expert advice." In making these comments, which I have further considered, I was acknowledging that NI did not have the capacity nor was there the need to replicate expert UK advisory structures and I was reflecting that I foresaw, that as the current situation developed that, I as CMO, and NI would be dependent upon UK bodies as a source of advice and guidance. At the time, and I continue to regard Northern Ireland's ability to draw on and consider the advice of SAGE and other expert scientific advisory bodies as a significant strengthen.

127. NI representation at SAGE, either with observer or with participant status, is dependent on the nature of the emergency and there is no automatic representation of NI on SAGE, as was apparent in the early stages of the Covid-19 pandemic. In the absence of NI involvement in the first five meetings of SAGE, summaries of SAGE's views and discussion in the form of minutes were received by NI for the 3rd 4th and 5th meetings however I have found no record of NI

receiving papers from the first two SAGE meetings. Therefore, policy makers in NI may have had more limited awareness of the extent to which uncertainty and a range of opinions were expressed in scientific discussions during these early meetings, if this was not possible to be fully captured or reflected in minutes. The same would largely be true of other UK Scientific Advisory Groups operating in emergencies in the absence of NI participation. The attendance of myself and subsequently the NI CSA ensured that policy makers were kept more fully aware of discussions relating to scientific uncertainty and the full range of opinions contributing to the consensus views of SAGE. However, from the 24 January there were also regular 4 UK CMO calls to discuss Covid-19 and there was full and appropriate information sharing and discussion on key emerging information, including from SAGE, at these meetings.

128. For most of the Covid-19 pandemic, from late March onwards, following his return to work the CSA or deputy CSA attended SAGE as a participant with, on a small number of occasions, others standing in for them. Prior to that I was the nominated NI contact for SAGE in NI and attended a number of meetings as an observer myself or on occasions one of my team observed on my behalf when I had other significant commitments. In the absence of NI attendance at some meetings, summaries of SAGE views and discussions, in the form of minutes, were regularly received and reviewed by myself from the 3rd SAGE meetings onwards and were widely circulated within the Department and all SAGE advice and recommendations were reflected in oral briefings to the Health Minister and or other Executive Ministers in addition to submissions including e.g. the SAGE reasonable worst case scenario on the 27 February 2020 [**MM2/44 INQ000203874**].

129. The Devolved Administrations were invited on 7 February to nominate observers to SAGE meetings [**MM2/45 INQ000425552** (DoH Ref: MMcB/0131)]. This was after the 5th meeting of SAGE. In response I asked that I be listed as the main NI contact for these meetings. The dates of the SAGE meetings during this period [6th to 19th SAGE meetings] were recorded in my diary. My diary also records which of those SAGE meetings I could not personally observe. Based on these records I dialled into eight of the 14 SAGE meetings held during this period as a

Northern Ireland observer. These were the SAGE meetings held on the 11, 18, February, 5,10, 13, 16, 23 and 26 March. For some meetings which I could not personally observe one of my team observed in my place. From Departmental records one of my team definitely attended the meetings on 25 February and 3 March on my behalf as an observer and circulated a summary of these meetings to me afterwards. With my attendance and the attendance of one of my professional team as an observer in February and March 2020, there is a record that NI attended at least 10 out of 14 meetings in February and March, 3 out of six in February and 7 out of 8 in March, which occurred after the DAs had been invited to attend SAGE as observers.

130. My ability to personally attend some meetings was variable due to competing diary commitments. However, this was partly mitigated by the frequency of UK CMO meetings where evidence and recommendations from SAGE was also being discussed. My diary records that I was unable to attend SAGE on 13 February 2020 as I was required to attend the NI Health Committee. However, there was a meeting of the four UK CMOs first thing the following morning. I was unable to attend on the 20 February but there were also two UK CMO meetings that day when relevant issues would have been discussed. I also did not attend the meeting on 27 February but again there was a meeting of the four UK CMOs the following day. On 18 March I did not attend due to a meeting with my RoI counterpart, my Chairing of Health Gold Strategic Cell and attending a COBR(M) meeting. I also attended a meeting of the four UK CMOs on that date. These were the dates of the four SAGE meetings to which the DAs were invited to nominate an observer during this period which we have no record of anyone from NI attending. However, as I have indicated previously records for the period January to March 2020 are not as complete as they could have been, so it is possible that someone from NI would have dialled into some or all of those meetings.

131. I had the opportunity to review and discuss in various fora papers and evidence presented to SAGE and to other groups prepared by different expert teams based in different centres of excellence across the UK including for example the Universities of Warwick, Cambridge and Manchester as well as Imperial College

London. These centres of expertise were also sharing information with each other and working together. In the early stages of the pandemic the context and background to these papers was relevant to my assessment and understanding of their content. Whilst there were for example papers presenting the results of surveys of behaviours and attitudes amongst the public, during the period February and March there was largely an absence of research based on detailed hard data within the UK about Covid-19 other than some information about the numbers of cases.

132. The limitations on data availability and consequent caveats were regularly highlighted in these papers. My recollection is that the first papers which reflected hard data from within the UK began to emerge from around mid to late March 2020. This data was initially more available in relation to Covid-19 patients in hospital and therefore reflected more what had happened to those most seriously impacted by Covid-19 rather than the majority of cases which were likely to be arising in the community. The papers developed by experts and/or by centres of expertise were extremely helpful even though they inevitably, given the limitations of the data, which was available, relied on modelling based on a range of assumptions and a number of possible different scenarios with wide confidence intervals. In some cases, experts may have had access to data from other countries such as Italy which they were assessing at the time was two to three weeks ahead of the UK in the spread of Covid-19. There was however actually a significant degree of commonality to the assessments being made by the different centres of expertise at that time.

133. The last SAGE meeting on 26 March 2020, prior to the return of the CSA, which my diary shows I attended as an observer included a paper provided by the SPI-M-O working group on scenario planning. Modelling outputs from three groups were included in the development of the scenarios: Warwick, Exeter / Bristol and Imperial and representatives from other groups were also present to compare the emerging findings of their models. The paper stated: "*These are scenarios and not forecasts. It is not possible to meaningfully forecast the epidemic at this stage, as:*

- *Its epidemiology is still uncertain, although our picture of it is improving.*

- *It is not yet possible to assess how contact patterns have changed, will change over time and, crucially, the impact of that on transmission rates. It is not that case that, for example, a reduction of leisure activities of 80% would reduce transmission from leisure activities by 80%.*
- *The impact of interventions will become apparent in around 3-4 weeks."*

134. It is important to an understanding of decisions made in 2020 that when reviewing the papers provided to SAGE in the first months of the pandemic in 2020 that we don't lose sight of the limitations on our knowledge at the time which were known and understood by myself, other UK CMOs, SAGE membership and attendees and by the Centres of expertise themselves. As is always the case when looking back it is in my view important that I am mindful of the risks of hindsight bias which I have sought to avoid in my statement.

135. I believe the limitations in our knowledge is reflected in part of an email chain on the 25 January between UK CMOs sharing the early epidemiological modelling of Professor Woolhouse's [**MM2/43 INQ000047559**]. The content, which I considered at the time and have subsequently reviewed, reflects the uncertainty in modelling the potential impacts of Covid-19 at that time. In his email he states: "There are very good reasons to suppose it might not be as bad as that, but we need additional evidence (not currently available, but hopefully coming soon) to move the dial on those predictions." He also acknowledges that there was still at least the prospect although increasingly unlikely that the outbreak would be contained and the "…*UK escapes relatively lightly*."

136. Having said that, during this period and before the availability of hard data, SAGE was a primary source of intelligence and for considering various scenarios including the worst-case scenario, how successful various NPIs might be in mitigating against the worst-case scenarios and what impacts NPIs might have, including possible negative impacts, on other aspects of health. SAGE was therefore important as a source for the purposes of developing advice, briefing Ministers, and surge planning.

137. Papers and estimates presented at the 6th meeting of SAGE on 12 February prompted further work to consider the position in NI with respect to the requirement for health service assessment, hospital cases and critical care. Initial draft NI estimates were produced by a Senior Medical Officer (SMO) within [**MM2/48 INQ000425553 MM2/48a INQ000425554** (DoH Ref: MMcB/0132)]. Where there were unknown elements of these estimates specific to Covid-19, Pandemic Flu reasonable worst-case assumptions were used and factored into Covid-19 current estimates, based on a 2016 population, again including confidence intervals where possible. The initial estimates produced by this SMO were:

- In Pandemic Flu reasonable worst case, based on a 2016 population in the UK some 9,840,000 would require assessment by health services. This is 30% of all those that are symptomatic. While it was then unknown for Covid-19, using pandemic flu planning assumptions it was estimated that this could result in approximately. 330,000 people in NI requiring assessment by health services (possibly over a period of 6 months)

- In a Pandemic Flu reasonable worst case, based on a 2016 population in the UK 1,312,000 would require hospital care, with an average six-day length of stay (LoS). This is 4% of all those that are symptomatic. While again this was unknown for Covid-19 it was estimated that this could possibly be in the region of 4% (1,312,000), as per pandemic flu planning assumptions. This would equate to approximately 44,000 people in NI requiring hospital care. Assuming all of these are inpatient cases with average LoS of 6 days this equates to a requirement for 264,000 bed days (over a period of potentially 6 months). For comparison in 2018/19 there were around 224,000 inpatient admissions to acute hospital beds (all ages) with an average LoS of 5.2 days giving around 1,165,000 occupied bed days in NI over 12 months. So the requirement would potentially be for around 40% of all acute hospital inpatient bed days but peak would be higher.

- For Pandemic Flu reasonable worst case, based on a 2016 population in the UK it had been estimated that 328,000 would require the highest level of critical

care (require intensive care for 10 days). This is 1% of all those that are symptomatic. While unknown for Covid-19 it was assumed this could possibly be about 1% as per pan flu planning assumptions. Based on this assumption approximately 11,000 people in NI would require the highest level of critical care (intensive care for 10 days) which is around 110,000 bed days again potentially over a period of 6 months. This was well in excess of the total critical care capacity. (Note: these 110,000 critical care bed days are probably included in the 264,000 acute hospital inpatient bed days referred to above.)

April 2020 Onwards

138. In the early stages of the pandemic there was not a formal infrastructure within NI to facilitate the expert consideration of the scientific evidence being generated by SAGE however the emerging scientific evidence and the recommendations of SAGE were fully considered by both DCMOs and myself and informed our professional advice to policy teams and the Health Minister and our interaction and meetings with colleagues in PHA and the HSCB as appropriate.

139. As is covered in the M2C-IYO-001 statement, at paragraph 12, as the pandemic evolved and following his return to work on 23 March 2020, the CSA drew on a wide range of information and evidence in providing scientific advice to the Health Minister and the Executive. This included data on the progression of the pandemic in NI, discussions and papers from the UK Scientific Advisory Committee for Emergencies (SAGE) and its subgroups as already described, and other elements of UK Covid-19 response infrastructure, discussions at the Department's NI Strategic Intelligence Group (SIG) and Modelling Group when these were established, discussions with colleagues (including clinical colleagues) throughout the NI HSC system and the other nations of the UK/ RoI, outputs from World Health Organization (WHO), the European Centre for Disease Prevention and Control (ECDC) and the US Federal Drugs Administration (FDA), reports from various Royal Colleges and other bodies including "Independent SAGE" and the wider scientific literature.

140. In the week prior to the CSA's return on 23 March 2020, I verbally agreed with him key priority areas for action. I asked that he establish a NI Covid-19 modelling group as a priority. As described in my M2C-CMO-01 statement, at paragraph 125, I also agreed a proposal by the CSA to establish a NI Group specifically to focus on scientific evidence as there was not initially any independent group of scientific experts in NI to consider SAGE papers and outputs, the outputs of SAGE subgroups or and other scientific papers and reports from an NI perspective to inform scientific and medical advice to the Health Minister and the Executive. In March 2020 I requested that a Strategic Intelligence Group (SIG) was set-up, and the first meeting of this group took place on 27 April 2020. [**MM2/49-INQ000137367**].

Strategic Intelligence Group (SIG)

141. Following the establishment of the Strategic Intelligence Group (SIG) by the CSA and its first meeting on 27 April 2020, the group met regularly and provided advice throughout the main phases of the pandemic. SIG was chaired by the CSA and the group considered a wide range of scientific papers throughout the course of the pandemic including those developed by SAGE and provided advice to the CSA and myself. SIG included representation from the PHA, Queen's University Belfast, Ulster University and Cambridge University as well as the Department, from a range of medical, scientific and other disciplines. Members were selected and approached by the CSA after discussion with me to cover relevant areas of scientific expertise. The terms of reference, membership and areas of scientific expertise are provided in [**MM2/50 INQ000183441**]. Dates of SIG meetings are provided in the accompanying chronologies. SIG met at varying intervals, depending on the state of the pandemic, the emergence of new evidence and the need for scientific advice. As CMO, I attended meetings of SIG with my two DCMOs. As indicated in the M2C-IYO-001 statement, at paragraph 48, the main role of SIG was to provide scientific advice to myself and the CSA to inform the advice which we then provided to the Minister and the Executive. The advice of SIG was not disseminated separately and was not provided directly to the public, it did inform the public advice which was provided by the CSA and me. The majority

of the scientific advice which informed SIG discussions was already publicly available.

142. SIG considered a wide range of evidence. This included many SAGE papers, but also reports and evidence from a variety of other sources. SIG members were invited to table papers or reports for discussion when they considered these to be relevant or informative. Potential advice to Ministers was in many cases discussed with SIG members to seek their views. In general SIG advice aligned closely with advice emanating from SAGE. In addition, it did take account of at times the somewhat different progression of the pandemic in NI and also potential specific cultural and geographical features of NI, including the progression of the pandemic and relevant policy decisions in the RoI and the Island of Ireland.

143. The CSA and I especially, had the benefit and support of academic colleagues in QUB who provided a synopsis with links to relevant scientific publications to assist in our reading of relevant emerging science. This was a valuable data reference source, and I am extremely grateful to QUB colleagues for this support and to academic colleagues in QUB and UU more generally who gave freely of their time throughout the pandemic. A key strength and learning point for the future was the significant benefits of the close working relationship between academia, the Department and PHA.

NI Modelling Group

144. As indicated in my M2C-CMO-01 statement and in the M2C-IYO-001 statement, at paragraph 16, NI did not have established capacity in pandemic modelling at the outset of the pandemic. In the initial stages of the pandemic, NI initially relied on UK modelling which was presented to SAGE.

145. The CSA on return to work established an NI modelling group at the end of March 2020 and this group played an important role in informing NI policy as the pandemic progressed. UK modelling which did include modelling of the pandemic in NI by UK groups was helpful, but generally lagged somewhat behind NI local modelling which used the most up-to-date data to inform my advice and that of the

CSA to the Health Minister and Executive. The NI Modelling Group [**MM2/51 INQ000137356**] chaired by the CSA, Professor Ian Young, was a Departmental group. I attended meetings of the Group from January 2021 when the CSA was unavailable for a period. During this time the meetings were chaired by the Deputy Chief Scientific Advisor. I continued to attend after the return of the CSA.

146. As described in my M2C-CMO-01 statement, at paragraph 142, the initial estimates of the potential impact of the pandemic in NI were based on the SAGE (SPI-M-O) consensus estimates of 2 March 2020 extrapolated for the NI population. On the 1 April 2020 the Department announced the consensus estimates of the NI modelling group based on the outputs from several different models. This informed further intensive hospital planning for the anticipated surge in Covid-19 cases. This modelling outlined a reasonable worst-case scenario, based on assumptions including social distancing measures producing a 66% reduction in contacts outside of the home and workplace. In addition, it was anticipated that 70% of symptomatic cases would adhere to self-isolation. The modelling group's best judgement at that time was that this would lead to a peak number of 180 Covid-19 patients requiring ventilation and critical care beds during the first wave of the pandemic. The modelling assessed that the peak number of Covid-19 hospital admissions would be 500 per week. Under this reasonable worst-case scenario, the projected number of cumulative Covid-19 deaths in NI over 20 weeks of the epidemic was calculated to be in or about 3,000. The modelling indicated that the peak of the first wave of the epidemic was expected to occur between 6-20 April 2020.

147. As described in the M02C-DOH-01, Wave 1 statement, at paragraph 628, the scenarios and estimates provided by the Modelling Group, following consideration of the potential effects of various interventions or none, informed discussions and advice which I and the CSA provided to the Health Minister and the Executive. The modelling group outputs were at an NI population level, and I understand were used to inform Trust specific modelling and planning which was carried out at HSB/PHA/Trust level.

148. SAGE and various subgroups and related groups such as NERVTAG and UK CMO meetings continued to be important sources of information and evidence. The CSA participated fully in SAGE as a member representing NI from late March 2020 following his return to work. Full participation in SAGE allowed a complete understanding of the range of views and weight of opinion expressed within scientific discussions, and also allowed the opportunity to ask questions of general relevance or specifically from a NI perspective, and to express opinions.

149. I believe that full participation in SAGE meetings is of more value than just having observer status or access to minutes or other outputs and that in future full representation of the devolved administrations, as soon as SAGE is stood up would be important if health issues are involved, since responsibility for health is a devolved matter. There were a small number of meetings after March 2020 which the CSA and his deputy were unable to attend and which a number of colleagues attended on his behalf.

SAGE Sub-Groups

150. NI also benefitted from the work of a number of SAGE sub-groups:

- The Scientific Pandemic Insights Group on Behaviours (SPI-B) is an ad-hoc subgroup of the Scientific Advisory Group for Emergencies (SAGE), which is chaired by the Government Chief Scientific Adviser. SPI-B is an advisory group only. SPI-B reports directly to SAGE. SPI-B meets on an ad hoc basis as required for the duration of an outbreak. Officials from each of the Devolved Administrations may attend SPI-B or sub-group meetings as observers. Attendance of other observers will be at the discretion of the Chair and Secretariat. Policy officials may attend SPI-B or subgroup meetings where they have an interest in the advice and views of the group, or to provide further context for discussion on specific topics. The subgroup provides advice and a consensus view to SAGE on a range of behavioural science issues. SPI-B meetings are not minuted; however, the secretariat may draft a high-level summary, including actions, following meetings. The Department agreed that

PHA would attend meetings on its behalf as an observer. The PHA shared papers with key colleagues in the Department on a regular basis so that they were apprised of all SPI-B activity throughout the pandemic. Papers were also available to the Department via SAGE.

- The Scientific Pandemic Influenza Group on Modelling (SPI-M-O) is a subgroup of SAGE and gives expert advice to the Department of Health and Social Care and wider UK government on scientific matters relating to the UK's response to an influenza pandemic (or other emerging human infectious disease threats). The advice is based on infectious disease modelling, epidemiology, and potential implications for policy decisions. The Department was officially represented on SPI-M-O by Dr Declan Bradley, who was the Deputy Chief Scientific Adviser for the Department during this period and also works for the PHA and was an academic who worked at Queen's University Belfast.

Scientific Papers

151. I was at the relevant time, and remain, familiar with the work and contribution of Professor Ferguson and his colleagues at Imperial College during the pandemic, including any papers they provided to SAGE from the third meeting of SAGE on 3 February 2020 onwards. However, a search of my emails has not identified that papers developed by Professor Ferguson and colleagues in mid-January 2020 prior to the first precautionary SAGE meeting held on 22 January 2020 were shared with me, including Reports 1 to 3 (see [**MM2/52 INQ000183353**] and [**MM2/53 INQ000183386**].

152. Similarly, while I have been unable to find any evidence in my emails that I received the Imperial College Report which is dated 10 February 2020 at that time, I did subsequently receive papers from the fourth meeting of SAGE which took place on 4 February, including the SPI M O paper dated 3 February.

153. The Imperial College report of 16 March 2020 [**MM2/186** **INQ000049647** was tabled at SAGE on that date and my diary records that I dialled into that meeting of SAGE as an observer. I considered this a useful report which I reviewed at the time. It was one of many other modelling inputs into SAGE meeting that I considered. The paper usefully, albeit with wide confidence intervals, showed graphically some of the possible scenarios which I believe was illustrative and very helpful in its accessibility.

154. It had always been a planning assumption that we would need NPIs if a pandemic occurred. The response to pandemics and major epidemics has always included self-isolation for those with symptoms, quarantine, closure of hospitality and close-contact professions and closure of schools. What was uncertain given the relatively limited understanding of Covid-19 at this time was the minimum set of NPIs or social measures which would need to be introduced to stop the pandemic from growing, in other words what interventions and measures would be required to move R from being above 1 to below 1. If the interventions were not enough, then R would remain above 1 and the pandemic would continue to grow, however if the interventions introduced were more than was required significant harms would be caused given the very high societal and public health cost which would increase over time and depend on the extent and duration of any interventions.

155. Modelling outlines potential future scenarios, while helpful at the time in the early stages of the pandemic, it became increasingly so later in the pandemic when more data was available. What was missing at the time was real data. Surveillance was limited by constraints on testing capacity, and it was therefore difficult to really know how far advanced and how quickly the pandemic was spreading and growing. At that time there was very considerable uncertainty as to what the impact of the various NPIs would be and given the limited testing available, it was not prudent or safe to introduce the minimum possible set of interventions in the hope that this might get R below 1 because if not sufficient it would be too late to intervene further if it subsequently turned out that those actions were not enough as it would take several weeks following their introduction before this would be known. In these circumstances we would have then been staring into the scenario of a still growing epidemic with a large number of

additional people infected, some with very severe disease and health services at risk of being overwhelmed.

156. My advice as CMO at that time was informed by and was consistent with that of SAGE and I was supportive of the decisions taken on 16 March to limit social contact at a population level. Looking back, had it been known then how quickly the pandemic was growing and spreading, and had we had the testing capacity to track its growth through surveillance, it would have been preferable from the epidemiological point of view for this action to have been taken sooner. As ever such observations are always clearer after the event and with the benefit of hindsight. Had the testing capacity been available to demonstrate how fast the epidemic was moving at this stage it highly likely that this decision would have been taken earlier, although how much earlier is difficult to say as it is difficult to estimate the difference this would have made for those making decision given the significant implications of the interventions required and the then evidence of impact in terms of severe disease and consequence for the health service.

UK CMOs Meetings and development of professional advice

157. There are 4 UK Chief Medical Officers one in each administration. The CMO of England advises the UK Government and represents the UK on international matters as the UK CMO. From early in the pandemic the four of us worked extremely closely together. We benefitted from close professional and personal relationships developed prior to the pandemic and in my view, we worked highly effectively together throughout the pandemic. This was also my experience of the 4 UK CMOs meetings during the H1N1 pandemic and during the Covid-19 pandemic in my view these were one of the most effective meetings.

158. The medical and scientific advice I provided as CMO along with the CSA on health issues to the Executive, through the Health Minister, was based on data, modelling, scientific analysis and outputs of various scientific advisory groups including SAGE and its subgroups. This included behavioural and social science advice. My advice was developed from my reading and consideration of relevant scientific papers and recommendations from expert advisory groups. It also

benefited from discussion with all CMO colleagues. As colleagues in respective jurisdictions with established professional working relationships this allowed for informed discussion and debate and sharing of experience. I believe this engagement was mutually beneficial as opposed to a dependence on any one CMO as each of us had differing ranges of expertise and experience. The CMO of England in his role as UK CMO and his Deputies, given his role on international matters, did provide extremely useful international perspective which informed our considerations.

159. It was the collective view of us as UK CMOs following discussion, that different interpretations and versions of the scientific or clinical evidence if provided across the four nations risked confusing the public and undermining consistency in policy decisions and communications as is reflected at paragraph 2.78 of the fourth statement to the Inquiry of Professor sir Christopher Whitty [**MM2/54 INQ000251645**]. In so far as possible, and only where we individually judged appropriate to our respective circumstances and the trajectory of the pandemic at that time in respective jurisdictions, we tried to adhere to the principle that the science and clinical advice both to Ministers and the public would be as similar as possible, whilst acknowledging the policy response and decisions taken by Ministers might be significantly different for many valid reasons. Likewise, I worked closely with my counterpart in the RoI, and in his absence on compassionate leave his DCMO, keeping each other informed of the course of the pandemic in both jurisdictions and potential policy decisions in so far as was possible. This was somewhat more complicated however because of the different sources of scientific and expert advisory groups recommendations.

160. As indicated in my M2C-CMO-01 statement, at paragraph 23, while in each jurisdiction the CMO provides independent advice to respective Ministers and this was the case during the pandemic, as CMOs we have always worked closely on public health policy, generating evidence and independently advising respective Ministers as decision makers. Examples of this joint work would include our work on the development of the UK CMO Physical Activity Guidelines and similar work to develop the UK Chief Medical Officers Low Risk Drinking Guidelines. Similarly, there was and remains ongoing professional and policy engagement with my

counterpart in the RoI for example in the area of alcohol policy and self-harm and suicide prevention.

161. During the pandemic we established a regular 4 UK CMOs meeting where we discussed technical and professional issues. The advice we independently provided to Ministers was broadly aligned following discussion and consideration of the relevant evidence. The first UK CMOs to discuss Covid-19 was on 24 January 2020 and from January 2020 to February 2022 the UK CMOs met as a specific group around 274 times. These 4 UK CMO meetings took place approximately three times per week in 2020, and approximately two times a week in 2021 and early 2022. These meetings were often at short notice when there were new developments and occasionally, we would have met on more than once in the same day. In the period January to March 2020, a number of UK CMO discussions took place on the same day or day after SAGE meetings which I did not personally attend either in the period before NI was invited to observe meetings and on subsequent occasions when due to conflicting commitments I could not personally attend SAGE. This offered me and provided an additional opportunity to be informed on what was being considered and emerging recommendations at SAGE even before SAGE minutes were circulated.

162. The 4 UK CMOs, including myself, also participated together in other UK wide groups and meetings, for example the UK Senior Clinicians Group. The DCMOs would also have attended these meetings. We also attended meetings together with clinical colleagues to discuss more technical and clinical aspects of the Covid-19 pandemic as for example the UK Senior Clinicians Group meetings.

163. On some occasions as UK CMOs, as described in my M2C-CMO-01 statement, at paragraph 24, we collectively provided advice and guidance as the evidence about the virus developed and experience of the disease and its treatment evolved. By way of example, we issued joint statements and correspondence to the profession in relation to the importance of recruitment to UK wide Covid-19 therapeutic trials [**MM2/55- INQ000137309**], described in more detail at paragraph 168, the

prioritisation of first doses of Covid-19 vaccination during the early phase of the vaccination programme [**MM2/56- INQ000137310**] , and we provided assurances and support to frontline clinicians in recognition of the extraordinary pressures they were working under during the height of the health service pressures [**MM2/57 INQ000137311**]. Examples of the joint CMO letters to the medical and public health profession are attached at pages 378, Appendix A of the UK CMO Technical Report with examples of some joint key statements and public advice to Ministers at pages 379 [**MM2/1- INQ000217254**].

164. On the occasions we decided to do this the purpose was to provide a basis for decision making across the UK, to provide clarity across all four nations, to add strength of weight to the clinical advice and or to make a clear public statement which reflected a collective clinical view.

165. An example of the first of these objectives included our consideration as described in my M2C-CMO-01 statement, at paragraphs 65 and 145, of the UK Alert level. From January 2020 as the outbreak in China developed, all four UK CMOs came together to provide advice on the threat of the outbreak becoming a pandemic and to advise respective Ministers and governments accordingly. Throughout the pandemic we continued to meet each week to review data on disease activity, potential growth and direct health service pressures in each jurisdiction to provide advice to respective governments on the UK Covid-19 Alert level. This advice was informed by the analysis of as close as possible to real time data provided by the Joint Biosecurity Centre which later became part of UKHSA. This analysis drew on the information provided separately by each jurisdiction and was essential to providing context to the advice that I gave and my CMO colleagues provided to Ministers. My consideration of the situation in NI included analysis of data on the numbers of cases; the numbers of people admitted to hospital and numbers with severe disease requiring oxygen or intensive care; numbers of outbreaks in particular settings including care homes and hospitals and performance data on the contact tracing service (CTS). It was also important to assess and factor in the impact of NPIs, and levels of public adherence to the restrictions. That information was available through the consideration of mobility data; analysis of contact patterns and behaviours; and surveys of people's attitudes. While each of us

independently could have separately determined to advise raising the Alert level in one jurisdiction to a higher level than the UK Alert level there was no occasion when this occurred.

166. Some of the decisions made at the UK CMO Meetings that were almost entirely clinical were also taken by this group which is somewhat atypical given the nature of our professional roles and responsibilities, and such clinical decision are normally and correctly matters for clinical colleagues. However, the circumstances in which professional colleagues were providing clinical care and the enormous challenges they faced necessity evidence based consistent collective professional advice from us as UK CMOs and I regarded this as our duty to so provide. These decisions and communications were always made collectively in discussion in the meetings which were normally chaired by the CMO England, Professor Sir Christopher Whitty. The outcome of these discussions was generally sent either as letters to the medical profession if of a clinical nature, for example on medical regulation or clinical trials; to the general public, for example on education; or as a communication to Cabinet Office and in NI the Executive usually via email, for example on the Covid-19 Alert Levels.

167. While we independently provided advice to respective Ministers, our advice was generally aligned although was independently provided within respective jurisdictions following discussion and having arrived at the same scientific conclusion. During these discussions we regularly tested each other's thinking, and I found this extremely helpful. As professional colleagues in respective jurisdictions with established working relationships this allowed for informed discussion and sharing of experience. I believe this engagement was mutually beneficial to all of us as CMOs as each of us had a differing range of experience and expertise. In my view the effectiveness and importance of this professional working relationship should not be underestimated, nor in respect of the island of Ireland similarly the professional working relationship between the CMO in the RoI and myself or our successors in any future pandemic. I would also like to acknowledge the professional supportive nature of this engagement such were the significant demands and pressures at this time which will be replicated in any future pandemic.

168. While there was healthy and appropriate discussion and debate, I do not recall any significant material differences in views between us following discussion and consideration of the scientific evidence. Given the extent and range of advice provided, and the difference of context, there may be some instances where within the respective jurisdictions the points of emphasis were different. The views and advice developed significantly benefited from discussion with all CMO colleagues. Some examples of the joint advice we provided as UK CMOs include advice on:

- 9 May 2020 on Borders - This advice sought to inform UK Government policy on the relative contribution of imported cases of Covid-19 to the epidemic in the UK. The UK CMOs agreed:

  - Imported cases matter most when the UK has a low level of infection. When domestic transmission is very high imported cases are such a small amount of total that they are make no significant difference to the epidemic. As the UK moves to situation where local incidence and prevalence is much lower, imported cases could become a higher proportion of the overall number of infections and so preventing them can have some benefit. This is a gradual process, so there is not a `threshold'. It is however the case that once rates of domestic transmission are low it is potentially a material issue.

  - That benefit only exists to a significant degree when people are coming in from a country with a higher rate infected) than the UK, and so the person being asked to self-isolate has a higher probability that they have the disease than the UK population, therefore adding to the risk Quarantining for 14 days those people who come from a country with a higher rate than the UK may have a useful impact on the epidemic once the UK is at low levels, but quarantining those from countries with a lower rate than the UK will not.

- However, quarantining is not only, or even mostly, about the epidemiology at this stage of the Covid-19 epidemic. Wider public confidence in the response, impact on travel and trade among other issues should be considered when making policy on quarantining at the border and may be more important in policy terms. This is not for the UK CMO's to offer advice on, as it is not where their expertise lies. Points 1) and 2) they are agreed on.

- 23 August 2020 - Balancing risks and benefits in education: advice to the public, parents, pupils, teachers and other staff - As outlined in my M2C-CMO-01 statement, at paragraph 169, at a UK level, in August 2020 [**MM2/58** - INQ000137374] as UK Chief Medical Officers, we published a consensus statement summarising the current evidence of the risks and benefits to health from schools and childcare settings reopening. We concluded that while the reopening of schools would put some upward pressure on community transmission that we were confident that schools were much less important in the transmission of Covid-19 than for influenza or some other respiratory viruses:

- 13 September 2021 - 12 to 15-year-old vaccination: advice to Ministers - As outlined in the M02C-DOH-01, statement Wave 3, at paragraph 284, "The offer of a single dose of vaccine was extended to all 12–15-year-olds in October 2021 as a result of the 4 UK Health Ministers seeking further advice from the four UK Chief Medical Officers on the Covid-19 vaccination of all young people aged 12 to 15. As 4 UK CMOs had collectively agreed that the offer of vaccination should be extended to all 12–15-year-olds with parents and children encouraged to understand the potential benefits, potential side effects and the balance between them [**MM2/254 INQ000348936** DoH Ref PM/3192] [**MM2/255 INQ000348937** DoH Ref PM/3193] [**MM2/256 INQ000348938** PM/3194]

- 31 December 2020 - Dosing schedule for vaccination: advice to healthcare Professionals. – This was an important update from the 4 UK Chief Medical Officers on the Covid-19 Vaccination programme. It outlined the scientific and Public Health rationale for the dosing schedules of the Pfizer and AZ vaccines and included a supporting statement from the Joint Committee for Vaccination and Immunisation (JCVI) and the relevant chapter from the Green Book [**MM2/59 INQ000425558** (DoH Ref: MMcB/0133)]

  - 1 April 2020 - Clinical trials for treatments to NHS colleagues - In this communication we sought to emphasis to clinical colleagues the importance of recruiting into major clinical trials in order to accumulate evidence of effective clinical treatment for Covid-19. [see **MM2/257 INQ000068589** (DoH Ref: MMcB/6041]

- Other communications

  - 4 December 2020 - Winter challenges [see **MM2/258 INQ000072041** (DoH Ref: MMcB/6063]

  - 11 December 2020 - Self-isolation period [**MM2/60 INQ000425559** (DoH Ref: MMcB/0134)]

  - 14 December 2021 - 15 minute wait for vaccines [**MM2/61 INQ000425561** (DoH Ref: MMcB/0135)]

  - 30 January 2020 - Risk from Covid-19 [**MM2/62 INQ000425561** (DoH Ref: MMcB/0136)]

  - 25 February 2021 - Alert levels [**MM2/63 INQ000425562** (DoH Ref: MMcB/0137)]

169. The above represents some examples of the UK CMOs jointly provided advice some of which was regarded as contentious at the time.

UK Senior Clinicians Group

170. Another group established was the UK Senior Clinicians Group. In meetings of this group senior clinical colleagues from across the UK and NI came together to discuss professional technical issues. This group was not a decision-making group but was an informal information sharing and discussion group for the rapid sharing of information between clinical experts. The UK Senior Clinicians Group met for the first time on 4 March 2020. Between March 2020 and February 2022, the group in some form met around 70 times. The group met around 64 times with UK CMOs in attendance. The meeting was usually chaired by the CMO England.

Understanding the Virus

171. At the start of the pandemic the initial understanding of Covid-19 was very limited. The initial assessment of risk and transmission was therefore largely based upon what was known about similar coronaviruses. Fortunately, there was early identification of the causative virus, and this allowed the rapid development of molecular tests although testing capacity was limited in the early stages of the pandemic, as discussed below. This is covered and summarised comprehensively in the CMOs' Technical report on the Covid-19 pandemic in the UK, Chapter 1, and the associated papers and studies referenced. [**MM2/1 INQ000217254**]. I have highlighted some of the key points only, and the high-level timeline in the developing understanding of the virus, its transmission, infectiveness, and severity of disease. Given that this understanding continued to evolve incrementally, and iteratively as new evidence emerged and was disseminated, it is not possible to provide definitive or specific dates when these changes in understanding occurred.

172. There was continuous learning throughout the Covid-19 pandemic as scientific understanding of the virus increased and as that information was shared. This resulted in the rapid dissemination of knowledge on the virus: its transmission, disease severity and identification of populations and people at increased risk of

severe disease; the development and persistence of immunity; and increased availability of testing and use of different types of tests such as Lateral Flow Devices (LFDs) in the community. This continuous learning also led to improvements in pandemic modelling; improved understanding of individual and population behaviours and how they were influenced by modelling; development of vaccination; the impact of non-pharmaceutical interventions including contact tracing and isolation) and the development of new therapeutic treatments. The increased understanding and knowledge of the virus emerged only incrementally and was considered by SAGE, NERVTAG, shared at UK CMO and Senior Clinicians Group meetings and the Department's Strategic Intelligence (SIG) as appropriate, and in the consideration of associated literature.

173. In all of this it is important to remember that limited data, the associated uncertainty, and evolving knowledge will be a feature in any future pandemic. As occurred during the Covid-19 pandemic, a global effort will be required to share emerging understanding and data on the pathogen (an organism which causes disease) concerned, and to establish research studies that will be vital in improving understanding and improving medical treatment.

174. When the genetical makeup of the virus (genome) was compared with genome sequences of other known human pathogens it was recognised that SARS-CoV-1 which caused the SARS outbreak in 2003 was the closest related human coronavirus with around 80% of the genome similarly to that of Covid-19. SARS-CoV-1 was also known to cause severe human infections and also used the same ACE2 receptor (angiotensin-converting enzyme 2 receptor) to act as a receptor to bind on to human cells and to gain entry causing disease. Other related human viruses were also considered to help provide scientific insight. These included: MERS-CoV, which showed around 50% similarity in its genome but did not use ACE2; NL63, an endemic (common and established) coronavirus that used ACE2; other endemic coronaviruses: OC43, 229E, and HKU1 influenza, as a pandemic respiratory virus.

175. Only later, as data about Covid-19 developed over time did it became apparent that Covid-19 was different from SARS-CoV-1 in several important ways including

pre-symptomatic infectiousness, higher levels of asymptomatic or subclinical infections and routes of transmission. In the early stages of the pandemic, before robust data on Covid-19 became available, it was the knowledge and experience of these related pathogens that informed and guided early understanding of the virus and public health actions and response to the pandemic. This included for example, the prioritisation of potential treatments that had already shown potential benefit against human and zoonotic (transmitted from animal to human) coronaviruses in either laboratory tests or in clinical use, and the recognition of the potential for reinfections due to the previous observation of waning immunity in the case of seasonal coronaviruses. This knowledge also informed early estimates of the incubation period, which was known to be longer for coronaviruses than influenza. In addition, existing data on the environmental persistence of coronaviruses informed early policy on decontamination.

176. I have provided in further detail below and a key timeline of relevant emerging SAGE evidence papers, recommendations and advice which I would in real time have been aware of through first hand access to SAGE evidence and/or through discussion with colleagues including the UKCMOs meeting:

- that Covid-19 was being treated as an airborne high consequence Infectious disease:

  - The minutes of the 2nd SAGE meeting on 28 January 2020 confirmed the transmission route for Covid-19 as respiratory. Whilst I did not attend that meeting and NI did not receive the papers from that meeting, I was fully aware of this fact from around that time.

- that there was evidence of community transmission:

  - 3rd SAGE meeting on 3 February 2020 *"Sustained community transmission outside China should be expected."*

- 5th SAGE on 6 February 2020 *"In light of new evidence of human-to-human transmission beyond China, SAGE advises that the UK geographical case definition should be widened, taking into account available information on air travel volumes from Hubei to other countries, numbers of reported cases in other countries, and understanding of other travel routes."*

- 6th SAGE on 11 February 2020 *"Human-to-human transmission outside China has occurred. Sustained human-to-human transmission outside China cannot be ruled out, but there is as yet no definitive evidence of a sustained outbreak/epidemic elsewhere. Asymptomatic transmission cannot be ruled out and transmission from mildly symptomatic individuals is likely."*

- 9th SAGE on 20 February *"There were differing views within the group about the likelihood of sustained transmission in the UK both currently and in the near future. Some believe it is a realistic possibility that sustained transmission in the UK will become established in the coming weeks while others believe this likelihood is higher and that there may already be sustained transmission."*

- that asymptomatic transmission was possible:

  - Asymptomatic transmission remained a possibility but had not been confirmed.

  - 4th SAGE on 4 February "Asymptomatic transmission cannot be ruled out and transmission from mildly symptomatic individuals is likely."

  - 4th SAGE on 4 February "The currently available data is not adequate to provide evidence for major asymptomatic/subclinical transmission of 2019nCoV. Detailed epidemiological information from more cases and contacts is needed to determine whether transmission can occur from

asymptomatic individuals or during the incubation period on a significant scale".

- 6th SAGE on 11 February "Asymptomatic transmission cannot be ruled out and transmission from mildly symptomatic individuals is likely.

- 11th SAGE on 27 February "Asymptomatic transmission cannot be ruled out and transmission from mildly symptomatic cases likely. Case Fatality rate 2=3% identified cases only. Deaths skewed towards those aged 60-70 (2.21%). 70-80 (5.92%) and 80+ (8.76%)".

- 12th SAGE on 3 March "17. Precise estimates of the CFR are much harder, as the proportion of cases who are asymptomatic is difficult to estimate."

- 13th SAGE on 5th March "•However new data suggests that children under 10 are infected at the same rates as adults, but may be asymptomatic or too mildly infected to come to medical attention. Emerging findings on infection rates do differ from what we know about SARS-CoV and MERS-CoV. Evidence suggests that the clinical course in Covid-19 in young children is milder, although we know relatively little about this and need more data on the clinical c333ourse in adolescents. There are several reports of asymptomatic infection in children, which would appear to be consistent with emerging data relating to infection rates. We have no data on transmissibility of Covid-19 from children to other children or children to adults, save one report of a 3-month-old unwell infant whose parents became symptomatic days after caring for their child with no protective measures. The quality of the included papers was low and we require far more evidence on all aspects of Covid-19 in paediatric populations including seroprevalence studies when an assay is available".

- 16th SAGE – 16 March "20. Antibody testing is particularly vital to address the central unknown question of the ratio of asymptomatic to symptomatic cases.

- As is reflected in minutes and papers from SAGE, there appeared to be a high rate of transmissibility and doubling time in the first half of February [SAGE 3, 4 and 6] of around 4/5 days, 5/6/7 days in Mid March [SAGE 16/17] which was then closer to 3 days by the end of March [SAGE 18 and 19].

- What the infection fatality rate and/ or case mortality rate might be. The 9th SAGE meeting on 20 February 2020 *"Current estimates of the average CFR seen to date are in the range 0.25% – 4%. Current estimates for the fatality rate for people hospitalised in China, who primarily have pneumonia and/or other severe symptoms, are around 15%." Our best estimate of the infection fatality rate is in the range of 0.5% to 1%, ranging from 0.01% in the under 20s to 8% in the over 80s. Precise estimates of the CFR are much harder, as the proportion of cases who are asymptomatic is difficult to estimate. Current estimates of the average CFR seen to date are in the range 0.25% – 4%. Current estimates are that mortality rates are 12% for hospitalised people, from 4% in the under 50s to 20% of over 80s, with 50% mortality in those hospitalised who require invasive ventilation."*

- SAGE meeting 27 February 2020 "*SAGE reviewed Covid-19 planning assumptions and advised that, in the reasonable worst-case scenario, 80% of the UK population may become infected, with an overall 1% fatality rate in those infected. Only a proportion of those infected will experience symptoms. This fatality rate represents a reduction in the number of excess deaths relative to previous planning assumptions (in which a case fatality rate of 2-3% was based purely on identified cases rather than all infected individuals).*

- This fatality rate represents a reduction in the number of excess deaths relative to previous planning assumptions.

- SAGE agreed that the case fatality rate (2-3%) remains the same, but the fatality rate for the overall infected population (identified and unidentified cases) is closer to 1%. This better reflects the expected proportion of mild and possible asymptomatic infections. It still includes an assumption that there is a higher fatality rate in vulnerable groups."

Covid-19 as an airborne high consequence Infectious disease

177. In the first months of the pandemic, when there was only a small number of confirmed Covid-19 cases in the UK, it was agreed to use existing High Consequence Infectious Disease (HCID) protocols to prevent transmission risk within healthcare settings by delivering clinical care in a small number of cases in highly specialised settings. The purpose was twofold: to prevent in so far as possible any spread from confirmed cases; and to optimise the care of patients by allowing knowledge and experience of clinical management to be developed which could then be rapidly shared. The limited number of HCID beds in the UK meant this was only possible when the numbers needing hospitalisation were small and community transmission was limited. This presented challenges for NI given the absence of HCID beds and the difficulties with patient transfer despite UK agreement to facilitate and support such transfers. I was involved in discussions with colleagues in England on the 27 February 2020 when the first case in NI was identified to arrange transfer to an HCID unit in England in keeping with the agreed protocol. Ultimately the transfer was not possible as existing transport arrangements established by the HSCB were not appropriate and a MACA request to the MOD was declined. Clinically the individual was otherwise well and the transfer was not deemed warranted on clinical grounds.

178. During the pandemic, infection prevention and control (IPC) also evolved as the epidemiological picture changed and other elements of the wider response developed with new evidence emerging. For example, changing case definitions and limitation on testing in the first few months of the pandemic made it difficult for healthcare settings to identify and confirm cases and to put appropriate IPC precautions in place. While the first few cases were managed according to high consequence infectious disease (HCID) protocols, as the numbers of patients with

Covid-19 in hospital increased and community transmission increased, spread meant that it was essential that a balance was reached to ensure that there remained proportionate and deliverable care throughout all health and care settings. Transmission within health care setting (nosocomial transmission) was a particular concern during the first and second wave, as healthcare settings worked to manage surging demand while rapidly identifying cases and implementing relevant IPC actions in response. Limited testing early in the first wave complicated this picture further however as testing capacity grew and IPC guidance adapted in response to the changing situation, nosocomial transmission reduced. With widespread community transmission, cases rose rapidly leading to the first wave and the health service saw a surge in demand. At this point it was necessary to simultaneously manage rising Covid-19 care demands alongside existing health needs, rapidly scaling up the arrangements for the clinical care of patients requiring hospital care - including intensive care - while reducing the risk of transmission within healthcare settings recognised that this also directly related to levels of community transmission. As care for Covid-19 patients with urgent and extensive clinical needs including intensive care was prioritised, routine and non-urgent services were paused. This was a regrettable but necessary consequence of the pandemic response.

Transmission and higher risk environments and occupations

179. As in previous pandemics and recent epidemics, and in the early stages of the Covid-19 pandemic where NPIs were the only interventions available, evidence on routes of transmission was important to inform the response. It was established early in the pandemic that the likely principal route of transmission was respiratory, although other secondary routes including faeco-oral could not be excluded. Three main routes of transmission had been considered as potentially important for Covid-19: fomite (contaminated surfaces and objects), droplet, and aerosol spread. The scientific consensus, and the relative importance of these different transmission routes, and the potential role of other routes was continually reviewed, and also as new variants of Covid-19 became established. By January 2020 close contacts of infected individuals had been identified as being at an increased risk, indicating that close range droplet transmission was likely to be

important. It was important, however, to balance the level of infection risk from a particular route of transmission with the likelihood and frequency of exposure to this route in daily activities.

180. As indicated in paragraphs 181 to 183 below, studies of transmission routes for other respiratory viruses and similarities with known viruses such as SARS-CoV-1 which caused the SARS outbreak in 2003 provided scientific insight. While the airborne transmission capabilities of Covid-19 were similar to SARS-CoV-1, it was subsequently identified that there were a number of important differences, such as in timelines of transmission and the much greater role of asymptomatic transmission seen with Covid-19 when compared to SARS-CoV-1. As a respiratory virus, Covid-19 had the potential for transmission via droplets and aerosols, direct physical contact, and indirect physical contact with contaminated surfaces or fomites. Evidence suggested that close contact with a person with acute respiratory infection carried more risk than a contact at greater physical distance, implying the importance of close-range droplet and, as is now understood, short-range aerosol transmission. Previous research into other acute respiratory infections had also shown the importance of transmission in public spaces, including public transport, indoor public places such as shops, restaurants, parties, theatres and places of worship and also suggested a potential role for more distant primarily aerosol transmission. Previous systematic reviews had also shown that regular handwashing reduced the incidence of respiratory infections, implicating a possible role for direct contact and or fomite-based transmission. While this all helped guide early responses strategies to limit transmission, the relative importance of these transmission routes for Covid-19 was initially unclear and required further investigation.

181. Early retrospective cohort studies were helpful in generating evidence. In January 2020, a retrospective cohort study of 41 patients in Wuhan, China provided the initial evidence of human transmission. This study suggested further investigation to exclude major alternate routes of transmission such as faeco-oral and recommended the use of precautions against airborne transmission [see footnote 178 of Exhibit **MM2/1 INQ000217254**]. Similarly, at the start of the pandemic, outbreaks provided opportunities to understand transmission, especially when the

background level of community prevalence was low. Early outbreaks in restaurants in China showed that the highest risk of infection was for those closest to the infected person also known as the "index case" in any outbreak. They also demonstrated infections among people at distant tables, implying that some aerosol transmission had occurred. Similar findings were seen for outbreaks on coaches and trains.

182. An early outbreak investigation in Germany in March 2020, combined with similar studies from China, suggested the importance of pre-symptomatic transmission as some of those infected had only been exposed to the index case prior to that person becoming symptomatic [footnotes 185, 186, and 187 of Exhibit **MM2/1 INQ000217254**]. In addition to these investigations, it was recognised early in the pandemic that there was a need to establish surveillance programmes across a range of settings to provide real-time information on transmission by different routes such as in households, in the community, and in health and social care settings. However, this relied on large scale availability of testing, which was limited in early spring 2020 in the UK as testing capacity was at that time unable to meet the rapidly rising demand [Chapter 6 of Exhibit **MM2/1 INQ000217254**].

183. In April 2020 to maintain an up-to-date overview of emerging evidence the SAGE Environment and Modelling group (EMG) was established. This group continuously monitored best available scientific evidence on transmission routes and the growing evidence for the significant role of aerosol transmission. In July 2020, based on a further review of the existing evidence, the WHO recommended that direct or close contact with infected people via droplet remained the most likely principal route of transmission, and that uncertainty remained about transmission by fomites. While multiple environmental sampling studies demonstrated presence of viable Covid-19 virus and RNA on surfaces for hours to days there were no reports or outbreaks demonstrating fomite transmission and most people who came into contact with infectious surfaces had also had close contact with an infectious person. As the pandemic progressed, the importance of airborne transmission was increasingly recognised and it was established relatively early that transmission was more likely indoors than outdoors. Although the fact that the respiratory route was dominant was established relatively quickly,

confirming the relative contributions of close range and longer distance airborne spread and of fomites took longer.

Higher risk settings for transmission

184. In the absence of specific evidence on transmission of Covid-19, established knowledge of transmission and existing research on respiratory transmitted pathogens helped to identify potential high-risk settings. Existing knowledge about pathogens transmitted predominantly by the respiratory route suggested that high transmission risks included households, schools, hospitals, homeless hostels, prisons and nursing homes and places where people from multiple households could meet such as hospitality settings, especially if they were physically close and, in particular, indoors.

185. In the first few months of the pandemic early mortality data, alongside outbreak studies, indicated that enclosed settings for vulnerable individuals such as homeless people, migrants and prisoners, cruise ships, health and care setting such as hospitals, care homes, care settings for those with learning disabilities, domiciliary care settings and inpatient mental health facilities were higher risk environments. Later in spring 2020, evidence from early outbreaks in choir groups, restaurants and fitness classes was reported. The majority of transmission did not take place within recognised large outbreaks which are more likely to be identified in relatively closed settings than in more open venues such as shops or public transport where tracing of contacts is more difficult and the extent of contact often less clear. In addition, studies of outbreaks highlighting risks in particular settings had to be balanced with the overall epidemiological importance of that setting in a given population. For example, while shopping may not be in of itself high risk, the fact that the majority of people need to shop makes it an important contribution to transmission.

186. In the early days testing was very limited, so outbreaks where multiple people were symptomatic or had died would have been more likely to be reported. Differences in mortality by occupation also gave indications of potential higher risk contexts.

Data from May 2020 showed that mortality was elevated in occupations with high levels of close contact with others including health and care contact, and in those with low pay [footnote 224 of Exhibit **MM2/1 INQ000217254**]. Later analyses in 2021 controlling for key comorbidities with Covid-19 showed that high levels of comorbidities in some occupational groups contributed to these variations, but setting and type of work remained an important factor [footnote 225 of Exhibit **MM2/1 INQ000217254**].

187. Research reviews and analyses that brought together multiple study types were helpful in highlighting consistent signals from particular settings. For example, an analysis of Covid-19 outbreaks in hospitality, retail and leisure facilities in the UK and elsewhere, presented to SAGE in January 2021, used multiple analytical approaches to examine transmission risks in these settings including social contacts over time; case-control studies; secondary attack rates; cluster concordance [footnote 230 of Exhibit **MM2/1 INQ000217254**]. This analysis reinforced the initial fundamental principles that transmission risks were highest in poorly ventilated and crowded settings, where mixing of people was for an extended period of time and where population turnover was high. Further analysis of cases by occupation and sector highlighted that risk is not necessarily the same across a particular sector or setting, with a range of socio-economic factors also influencing risks [footnote 231 of Exhibit **MM2/1 INQ000217254**]. For example, food processing is a sector that was associated with a number of large outbreaks as was the case in NI and the RoI. This was a sector that was subject to discussion at the weekly meetings between myself and my counterpart in the RoI as it contributed to outbreaks in NI and the RoI. Further analysis suggested that the risk of transmission depended not only on the characteristics of the settings such as ventilation and social distancing, but also the socio-economic characteristics of the workforce, including shared housing, pressure to continue working even if unwell due to lack of sick pay, and use of shared transport.

Asymptomatic infection and transmission

188. From the outset, asymptomatic infection and transmission were considered possible, but particularly in the first few months of the pandemic there was an

absence of hard data and scientific evidence on the extent of asymptomatic infection and transmission. Existing knowledge of related human coronaviruses suggested that asymptomatic infection and transmissions were possible. Work was however needed to clarify the proportion of infections that were asymptomatic, and the role of asymptomatic transmission. It should be noted that asymptomatic infection does not necessarily lead to asymptomatic transmission though it is a prerequisite, this was not however always well understood in some public reporting.

189. Knowing the proportion of infections that were asymptomatic was important for case detection strategies and determining the infection fatality rate. Understanding the role of asymptomatic transmission was important for identifying which public health measures were necessary to bring R below 1. Transmission of infection from asymptomatic cases can be difficult to control. The infectious timeline is also difficult to establish in the absence of symptoms as a marker of infection or infectiousness adding complexity to disease control. Asymptomatic cases cannot be detected in the absence of testing, and as indicated, this was a significant constraint globally and in the UK in the initial phase of the pandemic and this delayed the estimation of asymptomatic cases.

190. Early case and cluster reports raised the possibility of asymptomatic infection and transmission but often with poor differentiation between asymptomatic and pre-symptomatic transmission. At this stage, robust data on asymptomatic infections and whether they may be infectious to others was not available and estimates of the proportion of asymptomatic individuals varied widely. After a few months, studies of outbreaks in closed environments and facilities provided early estimates of the proportion of PCR-confirmed asymptomatic cases. However, many of these studies may have included some pre-symptomatic cases. Over time, evidence of positive tests in asymptomatic individuals increased with more reliable data on asymptomatic transmission. With respect to timelines and changes in understanding of the transmission of the virus by mid-2020, estimates of the asymptomatic proportion in closed and or institutional facilities and settings had been published and the first evidence that infectious virus could be recovered from

asymptomatic individuals emerged. [see footnotes 244, 245, 246, 251, 252, and 253 of Exhibit **MM2/1 INQ000217254**].

191. Early review studies of the number of people with asymptomatic infection followed, with initially wide variation in the estimates of asymptomatic infection. Studies that were able to differentiate between pre-symptomatic and asymptomatic cases provided lower estimates [footnotes 238 and 242 of Exhibit **MM2/1 INQ000217254**]. It was however not until large random sample swabbing studies, such as Real-time Assessment of Community Transmission (REACT) and those led by the ONS, established robust regular estimates of the proportion of people with asymptomatic infection. By mid to late 2020, studies of household transmission were in place and were able to identify asymptomatic infections and transmission and the viral load dynamics (how much virus was being carried and shed) in asymptomatic individuals had been characterised [footnotes 243, 254, and 257 of Exhibit **MM2/1 INQ000217254**]. The fact that asymptomatic transmission occurred was confirmed well in advance of establishing what proportion of transmission was from asymptomatic people and whether, if all symptomatic transmission ceased due to case isolation, whether asymptomatic transmission alone was capable of sustaining the reproduction number (R) above 1.

192. Understanding the duration of infectiousness is essential to infection prevention and control and will remain so in any future pandemic. Infections vary widely in the duration of infectiousness. It was important to understand the duration of the infectious period of Covid-19 to make informed decisions on the duration of isolation and contact tracing windows, to prevent transmission in health and care settings, and to be able to understand and model the dynamics of the pandemic. For Covid-19, epidemiological and virological methods were primarily used to develop this understanding.

High rate of transmissibility

193. Much of the early evidence from SAGE was focused on the 'doubling time' which did vary between the various scientific papers during February 2020 but was

mainly assessed as around 4/5 days based on what was happening outside of the UK and which indicates a high rate of transmission. The UK was being variously assessed as being two to three weeks behind mainland Europe.

194. Within the UK a paper submitted to SAGE on 18 March 2020 estimated that the doubling time in London, which was ahead of the rest of the UK was 5-7 days. A paper prepared by the London School of Hygiene and Tropical Medicine (LSHTM) for SAGE on 23 March 2020 estimated that the epidemic doubling time was then about 7 days (CI: 4 to 40) in the UK. At the same meeting a paper submitted by Lancaster University estimated that the doubling time was 4.4 days and a paper submitted by the University of Manchester stated "*Doubling time in the UK and most EU countries appears to be consistently < 3 days*". The SAGE minutes from that meeting concluded that "*the accumulation of cases over the previous two weeks suggests the reproduction number is slightly higher than previously reported. The science suggests this is now around 2.6 to 2.8. The doubling time for ICU patients is estimated to be 3 to 4 days*."

195. Difficulties arising from gaps and weaknesses in available data meant that estimates of doubling time and the reproduction number were heavily caveated. However, the SPI-M-O working group on scenario planning consensus statement dated 25 March 2020 concluded "*It was agreed that the doubling time was the most important epidemiological factor in determining the severity of a mitigated reasonable worst case, and that it was prudent for worst case planning purposes to use the 3.3 days, per Imperial's model, as it was lower than the 4 days modelled by Warwick. The reproduction number was considered less important to this but that, while a reproduction number greater than 2.8 could not be ruled out, it was sufficiently far removed from what has been seen in other countries that it was appropriate to plan for 2.8 in the Reasonable Worst Case*."

Disease Severity and Mortality

196. One of the key early questions for understanding the mortality risk of a disease is to understand if someone is infected with a disease how likely it is that they will die. The answer to that question is captured by the infection fatality rate (IFR)

which is the number of deaths from a disease divided by the total number of cases. The case fatality rate (CFR) is the ratio between confirmed deaths and confirmed cases. The CFR can be a poor measure of the mortality risk of the disease as many cases may not be confirmed. In the very early stages of this pandemic, as was the case for H1N1 influenza pandemic in 2009 and the SARS-CoV-1 outbreak in 2003, it was difficult to ascertain mortality rates. This was also the case in 2003 with SARS-CoV-1 where initial case fatality rate (CFR) figures underestimated severity as early estimates missed delayed deaths. In the H1N1 influenza pandemic in 2009, initial CFR estimates were about 500 times higher than the later recognised infection fatality rate (IFR) of 0.001% to 0.002%. This occurred because of initially measuring only symptomatic or confirmed cases and missing milder and asymptomatic ones. Later, more accurate estimations of the IFR for H1N1 influenza arose from studies on outbreaks within specific settings such as schools.

197. In the early stages of the pandemic there were varying estimates of CFRs for Covid-19 before widespread surveillance was set up. The initial estimates of the CFR came from dividing numbers of reported deaths by the estimated number of cases in Wuhan in China at a given time. These estimates were improved by Chinese Centres for Disease Control (CCDC) data. In the middle of February 2020, the CCDC weekly bulletin provided a CFR estimate of 2.3% from 72,314 cases identified using either PCR testing (63%) or clinical diagnosis. Of this group 1.3% were thought asymptomatic. Of the PCR confirmed cases, 81% were classified as mild (which included non-pneumonia or mild pneumonia) and 19% were described as severe. The CFR for those with severe disease was high at 49% and increased substantially with age. Another early study which included a wider range of cases from PCR testing for international travellers arriving to China, along with cases and deaths in Wuhan reported a CFR of 1.4% for symptomatic Covid-19. It was initially difficult to interpret the applicability of such studies for a UK context partly because denominators and numerators varied and also because the populations differed from the UK in several important ways including age distribution and differences in the provision of and accessibility of health care.

198. Population-wide surveillance including people testing positive and surveillance of those with symptoms when linked to outcomes such as hospitalisation and deaths provided high quality data for the routine calculation of CFRs by providing a robust denominator. Initially in the UK this was done using serology (antibody testing), which was difficult to interpret due to waning antibody levels, and after late spring 2020 by large scale surveillance studies such as the Office for National Statistics (ONS) Covid-19 Infection Survey (CIS), Real-time Assessment of Community Transmission (REACT) and Early Assessment of Vaccine and anti-viral Effectiveness 2 (EAVE-2), and in cohorts such as SIREN in healthcare workers (The SIREN study was a large, established cohort study in health-care workers that enabled accurate measurement of asymptomatic and symptomatic infection rates in the vaccinated and unvaccinated population) and Vivaldi in care homes The VIVALDI Study was a national project launched to investigate Covid-19 infections in care homes. The aim of this study was to find out how many care home staff and residents were infected with Covid-19, how effective vaccines are against infection, and to inform decisions around the best approach to Covid-19 testing. The calculation of an accurate IFR required serological testing of a representative random sample of the population and establishing a regular serological survey allowing an estimate of the severity of disease on a regular basis. All of this took time to establish and for results to indicate severity more clearly and CFR was available much more quickly.

199. The early establishment of data storage, data sharing and linkage was important for the calculation of these statistics through rapid analysis. Like previous experience with H1N1 in 2009 the investigations of large outbreaks of Covid-19, also supported CFR and IFR estimates early on, as well as providing signals on the proportion of asymptomatic infections. An outbreak on the cruise ship Diamond Princess in February 2020 provided early data on outcomes for 3,711 passengers and crew and gave a CFR of 2.6% and an IFR of 1.3%, which was likely due to testing across the ship picking up asymptomatic cases. Studies of Wuhan residents outlining the likely delay between onset and death were critical in estimating both CFRs and as testing and surveillance expanded in due course IFRs. It was not until late spring 2020, when many countries were experiencing high transmission and testing capacity was being significantly increased and with

larger scale surveillance studies, that a shift from CFR to IFR occurred. Based on this more robust data estimates at that time indicated an overall IFR of around 1%.

200. The presence of asymptomatic cases and asymptomatic transmission for Covid-19 was particularly problematic in early mortality rate estimates, and this had not been the case for the closely related SARS-CoV-1 in which peak infectiousness matched the time of peak clinical symptoms. Many early studies missed asymptomatic cases in the absence of widespread testing and community surveillance. This was also the case in the UK in February to April 2020 when many cases of Covid-19 occurred in the community without being confirmed by testing which likely contributed to higher early CFR estimates.

201. Mortality estimates varied significantly from country to country most probably due to different age demographics in the population and differences of other risk factors such as obesity, levels of social deprivation and importantly comorbidities. Comparison was also more difficult as hospitalisation criteria, testing availability and case definitions varied over time and across the different health systems in different countries. For example, a study in Italy, where 37.6% of cases were aged 70 years or older, estimated a CFR of 7.3% up to 15 March 2020, compared to a much lower CFR in a Chinese study where just 11.9% of cases were over 70. Understanding of how these complex and interacting factors influenced severe disease evolved throughout the pandemic and highlighted the importance of continual evaluation of variation in severity.

202. Obesity was also recognised early in the pandemic as an important risk factor for increased mortality. A study of over 13,000 hospital admissions in England found a J-shaped relationship between Body Mass Index (BMI) and death from Covid-19 with a BMI of 40 associated with about a 2-fold increased risk of death. Geographic location, degree of social deprivation and the presence of co-morbidities, which in some cases were linked to ethnicity [**MM2/64 INQ000425563** (DoH Ref: MMcB/0138)], also played an important part in understanding rates of severe Covid-19 and disease outcomes overall, reference page 34-38, Chapter 1, UK CMO Technical Report [**MM2/1 INQ000217254**]. In the working-age population, Covid-19 death rates were markedly and consistently higher for men

than for women throughout the pandemic highlighting the importance of gender as a risk factor for mortality.

203. Given all these differences, changes in all-cause mortality across different countries was a more helpful indicator as it was not sensitive to differences in diagnostic or testing data and included both direct and indirect mortality impacts from the pandemic. That said, geographical comparisons even with all-cause mortality needed to be handled very carefully as direct comparisons are not always valid.

204. Other measures of disease severity including Covid-19 admissions to hospital and ICU were particularly important to plan healthcare delivery. Understanding delays between infection and severe disease was also vital in estimating the correct denominator and rates of severe disease at any given point. The mean delay from infection to death for Covid-19 was around 4 weeks with wide variation. Many of the early patients in the UK with Covid-19 were travellers returning from Europe, the majority of whom were young and otherwise healthy individuals with mild disease and were not representative of the wider population. Within a matter of weeks however, the disease had spread more widely, and hospitals were faced with large numbers of older patients with severe disease and high mortality.

205. As case rates rose, determining wider population levels of morbidity was complex. Although routine statistics on the number of people requiring hospital care within the UK was available, the need to prioritise tests given the initial limited testing capacity meant that it was difficult to estimate the proportion of cases likely to require hospital admission to an Intensive Care Unit (ICU). As indicated in paragraphs 198 to 203, comparisons using other countries hospitalisation rates as with CFRs and IFRs, was complicated by differing age structures in the population, different criteria for hospitalisation criteria and difference in access to healthcare.

206. A further complication in such comparisons was that in some countries all cases were hospitalised to isolate those who were infected while other countries only admitted those who required hospital care on clinical grounds. An early report published 19 February 2020, [**MM2/65 INQ000425564** (DoH Ref: MMcB/0139)],

from Hubei province, China, found that 80.9% of identified cases were mild indicating that hospitalisation was unlikely to be required for the majority of cases, although its estimation of cases requiring hospitalisation was undoubtedly too high, most probably because it was limited to symptomatic patients. Widespread testing subsequently enabled more accurate estimates which gave significantly lower percentages for example a study in Indiana, USA, in early 2020 found an infection hospitalisation rate (IHR) of 2.3%, while a similar analysis in the UK at the end of 2020 (for the wild type strain) gave 3.5%.

Mass Gatherings

207. The advice I provided to the Health Minister and in turn to Executive Ministers in relation to mass gatherings would have been informed and aligned with advice an recommendations of SAGE as in [**MM2/66 INQ000051925**], [**MM2/67 INQ000106109**], [**MM2/44 INQ000203874**], [**MM2/68 INQ000061520**], [**MM2/69 INQ000061521**], [**MM2/70 INQ000061522**], [**MM2/71 INQ000236391**]. As indicated in paragraph 125 it was neither necessary nor would it have been technically feasible for NI to seek to replicate the expert scientific advice provided by SAGE. I have provided some examples of the evidence generated which improved understanding of the attendant risks data on which was presented at UK Senior Clinicians Group, UK CMO meetings and in discussions at SIG in NI.

208. The impact of stopping mass gatherings on transmission etc. was considered at SAGE meetings on 13 February, 3 and 5 March 2020. The conclusion at the SAGE meeting on 5 March was "*Stopping mass gatherings has a minimal effect, particularly on its own*".

209. Non-pharmaceutical interventions (NPIs), also known as 'public health and social measures', refer to the measures to reduce transmission not dependent on drugs, vaccines or other specific medical countermeasures. The aim throughout the pandemic through research and science was to get to medical countermeasures as soon as possible. At the start of the pandemic when medical countermeasures were not available almost all of the actions to blunt the effect and impact of the pandemic, save lives and to prevent the health service being overwhelmed, had to

be NPIs. NPIs had also been a standard part of pandemic planning since 2004, but they were not needed at scale in the 2009 H1N1 influenza pandemic. This pandemic was the first time in living memory that NPIs were so extensively used and at such scale and duration. The need for the extensive use of NPIs was greatest early in this pandemic when the population was all almost immunologically naïve with no previous exposure to or immunity to the virus as in the first wave, or mainly immunologically naïve with no immunity to the virus as in the second wave. This was also the time when much was unknown about the virus, spread was rapid, and mortality and morbidity were both tragically high. As medical countermeasures came on stream from December 2020 the relative contribution of NPIs began to decrease, however this was a gradual process. The success of NPIs depended on the remarkable response of people from all parts of society acting together to protect the most vulnerable, often at significant disadvantage to themselves. That they did so, near universally over prolonged periods is one of the most important lessons of this pandemic, and a remarkable tribute to the widespread sense of community action and response across society and is to be commended.

210. One of the NPIs to reduce the number of personal contacts was to introduce limits on the numbers and settings for gatherings and public events to reduce mixing between households in the community and thereby drive down transmission. While the approach was broadly similar across the UK and the RoI there was some variation in how this was applied across the UK nations throughout the pandemic. As is addressed in the CMO Technical Report Chapter 8 page 247 - 248 as the pandemic evolved there was a greater understanding of how, to what extent and by what means transmission occurred at such events which was informed and supported by epidemiological studies of outbreaks. This informed a growing understanding of the potential role of mass gatherings and events in outbreaks of Covid-19.

211. See, for example, Brandal Lin T, MacDonald Emily, Veneti Lamprini, Ravlo Tine, Lange Heidi, Naseer Umaer, Feruglio Siri, Bragstad Karoline, Hungnes Olav, Ødeskaug Liz E., Hagen Frode, Hanch-Hansen Kristian E et al. Outbreak caused by the SARS-CoV-2 Omicron variant in Norway, November to December 2021

[**MM2/71 INQ000425565** (DoH Ref: MMcB/0140)]. Also of relevance, Dasha Majraa, Jayme Benson, Jennifer Pitts, Justin Stebbing. SARS-CoV-2 (COVID-19) superspreader events, Journal of Infection, 2021. Vol 82, Pp 36-40 [**MM2/73 INQ000425566** (DoH Ref: MMcB/0141)].

212. In regard to and having further considered the advice I was providing to the Health Minister on mass gatherings in early March 2020, this was of particular relevance in the period preceding the Saint Patrick Day parades planned for the 17 March in NI and in the RoI. Whilst at this stage public gatherings had not been banned anywhere in the UK, and there had been no government advice to cancel events, the Department was aware that St Patrick's Day events had been cancelled in Belfast, Newry, Downpatrick and Derry City and Strabane Council. It was fully recognised that this was a difficult issue. There was a legitimate concern in SAGE discussions and minutes at that time if mass events due to be held outside in the open air were cancelled particularly at short notice, then there was a risk that people would instead watch them in indoor crowded environments including pubs and possibly increase the risk of transmission.

213. With the benefit of hindsight while outdoor events are considerably safer than indoor ones from the perspective of the transmission of Covid-19, the fact that some events proceeded elsewhere in the UK with media coverage of people mixing at such events risked sending a message of normality when that was not the case and this was regrettable. At that time the risks associated with travel to and from venues and social mixing before and after such events in addition to queuing to get into the events themselves was probably underestimated. To my recollection most or all such events did not proceed in NI and decisions were made by the organisers to cancel. It is not possible to assess the relative difference in the spread of infection between those events that did take place and the impact had those events been cancelled with people therefore mixing in crowed indoor environments. In June 2020, for example, SAGE noted the strong evidence for super-spreader events, and in August 2020 the SAGE Environmental Modelling Group and Public Health England (PHE, subsequently the UK Health Security Agency (UKHSA)) produced a joint review of evidence that singing and shouting

were associated with transmission of Covid-19 [**MM2/74 INQ000425567** (DoH Ref: MMcB/0142)] and [**MM2/75 INQ000425568** (DoH Ref: MMcB/0143)].

214. The generation of this type of evidence gave greater clarity on some potential risks for different types of activities, their settings and numbers of participants. However, the dynamics of transmission is complex, varies by event and setting, attendees and their relationships, the behaviours within an event or setting and the background epidemiology such as dominant variants and their transmissibility and community case rates at the time. Therefore, assessing the risk of any given events, settings or activities is highly complex and not straightforward. For example, the closeness of the relationship with other attendees at an event may be as important as the setting or size of the event, as it may relate to the sharing of transport or social interactions before or after the event. One meta-analysis found that contacts at social events with family and friends were higher than those for casual contacts [**MM2/76 INQ000425569** (DoH Ref: MMcB/0144)].

215. The type and setting of gatherings and events were important factors in the extent to which they enabled transmission, as well as possible mitigations such as testing before attendance and after events, ventilation and the use of face coverings. The UK Events Research Programme, which examined the risk of Covid-19 transmission from attendance at events and interventions to reduce the risk, pointed out the importance of these measures to limit transmission. This programme was established across UKG Departments to examine the risk of transmission of Covid-19 from attendance at events and to make recommendations to the UK Prime Minister, and the Secretaries of State for DCMS, BEIS and DHSC on how restrictions could be safely lifted. However, low testing adherence following its pilot events limited its ability to reach firm conclusions on how far particular mitigations at events impacted on transmission [**MM2/77 INQ000425570** (DoH Ref: MMcB/0145)].

216. There was a particular concern about the impact of limiting social mixing at one-off major life events where the timing was not movable, in particular end-of-life meetings and events such as wakes and funerals. The family and social importance and the cultural significance of these is considerable as a mark of

respect to those deceased and to provide support to those bereaved and was fully recognised. Such events also often involved elderly or medically vulnerable people mixing. Getting the balance right here was extremely difficult for policymakers and equally so in providing advice to inform those decisions. I fully recognise that the impact of the restrictions on such major life events were significant and material, from funerals and weddings to graduations and christenings. As once in a lifetime events understandably some of these were not repeatably and the impact was profound and deeply regrettably.

217. Early in the pandemic my role also involved seeking to ensure that NI had the ability to introduce a range of NPIs to limit community transmission should these be required. NI did not at the outset of the pandemic have the relevant powers to restrict mass gatherings. On the 27 February NI was involved in collective considerations and discussions with respective administrations across the UK to consider the legal basis within existing legislation should it be necessary to restrict mass gathering given the recent lockdowns in Italy. [. At that time, it was the Department's understanding – which was later confirmed – that the power, relating to mass gatherings, did not exist under our Public Health Act (Northern Ireland) 1967. The then proposed draft clauses for the UK Bill were essentially seeking to replicate the provisions of Part 2A of the Public Health (Control of Disease) Act 1984 for England and Wales. On the 27 February I was asked by the Chief Environmental Health Office within CMOG to consider the latest version of the draft clauses for information and to advise if I had any comment or views. The advice provided to me at that time was that draft section 25(C)(4)(b) would provide NI regulation making powers in respect of a prohibition or restriction relating to the holding of an event or gathering, and section 25Q allowed for regulations to be made by emergency procedure. I was advised that the intent was to draft regulations similar to those made under the 1984 Act and the more recent Coronavirus Regulations for England, however, work has not yet commenced on this and that it was hoped that these drafts would be completed and ready to go before the UK Bill receives Royal Accent.

218. This proposed approach would then leave NI in a similar position to England and Scotland. From that perspective, in policy terms, I agreed with the advice provided

to me that it would be desirable for NI to be included in UK powers that would allow for directions to be issued if the need was urgent rather than having to resort to making regulations. While it was acknowledged that this could also create a potential overlap with the clauses that we were submitting to essentially replicate Part 2A of the 84 Act, I agreed with colleagues that given the current rapidly evolving situation that subject to the views of Ministers that we should move to cover this and have the powers immediately available and review at a later date. The advice to me suggested that such a power would have to sit with a particular government department, most likely the Department. The advice provided further suggested that the Chief Medical Officer would be given a role in terms of determining whether a situation merits immediate action by direction. In the case of NI, the advice I received recommended that it seemed more appropriate that this role would fall to me as CMO rather than the Public Health Agency as it was I as the CMO who was ultimately responsible for public health and medical advice to the Health Minister. I supported the purposed approach.

219. On 10 March 2020 TEO accepted policy responsibility for 'mass gatherings', [**MM2/78 INQ000425571** (DoH Ref: MMcB/0146)], and [**MM2/79 INQ000425572** (DoH Ref: MMcB/0147)]

220. It was my view at the time, reflected in email exchanges on 5 March 2020 to TEO that the role of the Department and particularly myself as CMO should primarily be in providing advice in respect of the impact on transmission of mass gatherings and the need to otherwise restrict such gatherings and if so to provide and advice and guidance on the associated public health messaging. While a decision on the appropriateness and timing of social distancing measures including a restriction on mass gathering would therefore be informed by my advice as CMO reflecting the scientific advice provided to UK CMOs by SAGE any decision were for Ministers. Given that any decisions under such powers were likely to be significant and cross-cutting, it was my view at that time that there may be benefit in such powers residing in TEO with respective Ministers although I had not as yet discussed this with the Health Minister, although I recall I subsequently did so. I also expressed concerns at that time of the need to consider capacity across all Departments and the fact that increasingly the Department would understandably be increasingly

focused on the health response consistent with our role as lead government department. In relation to the timing of introduction, I expressed the view that to be effective social distancing interventions would need to be introduced before the peak. For all of those reasons I believe there were practical reasons at that time as to why there may be advantage in TEO retaining responsibility.

221. On the 11 March 2020, I received an email from TEO [see Exhibit **MM2/79 INQ000425572** (DoH Ref: MMcB/0147)] indicating that in response to a TEO submission on 6 March 2020 that the First Minister and deputy First Minister had agreed the recommendations that the new powers are necessary and should be exercisable by TEO. The response from TEO indicated that as this was regarded as a cross-cutting matter, that they would secure Executive approval, but that need not hold up work on the Bill and furthermore that the Departmental Solicitors Office had provided an NI draft of the Whitehall instructions. Prior to this on the 10 March 2020 I had been copied into an email between TEO officials and others which indicated that the two matters under consideration were 1. Whether the powers would be extended to include NI and 2. Whether the powers would be retained by TEO or the Department.

First significant sources of information

222. From a review of my emails in 2020, I first became aware of what was subsequently known as Covid-19 on the 7 January 2020 I received an email [**MM2/80 INQ000425573** (DoH Ref: MMcB/0148)] from one of my team headed "Updates from PHE weekly health protection teleconference 7.01.2020." The update from PHE was "*China - 59 cases of undiagnosed Pneumonia reported from Wuhan City, Hubei province, China. The following pathogens have been excluded as causes: Seasonal Influenza, Avian Influenza, SARS and MERS. Active ongoing monitoring of the situation is in place*" and this was my first significant source of information on Covid-19. It had been reported to WHO on 31 December 2019. A few days later, on 10 January 2020, I was copied via email [**MM2/81 INQ000425574** (DoH Ref: MMcB/0149)] into a press release which Public Health England were issuing that day titled "*Wuhan novel coronavirus and avian flu: advice for travellers over Chinese New Year*". The press release had been shared

by PHE with the PHA. My understanding of the importance of this particular infection incrementally increased throughout January.

223. From in and around December 2019, I was aware of emerging evidence of a new infectious agent in China, and from mid-January 2020 I was aware of the risk of human-to-human transmission of the virus, primarily from scientific and media coverage. The extensive nature of media coverage and social media coverage throughout the pandemic, beginning in January 2020, meant that this is the first public health emergency in my experience were the general public and political representatives were being 'briefed' in real-time by the media and via social media at the same time, and sometimes even before they heard from officials and healthcare professionals. This media 'briefing' was in the main, both informed and balanced, and it communicated key public health advice and in my experience particularly so in NI. However, coverage on social media was often inaccurate and presented additional challenges throughout the pandemic.

224. As I have previously indicated a considerable body of work was then underway primarily led by the PHA. However, from around 15 January 2020 I began to brief the Health Minister with a first formal written submission to the Health Minister on 22 January 2020. I met with the Health Minister at 3.30 p.m. on 23 January to brief him face to face in relation to this submission.

225. The first precautionary SAGE meeting on what subsequently became known as Covid-19 I understand occurred on 22 January. On 24 January I supported the Health Minister at a meeting of COBR (M) where Chris Whitty outlined a number of possible scenarios [**MM2/82 INQ000425575** (DoH Ref: MMcB/0150)] for how Covid-19 might progress.

226. At this time, I am unable to find evidence of SAGE minutes and papers being routinely circulated to me circulated until after the fourth meeting of SAGE, when the minutes of the third and further SAGE meetings [**MM2/83 INQ000254712** (DoH Ref: MMcB/0151)] and [**MM2/84 INQ000254713** (DoH Ref: MMcB/0152)] and an amended version of the fourth SAGE meeting minutes [**MM2/85 INQ000425578 MM2/85a INQ000425579** (DoH Ref: MMcB/0153)] were emailed to me which I

acknowledged receipt of in an email to OCMO England (Chris Whitty's office) [**MM2/86 INQ000425581** (DoH Ref: MMcB/0154)] dated the 5 February. Prior to this the first UK CMO Covid-19 specific meeting was the 24 January when there was further discussion on the rapidly evolving situation in advance of a COBR (M) meeting held the same day.

State of knowledge and assessment of risk at end of January 2020

227. The first Covid-19 related death in Europe was reported, in France, on 15 February 2020, and the first cases of Covid-19 in the UK were at the end of January when two foreign nationals tested positive. The first presumptive positive case in NI was on 27 February 2020. By the end of January my assessment of the risk Covid-19 posed to NI is summarised and set out in the paragraphs below.

228. Emerging evidence of person-to-person spread of Covid-19 was highlighted in an update to the Health Minister from Departmental officials on 22 January 2020 the same day as WHO made an announcement on the situation and this was covered in a written statement to the NI Assembly by the Health Minister on 24 January 2020.

229. It was around this time and subsequently as I recall following WHO updates; updates from PHA on PHE IMT Meetings; the request from PHA on 22 January to establish HSC silver; a UK CMO meeting on 24 January and the COBR (M) meeting the same day that I was fully aware of the potential gravity of the outbreak of Covid-19 in China, although the degree of uncertainty around this still remained very high. I was discussing the emerging information informally with colleagues in the Department most probably including the Permanent Secretary as well as with the Health Minister however I have no record of any formal discussion or meetings. At this time the number of Covid-19 cases reported in Europe was in low double figures, and I and colleagues in the Department were leading on the issue from an NI perspective and attending relevant meetings.

230. At the end of this period the minutes of the 4th meeting of SAGE which took place on 4 February 2020 record that the outbreak in Wuhan was expected to peak in the next 3 to 5 weeks. They also recorded that "*There will be a lag before it peaks in China, then further lags before it peaks elsewhere in the world if it spreads widely.*" The minutes also recorded an action for "SPI-M to produce projections of when the epidemic will peak as well as overall duration of outbreak in 1. Wuhan, 2. China and 3. UK – if we get sustained person-to-person transmission. In addition, SPI-M to advise on countries that may be most affected.

231. A paper presented at the same meeting of SAGE, SPI-M-O: Consensus Statement on 2019 Novel Coronavirus (2019-nCoV), concluded that *"while there wasn't sufficient evidence to estimate a reasonable worst-case scenario (RWC) for 2019-nCoV, the RWC for pandemic influenza would be an appropriate planning scenario at that point."*

232. I would have known that on 4th February that there had not yet been modelling to indicate when the virus was likely to peak in the UK and been aware of the position of SPI-M-O on the reasonable worst-case scenario. The main focus of discussion was on considering multiple different possible scenarios taking account of different possible values for R, different possible options on which NPIs to introduce and when to introduce them, and different possible levels of compliance with NPIs by members of the public. This is reflected in papers presented to SAGE meetings over the following weeks.

233. I am sure that at that time we were discussing these various scenarios and what impact NPIs for example would have on the timeline for the spread of Covid-19 including the peak although we would have for example been discussing surge planning on the basis of possible different scenarios. Discussion about when the virus might peak in any part of the UK including NI would most likely have been as part of considering these various different scenarios to inform surge planning. Things were moving rapidly at the time and certainly by 10 February if not more likely earlier, I was aware of the assessment of SPI-M-O that the virus was likely to peak sometime in late April or early May [**MM2/87 INQ000425582** (DoH Ref:

MMcB/0155)]. This was after the WhatsApp messages sent between Mr Pengelly and Sir David Sterling on 6 February 2020 [**MM2/88 INQ000308436**].

234. In relation to these WhatsApp messages, I do not believe I am able to interpret other people's thinking. I am not sure that too much should be inferred from this exchange between senior civil servants with no technical knowledge and which was based on their interpretation of briefing and updates that they had received. I do not believe it is accurate to infer that this exchange and the views expressed suggest that the risk posed by Covid-19 was being equated to a "bad flu" or was in any sense seeking to trivialise the potential impact. It is also important to highlight that each year seasonal influenza causes between 10,000 and 25,000 deaths in England and Wales depending on severity. It is estimated for example that the influenza pandemic in 1918 caused 50 million deaths worldwide and 228,000 deaths in Britain alone. There was at that time still uncertainty on the potential severity of disease once established in the UK with its population demography and health service model as compared to other countries internationally.

235. At this time in the absence of specific hard data on Covid-19 with respect to its transmissibility, severity of illness including deaths, the planning assumptions and the scenarios with respect to Reasonable Worst-Case Scenario (RWSC) in pandemic influenza plan were in my view a reasonable basis for initial planning. At that time the working assumption was that the existing pandemic influenza plan could be adapted to address other novel pathogens however in the event it was of limited use. If anyone did harbour such misconceptions at the time of this WhatsApp exchange between Mr Pengelly and Sir David Sterling, the flow of information from COBR over the following two weeks, updates to the Executive by the Health Minister; the presentation by the DCMO to CCG on 20 February and the updates by the then Departmental Permanent Secretary Mr Pengelly to PSG on 7 February and 21 February would and should have quickly dispelled them. I can say that from my certain knowledge that for myself, my staff, professional and policy staff across the Department, the PHA, HSCB and the rest of the HSC there was no such misconception as is reflected in the volume, variety and pace of work being taken forward at that time.

236. I have reviewed and considered if this WhatsApp exchange, between Richard Pengelly and Sir David Sterling, demonstrates that the potential risk that Covid-19 would present to hospital and care homes was recognised at this time. From the second half of January 2020 there was growing concern of the risk to the UK posed by Covid-19, and this is reflected in all the actions that were being taken in NI at that time with respect to preparing for the potential risks and impact of Covid-19.

237. The assessment of risk more generally to the population and to health and social care services including hospitals and care homes is best summarised by a 5 February 2020 [**MM2/89 INQ000425583 MM2/89a INQ000425584** (DoH Ref: MMcB/0156)] briefing on novel coronavirus for Departmental policy leads. This paper from the Director of Population Health to Departmental policy leads highlighted *"unfortunately, as expected"* the continued spread of the novel coronavirus globally and reported that on the advice of the UK CMOs that the risk level in the UK had been raised from low to moderate following the WHOs declaration of a PHEIC and confirmation of the first cases in the UK.

238. It advised of the planning and preparation in NI to date: the stand up of the Departments Health Gold Emergency Operations Centre (EOC) on Monday 27 February; the establishment of HSC Health Silver, led jointly by the PHA, HSCB and BSO from 22 January; ongoing daily calls between Health Gold and Health Silver to aid co-ordination; establishment of a dedicated 24 hour helpline to provide advice for members of the public who have returned from China in the past 14 days, or who have been in contact with a confirmed case of novel Coronavirus; the establishment of transfer arrangements to the Regional Infectious Disease Unit, Ward 7a Royal Victoria Hospital if a decision is taken to admit a patient who tests positive for coronavirus and that plans were also being drawn up to enable a patient to be transferred to a High Consequence Infectious Diseases (HCID) Unit in England, if required. The briefing also included the following updates:

- At paragraph 7: "*The UK CMOs have now agreed that, given the potential health and social consequences of a major epidemic, it is now appropriate to plan and prepare for the reasonable worst-case scenario of Influenza*

pandemic moderate severity, without a vaccine. DHSC has proposed, and this has been agreed with the DAs, that existing Pandemic Flu guidance would be the most appropriate model to use in the event of planning for the potential impact on health and society."

- Paragraph 8: "*The two major scenarios for cross government planning are:*
  1) China has a major outbreak but brings it under control (R <1 i.e. less than one person infected for each additional confirmed case). There are cases seeded out to other countries, including almost certainly the UK, but these do not lead to sustained onward transmission (there may be a few secondary cases). The main aim is to ensure we do not have outbreaks from index travellers, so that if the epidemic is brought under control it has had minimal impact on the UK.
  2) The opposite end of the risk scale and our reasonable worst case scenario of R of 2-3 (i.e.2-3 persons infected for each additional confirmed case), a mortality of maybe 2% (based on current data but wide confidence around both of these and all numbers), a doubling time currently of maybe 3-5 days and an incubation period of mean 5 days, could mean that within the next few weeks transmission becomes widespread and turns into a significant pandemic relatively quickly.
  Currently it looks as if most infections are mild and most will make a full recovery, and (probably the great majority) of the mortality is in older people or those with pre-existing health conditions, but this is still an appreciable mortality, and above that for example seen in the 2009 H1N1 (swine flu) pandemic."

239. The update advised of the ongoing daily teleconferences hosted by DHSC to ensure the whole of the UK is appropriately prepared and a consistent approach taken. Furthermore, it advised that the Public Health Agency (PHA) continued to work with the relevant public health organisations across the UK and the RoI and that the Department and the PHA remained in regular contact with RoI counterparts.

240. The update advised that a positive case in NI would have a wide impact across the health and social care sector. In preparation for this policy leads were asked at paragraphs 11-15 to "*consider what preparations can and should be made in your respective policy areas now, to ensure the Department is sufficiently equipped in the event of a positive case. As agreed at TMG on the 3rd February, in addition it would be prudent for areas to revisit their business continuity plans. We are also receiving requests for input to UK groups to consider specific issues, such as the potential impacts on social care. Relevant policy leads will need to engage in such discussions and we will forward these on to you as they arise. In discussion with the CMO, given other pressures across the Department, we have decided not to active the Departmental Strategic Cell at this time. However, we will keep this under active review. We have contacted staff who were on the Emergency Volunteer Register from the NICS Operation Yellowhammer C3 exercise in preparation for EU Exit, to ask whether they would consider volunteering to be part of a register of people who could be called upon to support Emergency Planning Branch in the event of any emergency situation. We have already received a good response to this request and I would encourage anybody who has not replied and would like to do so to contact phdadmin@health-ni.gov.uk.*" Paragraph 15: "*With a daily increase in the number of new cases of novel coronavirus reported worldwide, it is likely that we are at the beginning of what will be a prolonged incident. Therefore, we may shortly be contacting volunteers for assistance in the EOC and I would greatly appreciate your assistance in facilitating the release of staff as required.*"

241. This internal memo demonstrates that the assessment of the level of risk posed to the population and potential impact was at that time still developing. There was concern that there would be widespread impact across health and social care and the potential risks and pressures that Covid-19 would present to health and social care including hospitals and care homes in NI. The briefing does represent the concern about of the potential impact in enclosed environments such as care homes and the impact on hospitals for those requiring hospitalisation with severe disease. These concerns had already been identified and action was being taken by the PHA and HSCB to develop surge plans and other subsequent action which I have covered more fully below.

242. The state of knowledge of Executive Ministers can be summarised when the Health Minister provided an update, based on a submission from CMOG [**MM2/15 INQ000425586** (DoH Ref: MMcB/0157)], to the Executive at its meeting of the 3 February. The submission described developments to date including the continued spread globally of the novel Coronavirus and the World Health Organisation (WHO) declaration on 30 January that coronavirus was a global public health emergency of international concern. (PHEIC) and that the four UK Chief Medical Officers had raised the risk to the public from low to moderate to ensure that governments across the UK began to plan for all eventualities. At that time, as of 31 January, the official data from DHSC indicated 9,816 confirmed cases of which 9,701 were in Mainland China. 213 people had died and at that time all of the deaths had been within China.

243. The briefing also advised of the first two confirmed cases in England who were receiving specialist NHS care, and that infection control procedures were being used to prevent further spread of the virus. It further advised that two individuals had been tested in NI but both were negative and that due to relatively small numbers being tested in NI at this time, that aggregated UK numbers were being provided to protect individual patient confidentiality. The briefing also indicated that as some point a positive case would be identified in Northern Ireland.

244. The submission advised that this was a rapidly evolving situation and that we were very likely to see further confirmed cases in the UK over coming days and weeks and of the extreme importance of having agreed mechanisms for managing the situation, including early notification of any confirmed case and ensuring that the public remained appropriately informed and reassured to the actions being taken, as appropriate. The briefing contained proposed lines and information for the Health Minister to share with the Executive advising that: the Department had set up an Emergency Operations Centre and has updated relevant websites with advice for members of the public; the PHA and HSCB had activated their Emergency Operations Centre and continue to closely monitor the situation and risk in NI working closely with the Trusts, Port Health and primary care to make

them aware of the incident and potential symptoms of the virus. The Health Minister's update advised that the Department, along with the PHA remain in regular contact with the relevant authorities across the UK and the RoI to ensure a coordinated and consistent approach and that any necessary precautions are in place in NI in response to this situation. The briefing indicated that there was no room for complacency and that his priority as Health Minister was to ensure effective measures were in place within NI.

245. I have considered and again reviewed Professor Sir Chris Whitty's email of 28 January 2020 [**MM2/90 INQ000047585**] which I had considered at the time and whether or not it captures my then knowledge and assessment of the possible future scenarios. My assessment of the situation is initially summarised in a briefing submission [see Exhibit **MM2/82 INQ000425575** (DoH Ref: MMcB/0150)] dated 24 January 2020, which I had requested and approved, prepared for the Health Minister in advance of the COBR (M) teleconference which took place that day. As I recall the submission described five potential scenarios for planning purposes which had been already discussed on the UK CMO call on the morning of the 24 January. At 10.30 at my request, I also had a telephone call with Tony Holohan the CMO in the RoI to update him of the level of concern and action being taken at a UK level and to get an update on the position in RoI. At 11.30 on the same day, I then supported the Health Minister at the COBRA (M) meeting preceded by a pre-brief with the Health Minister. Therefore, having again considered, I confirm that my subsequent knowledge of and assessment of the possible future scenarios, four days later, is as captured in Professor Sir Chris Whitty's email of 28 January 2020 [**MM2/90 INQ000047585**] as was discussed and agreed at the UK CMO meeting on the 24 January.

246. Given the rapid escalation in pace and the many demands, much of the discussion and advice provided in that initial period may not have been formally captured in submissions or briefing notes as would be normal practice. NI is a smaller jurisdiction, as compared to other administrations, and in my experience, there are well established and effective working relationships across government departments. In my view this allowed rapid adaptation and sharing of information in a fast moving and rapidly developing situation which at times simply did not

allow for the development of written submissions and briefing. As a consequence of these relationships there were fewer layers of people to work through and in my view, this was a significant advantage in terms of agility and responsiveness across government notwithstanding the significant capacity challenges faced such were the demands.

247. I have covered other elements of the strategic and operational planning and readiness in further detail in the paragraphs below.

Late January to early March 2020 Strategic and Operational Planning and readiness

Early January 2020 up to the 21 January

248. During the first three weeks of January to in or around the 23 to 24 January the overall context and the main considerations was ongoing work and assessment to determine whether or not the outbreak in China represented a threat to the UK. This period predates the declaration of a PHEIC by WHO on 30 January 2020.

Late January to early March 2020

249. I have reviewed and fully considered two exhibits which have now been shared with me. The first appears to be a very short feedback note of a COBR (F) meeting from a TEO official to other officials in TEO [**MM2/91 INQ000201813**], on 29 January 2020, attended by the Health Minister, DCMO and myself in which it is reported that we said: "*It is anticipated it will become a global pandemic over the next 3 weeks*" [**MM2/91 INQ000201813**]. I have not previously seen this note which is not an official or agreed note of the meeting. I am not able to comment on

the completeness, factual accuracy or otherwise although I believe it summarises my increasing concerns at that time although there remained uncertainty. However, it is correct that by the end of January it was my view that it was highly likely that this would become a global pandemic although the full extent and the severity of that was yet to be then fully determined.

250. The second document [**MM2/92 INQ000201498**], dated the 30 January again is an internal TEO memo from the head of CCPB to through their G3 lead to HOCS outlining the arrangements for activation of NICCMA in the event of a global pandemic being declared; the actions already taken by the Department in activation of its ERP and the establishment of its EOC and Strategic Cell. I note that the memo advises that at that time *"...CCPB would need augmented to enable the branch to discharge its duties under NICCMA."* I have not previously seen this memo although it does suggest that consideration was being given to the activation of NICCMA and that there were recognised capacity issues within CCPB.

251. On 30 January 2020 following the recommendations of the Emergency Committee of the World Health Organisation (WHO), the Director General declared that the outbreak constituted a Public Health Emergency of International Concern (PHEIC). During late-January to very early-March 2020 the formal risk of the outbreak becoming a pandemic was assessed as moderate, based on our collective advice as UK Chief Medical Officers. On the 30 January following discussion we issued a joint statement [see Exhibit **MM2/62 INQ000425561** (DoH Ref: MMcB/0136)]. The purpose of the joint statement was to signal our collective concern and that preparations needed to be progressed across the UK.

252. Between late-January and early-March 2020, while the risk of the outbreak becoming a pandemic was assessed as moderate, based on our advice as UK CMOs, the Department and wider HSC commenced planning for the anticipated surge in demand for healthcare services arising from the outbreak. During the early weeks of this period, initial policy and operational planning to address potential responses if a pandemic occurred was undertaken.

253. The initial preparation and planning from a public health perspective in terms of efforts to limit transmission through detection, isolation and contact tracing are essentially pathogen neutral and are well established. Similarly, the preparation of the health and social care system again was around anticipating demands for community care from those who could be managed by self-care with appropriate advice, through to anticipation of increased consultation with and requiring the support of primary care at home, in GP surgeries or in care homes or other residential facilities, to those with more severe disease who would require respiratory care oxygen treatment and/or ventilation.

254. As described in paragraph 171, at the start of the pandemic the initial understanding of Covid-19 was very limited. The initial assessment of risk and transmission was therefore largely based upon what was known about similar coronaviruses. Fortunately, there was early identification of the causative virus, and this allowed the rapid development of molecular tests although testing capacity was limited in the early stages of the pandemic, as discussed below. This is covered and summarised comprehensively in the CMOs' Technical report on the Covid-19 pandemic in the UK, Chapter 1, and the associated papers and studies referenced. [**MM2/1 INQ000217254**].

255. The extant position at the end of January 2020 was that existing pandemic flu plans would/could have been adapted to address a novel pathogen other than influenza. In actual fact the extant pandemic influenza plan in respect of specific elements of the response was not of material benefit as it was clearly written following the experience of the H5N1 pandemic and not for a pandemic as severe as Covid-19 with the extensive measures and interventions required including the "lockdown" and the scale up in diagnostic testing and contact tracing. However, the planning assumptions for a reasonable worst case influenza pandemic were used early in the pandemic to estimate the potential impact on the population and likely health service demands which enabled some early preparation when specific information on Covid-19 in respect of the severity of disease was uncertain. It is also the case that the generic emergency response arrangements for a potential influenza pandemic did provide a basis for the initial response to the Covid-19 pandemic.

256. The Emergency Planning and Civil Contingency arrangements are agnostic to the threat and relate primarily to establishing strategic objectives, giving direction and providing oversight. In general terms during the pandemic these were mostly effective although severely stretched within the Department and the Health and Social Care system. However, they were not sufficiently developed or resourced, nor had it been fully envisaged that they would be required for such a sustained and protracted pandemic response. Arrangements were however adapted with the establishment of both new arrangements within the Department and across government to respond to the coronavirus pandemic.

257. In my experience, all plans, no matter how well developed or rehearsed cannot provide for all eventualities and always require significant adaptation and modification. What is more important for the future is a range of deployable, scalable capabilities to deal with a range of pathogens and threats with maximum flexibility and adaptability an inherent part of those plans.

Operational and HSC Response

258. In and around 23/24 January 2020 from an operational perspective a number of actions were being taken. For example, work was progressed to develop SAR-CoV-2 testing capabilities within the Regional Virus Laboratory and to develop plans to enhance resilience in contact tracing and the wider public health response.

259. As in paragraph 76 above, the submission to the Health Minister on 22 January 2020 described the considerable preparations which were already underway during this period, much of it led by the Public Health Agency in NI and by Public Health England working with respective public health bodies in Scotland and Wales.

260. From my professional perspective I have considered the adequacy of clinical care available in NI during the pandemic in relation to the denial of a MACA request to transfer the first confirmed patient to Royal Victoria Infirmary Newcastle, one of

four specialist HCID units in keeping with the UK Protocol that had been agreed by us as the 4 UK CMOs and the clinical consequences of this. At this time, the HSCB had been unable to arrange commercial transport arrangements and the then commercial provider would not transfer infected patients. Throughout the pandemic it is my professional view that there was excellent clinical care provided by health and social care professionals in NI. I do not believe the comments made in respect of this denial of the MACA request relate to the quality or adequacy of clinical care in NI which in my view was at least comparable to the rest of the UK. The contribution of all those in health and social care in NI was in my view outstanding and demonstrated an exemplary level of commitment and dedication.

261. Core elements of the public health response were also bolstered within the PHA including work led by the Department working with a range of partners to rapidly increase testing capacity and to expand contact tracing capacity. This included for example through the formation of new partnerships to deliver this, both locally through the Scientific Advisory Consortium which I asked to be established as part of what was known as Pillar 1, and nationally under the UK National Testing Programme which was known as Pillar 2 which was procured and contract managed nationally on behalf of UK nations by the Department of Health and Social Care (DHSC) and latterly by the UK Health Security Agency (UKHSA). Community population based contact tracing was paused following the policy decision to move from the containment phase to the delay phase on the 12 March 2020. At that time, contact tracing was restricted to high risk contacts, such as residents in care homes or patients in hospital. The PHA later scaled up the contact tracing service operation in NI initially through a pilot phase in late April 2020 through to the launch of the full Service on 18 May 2020. The PHA led service built on the expertise already within the PHA and specifically within the Agency's Health Protection service, which had established expertise in risk assessment of incidents and outbreaks, and in undertaking contact tracing as a core aspect of its usual Health Protection function.

262. At that time at the end of January 2020, Health Silver was led by the Public Health Agency (PHA) as the focus was then primarily on the public health response, as

described in paragraph 78, with the information from Health Silver being received by Emergency Operations Centre (EOC) following its activation on the 27 January.

263. By this time Public Health Agency and Health and Social Care Board were working closely with the Trusts, Port Health and primary care to make them aware of the emerging situation and potential symptoms of the virus with respect to returning travellers. The Public Health Agency was also working with Universities and Educational Establishments, and with the Chinese community given the potential for cases in returning students following the Christmas holidays.

264. Anticipating a surge in demands and pressures on the health and social care system, the Department commissioned work from the HSCB and PHA to begin planning for an anticipated surge in demand for healthcare services arising from the outbreak. The detail of this is outlined in the M02C-DOH-01, Wave 1 statement, paragraphs 254, 255 and 258, and my M2C-CMO-01 statement, at paragraph 59, which outlines the actions I took on behalf of the Department and the Health Minister in commissioning the Health and Social Care Board (HSCB) and the Public Health Agency to initiate surge planning for the health service in NI.

265. On 11 February 2020 I held a meeting with the senior leadership team of the HSCB and PHA which I had requested to direct that they develop surge plans to address the potential impact on health and social care should the novel Wuhan coronavirus threat develop into a pandemic. I followed up this request in writing [**MM2/93- INQ000137326**] on the 17 February 2020 and asked that they develop detailed worked up integrated surge plans from community and primary care through to acute care including those areas where it was anticipated that there would be particular demands, such as critical care, setting out how health and social care would respond to any significant increase in Covid-19 cases. The HSCB Chief Executive replied to me on the 20 February 2020 [**MM2/259 INQ000130371** (DoH Ref PM0207] and advised that surge planning was underway and that the HSCB and PHA had established a regional operational Surge Planning Subgroup to ensure that there was an appropriate and proportionate level of HSC preparedness across the HSC in response to Covid-19.

266. Following the response by the HSCB and PHA on 20 February 2020, I commissioned further work on the surge plans to quality assure and address gaps in the initial surge plans, recognising that the lack of specificity at this time of the potential health and social care service pressures made surge planning problematic. The quality assurance was to address gaps and to work with those involved in preparing the plans to support improvements in planning and monitoring. It was carried out by a team of assessors tasked by myself and with the support of my Chief Professional Officer colleagues to undertake a review of the social care HSC Trust Covid-19 surge planning for the Independent Care Home Sector (nursing and residential care homes) and for HSC Trusts' directly managed inpatient and residential mental health and learning disabilities services (including supported living), critical care and secondary care sectors.

267. This additional work included the need for specific work and surge plans to be developed for critical care, secondary care and for the care home sector. The work I commissioned in the care home sector, on completion, was, I understand, subsequently integrated into the initial plans which had been developed by the HSCB. For critical care, the output was incorporated into the HSC Summary Action Plan (March/ April 2020) which covered actions in some twenty-one health service areas informed by the reasonable worst case scenario planning data. The review of the initial health service surge plans also subsequently resulted in the establishment of a Covid-19 Strategic Surge Planning Directorate by the Deputy Secretary of Health Care Policy Group (HPG) in May 2020 to provide leadership to the Surge Policy Cell of the EOC reporting into the Strategic Cell. The CNO, the Director of strategic surge planning, the Deputy Secretary and I worked closely together on this.

Policy and Departmental Response

268. In January and February 2020 several policy actions were taken by the Department in the context of the emerging threat. This included the dissemination internally within the Department of key updates to ensure readiness across all

policy teams and within the wider health and social care system, and in addition information sharing and communication with TEO to ensure preparation and readiness across departments in NI.

269. A timeline of some of the early developments and communications is as follows:

- **On 24 January 2020** – the Health Minister made the first of many statements to the Northern Ireland Assembly to update Members of the Legislative Assembly on the global impact of Coronavirus, and the response to date.

- **27 January 2020** - as indicated the Department's Emergency Operations Centre (EOC) was activated. In line with Section 3.4 of the Emergency Response Plan 2019, the activation was approved by the Director of Population Health and the DCMO.

- **30 January 2020** - the World Health Organisation (WHO) declared the coronavirus as a global public health emergency of international concern. In discussions with UK CMO colleagues we agreed that, given the potential health and social consequences of a major epidemic, it was now appropriate to plan and prepare for the reasonable worst-case scenario (RWCS) of influenza pandemic moderate severity, without a vaccine.

- **31 January 2020** Briefing for the executive update meeting on 3 February 2020 [see Exhibit [**MM2/15 INQ000425586** (DoH Ref: MMcB/0157)] (Paragraph 242 above).

- **5 February 2020.** Briefing on novel coronavirus for Departmental policy leads described at paragraph 237 above. (see Exhibit **MM2/89 INQ000425583** (DoH Ref: MMcB/0156)]

- **6 February 2020** – In order to assist with wider government co-ordination in NI the then Director of Public Health wrote to the then Director Executive Support and Programme for Government, the Executive Office (TEO) to highlight the

need for TEO, and Civil Contingencies Policy Branch (CCPB) to urgently consider sector resilience in the face of a growing threat from novel coronavirus. In the letter it stated that, while activation of NICCMA had been considered by the Department, it was reasonable to withhold such a request until infections and their impacts were experienced in NI. The Department suggested that, to provide reassurances should an escalation of events require a request to implement NICCMA, it would be helpful if TEO would consider convening a multi-agency meeting to inform an assessment of sector resilience preparedness, capacity and capabilities across NI departments and agencies and the emergency services. As described in paragraph 107 above, to assist with this request, the Department provided TEO with correspondence for issue on my behalf as CMO, also dated the 6 February 2020 to Departments and public authorities [see Exhibit **MM2/39 INQ000425544 MM2/39a INQ000254430 MM2/39b INQ000425546** (DoH Ref: MMcB/0127)]. The purpose of this letter was to enable all Executive Departments and public authorities to prepare to respond to any and all potential eventualities arising from the current outbreak and to recommend that each Department had proportionate, appropriate and efficient arrangements in place, consistent with the key public health messages about novel coronavirus.

- **7 February 2020** – Mr Richard Pengelly, the then Departmental Permanent Secretary informed the Permanent Secretaries Stakeholder Group (PSS), that urgent consideration was needed across Executive Departments on sector resilience and wider strategic coordination across civil contingencies arrangements in the face of a growing threat from the novel coronavirus. However, as no cases had been reported across the UK, the Department did not consider it necessary to activate NICCMA at this time. He noted that this was an evolving situation and that preparedness across NI is critical. Departments needed to review business continuity arrangements to assess resilience preparedness, capacity and capabilities to assess the likely impact on the delivery of essential services. He reiterated that it may be prudent for TEO to consider convening a multi-agency meeting to assess sector resilience and preparedness.

270. In taking these steps the Department was clearly signaling to TEO, CCPB and other Departments that the activation of the NICCMA arrangements would in all likelihood be imminently required and that in the interim all Executive Departments needed to consider, individually and collectively, urgently and proactively sector resilience and strategic coordination across civil contingencies short of the formal activation of NICCMA.

271. The arrangements for activation of NICCMA are addressed in a memo to the HOCS from CCPB on 30 January 2020. In relation to civil contingencies, a decision to activate the NICCMA arrangements in NI needed to be taken at the appropriate time and to be proportionate to the level of threat and response then required. The formal activation of the NICCMA arrangements and the associated arrangements generates significant additional activity and work across Departments including for the Department and the premature activation may potentially have imposed further demands on the Department which at that time was already fully stretched with potentially little additional value at that time.

272. For context until 6 February 2020 there had been 2 UK confirmed cases both in Chinese nationals who had travelled to the UK and that time there had been no UK deaths with 564 reported deaths in China [**MM2/94 INQ000203935**].

<u>Action taken immediately prior to and after the 24 February 2020 and the publication of the WHO report of its international mission to Wuhan.</u>

273. **20 February 2020** - The first meeting of Civil Contingencies Group NI, CCG(NI), in response to the pandemic was held. TEO convened CCG(NI) to bring all Departmental Permanent Secretaries together in its role to coordinate the overall response to the pandemic by the Executive. At this first meeting the Department's Deputy Chief Medical Officer (DCMO) gave a presentation to CCG(NI) on the Novel Coronavirus and Northern Ireland's Preparedness [see Exhibit **MM2/28 INQ000425536** (DoH Ref: MMcB/0121)]. Further regular meetings of CCG(NI) were chaired by the Head of the Civil Service (HOCS) and attended by the Department's then Permanent Secretary [**MM2/95 INQ000425589** (DoH Ref: MMcB/0158)].

274. **24 February 2020** - the WHO published the report of its international mission to Wuhan, and advised that countries should:

"(1) Immediately activate the highest level of national Response Management protocols to ensure the all-of-government and all-of-society approach needed to contain COVID-19 with non-pharmaceutical public health measures;
(2) Prioritise active, exhaustive case finding and immediate testing and isolation, painstaking contact tracing and rigorous quarantine of close contacts."

275. I was aware of this report at the time and as outlined above action across all of these areas was already being progressed in NI by the Department or was under preparation and was actioned in the following days. In response to the WHO report, I wrote on 25 February 2020 to the Health and Social Care System with updated guidance [**MM2/260 INQ000103641** (DoH Ref PM0045]. This letter updated the advice sent on 7 February 2020 and it stated: "*Based on the World Health Organization's declaration that this is a public health emergency of international concern, the UK Chief Medical Officers had raised the risk to the public from low to moderate. This permits the government to plan for all eventualities. The risk to individuals remains low. The letter updates the list of countries from which travellers returning, and who experience symptoms, should self-isolate and contact their GP to include Northern Italy (defined by a line above, and not including, Pisa, Florence and Rimini), Iran, Vietnam, Cambodia, Laos, Myanmar."*

276. On the 1 March 2020 - following a presumptive positive test on 27 February, NI had its first confirmed positive result for Covid-19 in an individual who had recently travelled from an affected area.

277. **On 2 March 2020** I supported the Health Minister at the Executive meeting to provide an update on Covid-19, the developing situation and potential impact. During the meeting as I recall I provided a summary of what was known about the

novel coronavirus and the range of symptoms caused, including initial assessment of disease severity, the numbers of people potentially who might develop severe disease requiring hospital care and potential numbers of people infected who might die. As I recall I provided an estimate that the initial peak in infections could last for 15 weeks, that upwards of 50% of the population might be infected and that between 2-3% of the those with symptom might die. The Executive meeting was adjourned for a period of time to enable the Health Minister, the FM and dFM, accompanied by myself to attend a meeting of COBR(M). At that meeting a Common Recognised Information Paper (CRIP) was tabled which included the SAGE scenario from its 27 February meeting of 80% infection and 1% deaths. At the Executive meeting, prior to the adjournment, the Health Minister and I briefed the Executive on developments relating to Covid-19. I indicated that NI needed to be prepared for a duration of weeks or months and in discussion I advised that there was a "*need to plan and prepare for all eventualities.*" My reference to the "need to plan and prepare for all eventualities" was to impress upon Executive Ministers the scale of what potential lay ahead and to impress upon them the need to plan and prepare across all of government given what I anticipated the imminent challenges would be despite the significant uncertainties at that time.

278. Prior to the beginning of the first part of the Executive meeting, while I cannot be certain, I most likely had not have seen the latest estimate of 80% infection and 1% deaths from the 27 February meeting of SAGE. That SAGE meeting was one of the meetings I could not attend, due to competing pressures, and there is no record of one of my team observing the meeting on my behalf. Although there was a meeting of the four UK CMOs the following day. I have no clear recollection of this updated SAGE RWCS being discussed at that meeting.

279. **4 March 2020** An extraordinary meeting of the Department's Top Management Group was held at my request to agree the full activation of the Health Gold Command with the first meeting of Health Gold Strategic Cell taking place on Monday 9 March 2020.

280. **5 March 2020** I understand a Surge Planning workshop was held to consider the HSC Trust surge plans and ensure regional consistency where possible. There

followed intensive engagement between the Department, HSCB, the PHA and HSC Trusts resulting in the publication on 19 March 2020 of the Health and Social Care (NI) Summary Covid-19 Plan for the period Mid-March to Mid-April 2020 [**MM2/261 INQ000130410** DoH Ref PM0300]. The Plan summarised the key actions to be taken by the HSC from mid-March to mid-April 2020 to ensure that there was sufficient capacity within the system to meet the expected increase in demand from patients contracting Covid-19 during this period. This was a dynamic plan, which was to be constantly refined in light of the emerging issues.

281. **10 March 2020** Advice was provided and action taken with respect to SAGE and NERVTAG advice in early March ([**MM2/69 INQ000061521**]; [**MM2/96 INQ000087540**]; [**MM2/97 INQ000048000**]) when SAGE advised:

> ***"5. Based on surveillance, including cases in intensive care units (for whom there is no travel history accounting for infection), the UK likely has thousands of cases – as many as 5,000 to 10,000 – which are geographically spread nationally.***
> ***6. Transmission is underway in community and nosocomial (i.e. hospital) settings.***
> ***7. Available data for the UK are accruing fast. Firmer estimates of infection rates will be available next week...***
> ***12. The UK is considered to be 4-5 weeks behind Italy but on a similar curve (6-8 weeks behind if interventions are applied)***
> ***14. SAGE endorsed NERVTAG's advice that individual case isolation should last for 7 days from onset of symptoms." ([MM2/70 INQ000061522])"***

282. In the first two weeks of March 2020 the Health Minister received a number of submissions in respect of:

- An oral statement he made to the Assembly on 2 March 2020 [see Exhibit [**MM2/42 INQ000425519** (DoH Ref: MMcB/0114)]

- A COBR (M) meeting held on 9 March 2020 [**MM2/98 INQ000425590** (DoH Ref: MMcB/0159)]
- Briefing for the Executive meeting held on 10 March 2020 [see Exhibit **MM2/34 INQ000425540** (DoH Ref: MMcB/0124)]

283. The Oral Statement to the Assembly on 2 March reflected the advice which was being given to the Health Minister and the Executive at that date. The Health Minister updated the Assembly that there had been a first positive case in NI. Coincidentally, a first positive case had just been reported in the RoI and was confirmed on the 29 February. The statement was largely focused on the UK Covid-19 Action Plan which was being published the following day having been discussed and signed off by the Health Minister and the First and deputy First Ministers at the COBR (M) meeting that day. The Health Minister also reiterated advice to members of the public who had symptoms and were concerned they may have Covid-19 and encouraged everyone to take sensible precautions of washing their hands regularly and to especially heed the advice recommend for similar illnesses such as cold and flu – "catch it, bin it and kill it". The statement also referred to the fact that NI now had full access to the 111 helpline on coronavirus. This was available 24/7 to provide advice. More general advice about coronavirus was available at the Public Health Agency website and NI Direct.

284. The Health Minister advised the Assembly that as the situation developed the Department and the Public Health Agency would continue to provide updated guidance to health care professionals and other Departments and their authorities, including schools, as and when necessary. He advised that he was continuing to attend COBR and NI was working closely with other jurisdictions and had contributed to the UK wide Coronavirus Action Plan (this is covered in more detail at paragraphs 539 to 540) which was due to be published by the UK government tomorrow. The Health Minister said:

> "***The document sets out what the UK as a whole has already done - and plans to do further - to tackle the current coronavirus outbreak, based on our wealth of experience dealing with other infectious diseases and***

our influenza pandemic preparedness work. The exact response to COVID-19 will be tailored to the nature, scale and location of the threat in the UK, as our understanding of this develops.

This document sets out:

- *what we know about the virus and the disease it causes*
- *how we have planned for an infectious disease outbreak, such as the current coronavirus outbreak*
- *the actions we have taken so far in response to the current coronavirus outbreak*
- *what we are planning to do next, depending upon the course the current coronavirus outbreak takes.*
- *the role the public can play in supporting this response, now and in the future.*

Locally the HSCB are leading on surge planning working with our Health and Social Care Trusts. This will be informed by our existing pandemic flu plans which are in place across the Health & Social Care sector. As I have previously advised the House the Regional Virology Lab, Belfast, is now set up for testing of COVID-19 since mid-February. All positive tests are sent to PHE labs for confirmation.

My Department, the Public Health Agency and the Health and Social Care Board will continue to work closely with the relevant authorities and public health organisations across the UK and the Republic of Ireland to deal with the situation as events unfold.

Across the NICS planning has been stepped up to ensure a coordinated response from all sectors of Government. I am aware TEO is leading the work on assessing essential services and key sectors' readiness and that they convened a cross departmental meeting on 20 February where information on the all possible eventualities was shared and all Departments were asked to review business continuity plans. A table-top exercise is planned in coming day where our planning and preparation across government will be discussed.

Internationally, and in the UK and the Republic of Ireland, we remain in the Containment phase of our response as we seek to prevent

sustained community transmission." **He concluded his statement by saying:**

"In conclusion, let me direct my comments beyond this House – to the people watching at home, and indeed to the media reporting on these proceedings. It is vital that we keep taking a balanced, proportionate approach at all times – with our actions based on the best scientific advice. Complacency is our enemy – but so too are panic and hysteria. As we've said, we will continue to prepare for all eventualities. When the UK Government issues its action plan tomorrow, there will inevitably be intense interest in what kind of emergency measures may form part of our collective planning. These are measures that we will have in our toolkits to deploy only if required. "If required" are important words in that sentence. The emergency measures in the forthcoming UK Government action plan will apply to Northern Ireland, if needed. It is normal practice to plan for worst case scenarios. This does not mean these outcomes are expected or likely. This is a really important point to underline. Our primary focus remains on containment at this time and then to delay and mitigate. There are risks for society in taking premature actions - actions not grounded in scientific advice. We have already heard fears being voiced about our economy and jobs; including in the tourism and hospitality sectors. Obviously, public health protection must come first. I'm sure all members would agree on that. However, premature actions in the current situation could also have impacts on our health. I'm thinking of the risks from undue panic or hysteria, and also of social isolation as a result of social distancing." And "The people of Northern Ireland are a resilient people. I believe they are well used to keeping calm during challenging circumstances. I believe they will not be unduly influenced by rumour or fake news on the internet; that they will rely on the advice and guidance of our public health experts. That's what I am doing and believe the Executive is 100% behind me in that approach."

285. The submission provided to the Health Minister in advance of the COBR (M) meeting held on 9 March 2020 stated:

"Based on the advice of the UK Chief Medical Officers the risk to the UK remains at moderate. The latest forecasts indicate that a peak is likely to occur in China in March, and in the UK as early as April 2020. At present the UK remains in the 'CONTAINMENT' phase (preventing the disease from taking hold in the UK), but a protocol is being worked on to agree how moving to the 'DELAY' phase (and flattening the peak of the outbreak in the UK) will be handled across the UK. In the event of the Covid-19 outbreak worsening, or a severe prolonged pandemic, the coordinated response of the UK Government and the Devolved Administrations will escalate. Following this transition the pressures on services and wider society may start to become significant and more clearly noticeable."

286. The submission also included an update on Reasonable Worst-Case Scenario Planning, reflecting both the Cabinet Office and SAGE position, as follows:

- *Cabinet Office is currently working to the 2019 National Security Risk Assessment pandemic flu planning assumption as the Reasonable Worst-Case Scenario (RWCS).*

- *This assumes that the first wave of the pandemic will last approximately 15 weeks with over 50% of the population falling ill and up to 20% off work during the peak weeks. This would lead to a huge surge in demand for health and social care services which would have a knock-on impact on current provision.*

- *Besides very severe levels of stress on HSC, the level of excess deaths would stretch capacity in organisations involved in the management of deaths. In NI, DoJ, in partnership with other government departments, local councils and funeral directors, is responsible for managing excess deaths. DoJ is currently developing an Excess Deaths Framework and exploring body storage options.*

- *The Imperial College and London School of Hygiene & Tropical Medicine has produced a report on the estimates of severity of Covid-19. The Key estimates include:*
  - *Around 1% of those infected, with or without symptoms, are expected to die. This would be equivalent to about 1.5-2% of those with symptoms dying. This is lower in those aged under 60. Less than one in a thousand under-40s would be expected to die if infected*
  - *Around 8% of people infected (with or without symptoms) would need hospital treatment. This would be to about 15% of those with symptoms*
  - *Up to 15% of those hospitalised would die*
  - *50% of those needing intensive care would die, if we had capacity to treat them all.*

- *The government's Reasonable Worst-Case planning assumptions are based on these estimates, but they will not be badged as Government planning assumptions when they are published. DHSC's Reasonable Worst-Case scenario is for 80% of the UK to become infected. DHSC policy anticipate the published papers will (rightly) say that demand for the NHS will massively outstrip availability.*

- *The Regional Surge Planning Subgroup of HSC Silver has been established to ensure that there is an appropriate and proportionate level of HSC preparedness across the sector in response to Covid-19. Twice weekly meetings are held and a Covid-19 Surge Planning workshop was held on 5 March. The purpose of the workshop was to consider Trust surge plans and self-assessment checklists in order to share actions and ensure regional consistency where possible. The Department has also established a Covid-19 Strategic Surge Planning Directorate.*

- *Across the NICS, planning has been stepped up to ensure a coordinated response from all sectors of Government. TEO is leading the work on*

assessing essential services and key sectors' readiness and have convened weekly C3 (command, control, coordination) meetings. TEO led a workshop on 6 March to discuss Departmental risks and priorities.

- *On Friday 6 March, the UK government pledged to spend £46m on urgent work to tackle Covid-19, including more money to develop a vaccine and cash to help some of the most vulnerable countries prepare for an outbreak. The money will fund work on eight possible vaccines which are already in development as well as a lab in Bedford to try to create a test that could provide results within 20 minutes.*

287. The submission also provided an update on progress with The Health Protection (Coronavirus) Regulations 2020:

- DHSC announced The Health Protection (Coronavirus) Regulations 2020 on 10 February. The Regulations are designed to provide measures to prevent the further transmission of Covid-19, including powers to detain an individual on public health grounds for the purposes of isolation and screening. These powers will apply to England only.

- Officials are working with colleagues in the NI Office of the Legislative Counsel to develop clauses pertaining to the above requirement to be included in the draft Covid-19 Bill. This work is well advanced.

288. Finally, the submission included information on the decisions on the introduction of NPIs:

- The spread of Covid-19 has accelerated in the UK and advice from SAGE is that the response to the virus will soon need to move from contain to delay. For the delay phase, the Scientific Advisory Group for Emergencies (SAGE) have considered six possible social and behavioural interventions to delay the outbreak based on the clinical evidence. These are: stopping large events;

closing schools; social distancing for all; home isolation for symptomatic cases; whole household isolation; social distancing for elderly and vulnerable. Potential interventions have been considered against the following objectives:

- contain the outbreak so that it does not become an epidemic (this is now unlikely to be achievable);
- delaying the peak so it occurs when the NHS in each nation is out of Winter pressures;
- reducing the size of and/or extending ("flattening") the peak so that the response by the NHS/HSC and other sectors can be maintained more sustainably;
- reducing the total number of deaths by limiting the number of cases in vulnerable groups.

- The Scientific Pandemic Influenza Group on Modelling (SPI-M) and Scientific Pandemic Influenza Group on Behaviour (SPI-B) have modelled the impacts of these interventions. DHSC is producing policies on the latter three recommended interventions for communication to the public.

- Ministers will need to make a decision on which intervention, or combination of interventions, to implement based on the clinical advice and the social, economic and operational impacts of each measure.

- Based on SAGE's current understanding of the progress of the outbreak, to maximise the effectiveness of two measures (self-isolation and household isolation) implementation would need to begin by the end of this week. A decision will be needed by Ministers on implementing these two measures on Wednesday 11 March. The third measure (social distancing for over 70s and the most at risk) can be introduced in 2-3 weeks' time.

289. The briefing to the Health Minister for the Executive meeting held on 10 March largely repeated the briefing provided for the COBR meeting held on the previous day.

World Health Organisation (WHO) declared the outbreak as a pandemic.

290. **11 March 2020** the World Health Organisation (WHO) declared the outbreak as a pandemic and, sadly, we had our first death from the virus in NI announced by the Heath Minister on 19 March 2020. On 11 March 2020, at a meeting of COBR(M) the decision was made to move from the Contain phase to the Delay phase across the UK.

291. **11 March 2020** Measures were introduced by the RoI on 11 March 2020 when WHO declared Covid-19 as a pandemic. At that time 118,455 people were reported as infected with 37,677 cases reported outside of China with 4,290 deaths and 1,132 of these outside of China. In the UK there was 456 confirmed as infected and 6 reported deaths.

292. The package of measures announced, by the RoI on the 11 March 2020 included: the closure of schools, colleges, and childcare facilities; cancellation of all indoor mass gatherings of 100 people and outdoor gatherings of over 500 people. To the best of my recollection while there was ongoing discussion and debate at that time including on UK CMO calls about the need for such measures there was also significant concerns about the potential adverse impacts and therefore given the then prevalent medical and scientific evidence on Covid-19 and its transmission there was not then a resolved consensus on the decision that the RoI Government had taken.

293. As recorded in [**MM2/99 INQ000083097**] the Executive and the Northern Ireland Office had received "very little notice" and little time to consider the relative merits of any policy alignment. I believe it is possible that the RoI may have decided on this package of measures at the time they did because they were concerned

around large scale events and international travel specifically around St. Patrick's Day.

294. Following a meeting on the 12 March 2020, as UK CMOs we raised the risk to the UK from moderate to high [**MM2/100 INQ000052485**] in response to the increase in confirmed cases. As testing was very limited at this point in time in NI and across the U.K. there is not robust data to definitely comment on the level of community transmission in NI. Given what was happening elsewhere in the UK I believed that in the context of a highly transmissible virus that it was a reasonable assumption that transmission in NI was also increasing significantly. In raising the alert level, we were also signalling to decision makers of increased risk to the population. In the UK, as of 10 March, 345 people had tested positive for Covid, 302 of these have been in England while there are 27 in Scotland, 6 in Wales and 16 in Northern Ireland. While the number of confirmed cases in NI remained relatively modest this was in the absence of widespread community testing and surveillance and I suspected there was highly likely to be significant numbers of undiagnosed cases. The decision to do this collectively as UK CMOs was to signal the risk to the UK and the need for additional government action and intervention. On the 16 March 2020, advice to the public on avoiding unnecessary social contact, to work from home and to avoid pubs and restaurants was issued across the UK. The Prime Minister's announcement, on 16 March that people should start to work from home was mirrored in NI, with a series of Executive Statements detailing the Executive's decisions and mitigating measures issued on the 16th, 18th and 19th March [**MM2/101 INQ000425591** (DoH Ref: MMcB/0160)], [**MM2/102 INQ000425592** (DoH Ref: MMcB/0161)] and [**MM2/103 INQ000425593** (DoH Ref: MMcB/0162)].

295. Despite significant pressure from a number of sources to align with the RoI at that time, I did not then believe it was proportionate to move to close schools given the very significant negative impacts on children's health and wellbeing and education particularly given the likelihood that any closure would extend into the school holidays and potentially beyond. A second order decision and consideration was the potential impact on Health Care Workers (HCW) with caring responsibilities and other workers. On the 18 March 2020 when the announcement was made on

schools closures in the UK there were 2,626 people confirmed with Covid-19 and 103 reported deaths.

296. As indicated in my M2C-CMO-01 statement, at paragraph 165, during the pandemic the approach to schools was one of the more challenging areas given the recognised educational, social and health benefits to children of being in school, and the significant contribution of education in improving life chances and in reducing health inequalities and disparities experienced by children. The task of maintaining children in schools while reducing the risks of transmission and outbreaks with consequential schools closure was complex. As outlined in my M2C-CMO-01 statement at paragraph 166, at the start of the pandemic the short- and longer-term impacts of Covid-19 on children in general were not known although children were observed to have generally milder symptoms. Nor was the role that children played in the transmission of Covid-19 fully understood or indeed the relative contribution that transmission of infection in the school setting played, as distinct from transmission in the home or through other social contacts. In the early stage of the pandemic there was significant debate as to whether school restrictions and/ or school closures were necessary in addition to other NPIs, and this uncertainty was reflected in SAGE discussions. For some infectious respiratory viruses such as influenza, children while generally experiencing mild disease they can act as "super spreaders", increasing community transmission. While undoubtedly mixing in schools provided opportunity for transmission of the Covid-19 virus, it was recognised and I was cognisant that the closure of schools would have significant implications for children's education and their well-being given the important public health benefits that attendance at school has for children's physical and mental health. In addition, it was also recognised that school closures would be likely to present further challenges in respect of childcare arrangements for essential workers. It was therefore important to try and achieve a balance between no intervention in schools and the risk of increased transmission of the virus, and intervention to the extent there could or would be a disproportionate impact on children's education, social development and future life opportunities. In the context of the early evidence available and an assessment of the benefits in terms of reduction in transmission, when weighed against the harm to children and the wider societal impact, I advised that there was insufficient

evidence at that time to advise that the immediate closure of schools was proportionate. The difference in the timing of the decision on schools' closure between NI and the RoI was the source of political and media commentary. The wider issue of the approach to the closure of schools was however a complex matter; the considerations are described more fully in the UK CMO Technical report on the pandemic in the UK, Chapter 8.1, pages 270 to 282 [**MM2/1 INQ000217254**]. In March 2020 the consensus view taken by SAGE was that school closures represented one of the least effective single measures to reduce the peak of the pandemic wave. At this time SAGE did note, however, that school closures may indeed be necessary to ensure sufficient capacity within the health service. The first attendance restrictions came into place on the 20 March 2020; however schools did remain open for face-to-face learning for vulnerable children and the children of essential workers. The commitment of teachers and parents to support and maintain education remotely was remarkable however was not a substitution for children attending school. I was, and remained throughout the pandemic acutely aware of the disproportionate impact that the closure of schools would have on those children from more socioeconomically deprived backgrounds.

12 March 2020 – Move from the Contain to the Delay Phase

297. The UK Government and the DAs decided at the COBRA meeting on 12 March to move from the containment phase to the delay phase. This decision was underpinned by the UK-wide agreed Protocol for Moving from Contain to Delay [**MM2/262** INQ**000346695** (DoH Ref: PM0371)]. This was associated with a pause in contact tracing and the prioritising of testing for clinical care and in settings with vulnerable people. The decision to move to the delay phase was followed shortly afterwards on 23 March 2020 by the introduction of the first UK-wide lockdown.

298. The decision to pause contact tracing was I believe linked to the decisions to move to the delay phase and the move to introduce population wide lockdown measures. As described in the M02C-DOH-01, Wave 1 statement, at paragraph 196, the pause in contact tracing was also informed by a number of other operational factors. This included the requirement to optimise the use of available testing capacity. Testing capacity at this time was insufficient to identify all cases that

needed to be contact traced and available tests needed to be prioritised for clinical care and in settings with vulnerable people such as hospitals and care homes. This in turn impacted the effectiveness of contact tracing, as only a limited proportion of cases in the community were being picked up through testing. In addition, in the first wave, as case numbers increased very rapidly, the existing contact tracing workforce, resources and systems were not able to handle such a large increase in demand nor to maintain contact tracing at the intensity and scale required to ensure chains of transmission were interrupted as effectively as possible. Even had the testing capacity been available there is a question as to how effective contact tracing would have been if it had been maintained given the likely level of community transmission and the limitation in the PHAs ability to scale capacity in the service quickly enough.

299. As in the rest of the UK, the Public Health Agency were undertaking contact tracing for all cases of Covid-19 until 12 March 2020, as described in the M02C-DOH-01, Wave 1 statement, at paragraph 194. Prior to this date there were a relatively small number of cases and therefore contact tracing had the potential to have significant impact on the course of the epidemic and in delaying community transmission. More generally, contact tracing is most effective when levels of community transmission and numbers of cases are lower. In mid-March 2020 the levels of community transmission were higher in the UK including NI which meant, in general terms, the impact of contact tracing as an effective mitigation to help break chains of transmission and reduce spread was likely to be less. Contact tracing in NI remained paused until reintroduced on 27 April 2020 through a pilot phase, with the full launch on 18 May 2020. When re-established on 18 May 2020, contact tracing was maintained throughout the rest of the response although its effectiveness was in all likelihood reduced at times of high levels of community transmissions.

300. As previously described in the M02C-DOH-01, Wave 1 statement, at paragraph 195, the rationale underpinning the change in approach from the containment to the delay phase was based on sound public health principles and recognition that

there was widespread community transmission of the Covid-19 virus. Members of the pubic were informed that the virus was circulating, there were extensive communication campaigns to advise members of the public about symptoms to watch out for and actions to take should they develop symptoms. The application of these population level interventions including the rigorous social distancing measures effectively superseded contact tracing during this 'delay' phase of the pandemic response. All the advice and guidance on preventing onward spread, on self-isolation and on social distancing, which previously formed the basis for the rationale underpinning contact tracing of cases and contacts, now applied to the general population.

301. I have carefully considered comments made at a meeting on 12 March 2020, between HOCS, FM and the dFM which discussed the introduction of a wide range of interventions announced in the RoI earlier that day. The note of the meeting states that "*HOCS clarified that there are no medical/scientific evidence to support measures announced by Taoiseach earlier today.*" [**MM2/104 INQ000232525**]. I was not present during this discussion, and I am not certain how fully or accurately the note reflects the discussion and nuances of the matters being outlined by HOCS. Given the ongoing discussion and considerations at SAGE and UK CMO meetings I am certain that these are not words I would have used in respect of the introduction of measures in response to the pandemic and in particular the timing of the introduction of such measures given their implications. The Health Minister and I subsequently joined the meeting. The Health Minister is noted as saying "*clarified that containment measures are working in NI and following RoI position would crash the NHS and create unnecessary panic and fear.*" While I cannot interpret the Health Minister's thinking, I believe he may have been referring to the need for further cross-government preparation across all sectors in addition to health and the need for clear public communication in order to support the introduction of further NPIs and the need for a planned and considered approach and clear public communication.

302. At all times balanced and proportionate measures were required throughout the pandemic given the potential negative impact of NPIs on health and wellbeing in both the short and longer term and the fact that any new global pandemic of a

novel pathogen was unlikely to be of short duration and with no treatment or vaccines then available or immediately anticipated, the introduction of measures to reduce human to human contact and transmission and the implications would be profound. It was also the case, which as I recall was indicated by the Health Minister, that public messaging around any introduction of such matters needed to be carefully considered given the potential to cause considerable alarm.

303. Sadly, the pandemic and the NPIs introduced impacted most acutely on the young and the elderly, those already isolated and socioeconomically deprived and those most vulnerable in care homes. The introduction of such wide-ranging restriction was therefore a complex matter and needed to be carefully planned and coordinated. It would in my view be overly simplistic to present this as a binary "too early or too late" decision as this does not in my view take into consideration the many and profound adverse consequences associated with any such decisions and the excess mortality evidenced directly and indirectly and the significant health consequences of the pandemic itself, the measures required to mitigate and the wider implications of these measures that are increasingly evident.

304. While others will be better placed to advise, I am not certain to what extent the cross-Department preparation and planning and the policy and strategic planning within individual Departments within their relevant sectors such as schools and the business community would have allowed NI to proceed with the introduction of similar measures at that time without significant unmitigated consequences. In my view the extent of the preparation required in advance of the introduction of NPIs including lockdown was not inconsequential. The timing of any such decisions was also important as the concern was then that such measures once introduced may have needed to be in place for a very long time. The enormity of this consideration and the implications and consequences lay heavily on all.

305. My advice was based and informed by the assessment of SAGE at that time as the best source of scientific advice then available to me and I reflected this in my advice to Ministers and in all meetings at this time.

306. I have reviewed and considered a Situation Report (SitRep) on 12 March 2020, which records that "*David Sterling chaired an emergency meeting of the Perm Secs this afternoon at 330. From this meeting there is a view that all NIE Ministers, including FM and dFM, are relying heavily on CMO and SAGE advice as their guidance for decisions - hence no major push for alignment with the RoI*" [**MM2/99 INQ000083097**].

307. This appears to be a note of a meeting where I was not present and I am unclear as to how comprehensive the note is. As CMO I provide independent professional advice to the Health Minister based on the evidence then available which included a range of scientific advice and other information to inform my advice as CMO to the Health Minister and in turn the Executive. As is appropriate this included the expert advice and recommendations of SAGE and its subgroups. It was not my role as CMO to "push" or press for policy alignment with the RoI. Policy decisions remain matters for Ministers.

308. Policy decisions correctly are for respective Ministers and Departments and incorporate the advice from officials in those departments with respect to considerations other than health and scientific advice. Decision on NPIs were considered and approved by the Executive. My role was to provide independent health and scientific (as the CSA was absent) advice at that time. For example, I did not at that time advise school closure given the then evidence around the role children played in transmission, the recognised negative impacts on children, the uncertainty of how long schools would be closed, and potential wider impacts in terms of parents with children working in the health service and other essential services. There was however significant political and media debate at that time proposing such alignment. Ultimately, policy decisions remained the responsibility of Ministers and the Executive.

309. Executive Minister's consideration of the advice provided, informed by SAGE, was in my view appropriate although clearly there were other factors that Ministers needed to consider. If Ministers had wished to align policy in NI with decision in the RoI or the UK this remained their prerogative irrespective of any advice provided. My observation at the time was that Ministers wished to make decisions

that were right for NI but were mindful of and considered the challenges presented by some differences in the timing of policy decisions and public communications between NI and RoI and with respect to the rest of the UK. While policy alignment is not a professional technical matter on which I can comment, such alignment across the island of Ireland or GB and Ireland would have required respective Ministers in the UKG, Irish Government and Executive to work jointly to agree such an approach.

310. **14 March 2020** - following a North/South Ministerial meeting, I wrote to TEO acknowledging that we had been in a 'soft standup' position which had been of assistance and advising that CCG(NI) and the Executive Information Service (EIS) now needed to "increasing lean in" and support the Department and coordinate across NI Departments in respect of cross-sector resilience [**MM2/105 INQ000425594** (DoH Ref: MMcB/0163)]. This was a reference to the need for greater cross- government coordination under the civil contingencies and NICCMA arrangements.

311. **16 March 2020** – A request to the phased activation of NICCMA was approved by the then Head of the NI Civil Service who agreed to the activation of the NICMMA Protocol which was formally stood up. I believe the need to activate the NICCMA arrangements and cross government coordination is also reflected in the WhatsApp message between Andrew McCormick and David Sterling [**MM2/106 INQ000308415**].

312. At a meeting of the Executive on the same day, a paper from the First Minister and deputy First Minister [**MM2/107 INQ000086883**] explained that, on the basis of scientific and clinical advice "*the United Kingdom has moved from the 'containment' phase, where for the most part daily life was 'business as usual', into the 'delay' phase where a number of measures aimed at slowing the spread of the virus will be implemented over the coming days…*" The purpose of the paper was to facilitate Executive consideration of the wider non-health response to Covid-19 and in particular the phased activation of the strategic emergency co-ordination arrangements within government of the Northern Ireland Central Crisis Management. It was agreed by the Executive on 16 March to implement a phased

activation of the Northern Ireland Central Crisis Management Arrangements to deal with the impacts of Covid-19 [**MM2/108 INQ000048447**].

313. **18 March 2020** - TEO activated the NI Hub, the operations centre of CCG(NI) and this remained activated until June 2020. The Department embedded liaison officers in the NI Hub to assist in the coordination of quality and timely information to and from the Department's EOC. [**MM2/109 INQ000425595** (DoH Ref: MMcB/0164)], [**MM2/110 INQ000425596** (DoH Ref: MMcB/0165)], [**MM2/111 INQ000425597** (DoH Ref: MMcB/0166)] and [**MM2/112 INQ000137343** (DoH Ref: MMcB/0167)].

314. On 19 March [**MM2/113 INQ000065737** page 8] the Health Minister provided a further update to the Executive on the worst-case scenario for Covid-19 in NI and is quoted as saying these are "*scary numbers*". In my view this was further confirmation of the potential impact of the pandemic which had previously been provided in previous briefings, updates and COBR meetings. Providing specific information to the Health Minister on health service and ICU capacity would have been the responsibility of Healthcare Policy Group and the HSCB (now SPPG).

315. **23 March 2020** - When the UK including NI announced the wider restrictions which became known as the national lockdown there were 6,650 confirmed people with Covid-19 and 335 reported deaths.

316. **28 March 2020** – first meeting of the NI Expert Advisory Group on Testing occurred. This group was established by the Department at my request and was led from the PHA. This group provided advice and made recommendations to the Department on all aspects of Covid-19 PCR testing. For example, it informed the announcement by the Health Minister on the 18 May 2020 [**MM2/263 INQ000103704** (DoH Ref: PM0143)], that Covid-19 testing would be made available to all Care Home residents and staff across NI; this included Care Homes which did not and had not previously experienced a Covid-19 outbreak with the intention of completing the roll-out of testing to all residents in June 2020. On 28 July 2020 the Health Minister announced the next phase of testing in Care Homes [**MM2/264 INQ000103705** (DoH Ref: PM014)]. This involved a rolling programme

of regular testing, starting on 3 August 2020, for all residents and staff in homes which did not have a confirmed outbreak of the virus, with the aim of helping to keep those homes free of Covid-19. The roll out of routine testing meant that Care Home staff would be tested on a fortnightly basis and residents would be tested monthly.

317. It is undoubtedly the case that limited testing capacity was a critical factor in the first few months of the pandemic, and led to the need for challenging and difficult decisions about how limited testing should be most effectively deployed. Every effort was made to maximise the availability of testing through development of a local testing network, but for me one of the key lessons from this pandemic is the need to focus more on a rapid expansion of reliable testing capacity at the earliest point possible, in order to be able to identify all cases and fully support a contact tracing service and to ensure that such testing is available to all vulnerable groups including those whose home is a care home.

318. In regard to my professional review and consideration of briefing and decisions just prior to and including the Executive meeting on 16 March 2020 on self-isolation and social distancing given the pace of events and the passage of time, it is problematic to try to identify and isolate information and advice provided by myself and others for particular meetings given the challenges with providing written briefings. The rapid pace of events, and the comparatively small nucleus of people then involved meant that verbal briefings were often more efficient than written briefings during this time period. However, the sum total of what the Health Minister, the FM and dFM and Executive Ministers would have known and understood at any point in time would have reflected in the briefings they had received at Executive meetings over the previous days and weeks as well as Executive papers, press releases, Ministerial Statements, and knowledge that they accumulated through participation in both COBR (M) meetings and discussion at Executive meetings over the same period.

319. SAGE met at particular points in time but the flow of information and evidence, discussions amongst the scientific community and engagement between the Scientific Community and UK CMOs and UK CSAs was continuous and ongoing.

The point of the actual meetings was to discuss and arrive at resolved/agreed positions and to make decisions.

320. The UK action plan published on 3 March 2020 explained what would happen during the 'Delay' phase i.e. *"If the disease becomes established in the UK, we will need to consider further measures to reduce the rate and extent of its spread. Based on experience with previous outbreaks, it may be that widespread exposure in the UK is inevitable; but slowing it down would still nonetheless be beneficial. For example, health services are less busy in the summer months when flu and other winter bugs are not driving GP consultations and hospital admissions. In the 2009 'swine flu' pandemic school holidays significantly slowed transmission of the virus. We will increase publicity about the need for good hygiene measures (hand washing, and catch it, bin it, kill it) and further promote the need for people with symptoms to stay at home for the full duration of their illness. Other action will be considered to help achieve a Delay in the spread of the disease. We will aim to minimise the social and economic impact, subject to keeping people safe. Such judgements will be informed based on the best available and most up-to-date scientific evidence, and take into account the trade-offs involved. Action that would be considered could include population distancing strategies (such as school closures, encouraging greater home working, reducing the number of large-scale gatherings) to slow the spread of the disease throughout the population, while ensuring the country's ability to continue to run as normally as possible. The UK governments' education departments' planning assumptions include the possibility of having to close educational settings in order to reduce the spread of infection. We would consider such measures in order to protect vulnerable individuals with underlying illnesses and thus at greater more at risk of becoming seriously affected by the disease. The effectiveness of these actions will need to be balanced against their impact on society."*

321. In an Oral Statement to the Assembly on 9 March 2020 the Health Minister said:

"Across the NICS, planning has been stepped up to ensure a coordinated response from all sectors of Government. TEO is leading the work on assessing essential services and key sectors' readiness and have convened weekly C3

meetings. C3 means command, control and coordination. TEO led a workshop on 6 March to discuss Departmental risks and priorities." AND
"I also have to be frank with people. This is not going to get any easier anytime soon. The indications are that it is likely to get much more challenging before we are through the worst of the situation. We can expect significant ongoing increases in the numbers of people testing positive for Covid-19 in Northern Ireland. The same can be said in England, Scotland, Wales and the Republic of Ireland Health systems across the globe are coming under extreme and increasing pressure as this virus spreads. Ours will be no different. This is bound to take its toll. Normal business in health and social care may not be possible. Some activities may unfortunately have to be scaled back, but such decisions would not be lightly taken."

322. On 3 March 2020 the Cabinet Office emailed Departments across the UK [**MM2/114 INQ000425599 MM2/114a INQ000425600 MM2/114b INQ000425601** (DoH Ref: MMcB/0168)], including TEO and the Department, with the following request: "*As part of planning, HMG is considering potential packages for non-pharmaceutical intervention options e.g. school closures and self-isolation. SAGE have developed advice on the efficacy of these, which will be discussed at COBR(M) tomorrow, 04 March. Building on SAGE's table, attached for reference, Departments are requested fill in the table attached outlining impacts, challenges and cross-government interdepencies for their sectors if that intervention option is taken forward. This could include societal impacts, as well as operational. Where possible, if you have quantitative information or predicted numbers impacted, please do include those. We would also appreciate input from the Das on the impacts of these interventions on their communities*." On 9 March the Department emailed its input to the Cabinet Office [**MM2/115 INQ000425604** (DoH Ref: MMcB/0169)]:

Population (NI)	1.9M
COVID total symptomatic cases	0.98M
COVID total hospitalisations	0.12M

COVID total invasive ventilation	11K
COVID total deaths	15K
COVID peak daily new symptomatic cases	32K
COVID peak daily new hospitalisations	4K
COVID peak daily symptomatic caseload	609K
COVID peak daily Hospitalised caseload	30K
COVID peak daily invasive ventilation	3K
Average daily beds available (all beds)	3.8K
Average daily admissions (emergency & elective)	0.8K
Total level 3 ICU beds	100

Table 2. COVID-19 Reasonable Worst Case for Health and Social Care, Northern Ireland, with and without three behavioral interventions (figures not age standardized for population)

	Without Behavioral Intervention	With three behavioral interventions
COVID peak daily new symptomatic cases	32K	10K
COVID peak daily new hospitalisations	4K	1.2K
COVID peak daily hospitalised caseload	30 K	10K
COVID peak daily invasive ventilation	3K	1K
Average daily beds available	3.8K	
Average daily admissions (emergency & elective)	0.8K	
Total level 3 ICU beds	100	

323. These tables were shared with the Health Minister on the 9 March 2020 **MM2/116 INQ000425605** (DoH Ref: MMcB/0170)]. The day before the SAGE meeting of 13 March, a SAGE paper was tabled at COBR (M) (i.e. 12 March) meeting at which SAGE had considered six possible social and behavioural interventions to delay the outbreak based on the clinical evidence. The impacts had been modelled and SAGE was advising four interventions for implementation in the following 3-4 weeks:

i. Individuals stay at home for 7 days from the point of displaying mild symptoms - to delay the peak;

ii. Household stay at home for 14 days from the point that any member of the household displays symptoms - to delay the peak;
iii. Most vulnerable individuals stay at home for a period of 13-16 weeks - to reduce deaths and delay the peak;
iv. Significant reduction of social contact by the over 70s and at risk groups - to reduce deaths and delay the peak;
v. Closing Schools; and
vi. Stopping Large Events/Mass Gatherings

324. A seventh option on social distancing was also listed in the paper. SAGE advice was that interventions 1-4 should each deliver benefits by delaying and flattening the peak and/or lowering overall deaths and would deliver greatest overall benefit as a package. The recommendations made by SAGE in the paper were as follows:

- Agree to implement intervention 1 (individuals staying at home) now; and interventions 3 and 4 (protection for the most vulnerable groups; and social distancing for the over 70s and those with chronic conditions) in 1-3 weeks' time. This is intended to ensure that each measure impacts at the right point to delay the "peak" and reduce deaths among more vulnerable groups respectively, and to allow support to vulnerable groups to be put in place;

- Decide whether to implement the revised approach to intervention 2 (household stay at home); and if so whether to do so now alongside intervention 1, or delay until 1 - 3 weeks' time;

- Decide whether to announce today that the change in advice to "stay at home" applies immediately, or from Monday 16 March to allow revised public health advice and other preparations to be made;

- Agree to announce today that we will implement interventions 3 and 4 in 1-3 weeks' time when the overall effect would probably be better;

- Discuss the approach to the two interventions (on school closures and mass gatherings) not advised by SAGE for adoption now.

325. The SAGE paper included a detailed Communication and Implementation plan which reflected discussions and evidence considered at a number of SAGE meetings since January 2020. The plan covered objectives, strategy, tools and indicative timelines: The objectives were listed as:

- Through open, transparent, clear communications from the PM, Ministers, CMO and the scientific community, we must ensure that citizens are able to act on the advice. To do this, they must feel like this is:
  - Practical and possible; that they can join the 'national effort' to protect the population and themselves from this virus.
  - Fair to them; that they are able to adopt the recommendations regardless of their social grade or status.
  - Effective; that the science and evidence, as well as the reassurance provided by Government, will have an impact across society and for the individual.

- In combination, our communications, policy implementation, and public infrastructure (including the NHS and local services) will give people the capability to do as we are asking, ensure they have equal opportunity to do so, provide the motivation to join the national effort, to lead population-wide behaviour change.

326. On the basis of what was known at the time NI was still in the containment phase at the beginning of March. Things then changed quickly and on Friday 13 March 2020 we moved into the delay phase. The Health Minister issued a press release in which he said:

"Health service activity across Northern Ireland will unfortunately have to be significantly curtailed as resources are diverted to care for coronavirus patients, Minister Robin Swann has stated.

Affected services will include non-urgent outpatient appointments, day cases, inpatient and diagnostic work. The process of scaling back provision will be phased in over the days and weeks ahead.

Due to increased pressures on GPs during the Covid-19 outbreak, the Department of Health and the British Medical Association have agreed measures to release additional capacity in General Practice. This will mean that GPs will prioritise work to address Covid-19 cases and practices may reduce certain services.

Northern Ireland has moved from the containment to the delay phase for dealing with coronavirus. As part of this new phase, members of the public are advised to stay at home for seven days if they have a fever and/or a new and persistent cough.

Mr Swann stated: "I want to be totally frank with the public about the scale of the challenge heading our way. Health services across the globe are coming under severe pressure. Ours is no different.

"We have now started freeing up resources in our health service to provide hospital care for the most seriously ill Covid-19 patients."

Currently, only non-urgent outpatients, day case, inpatient and diagnostic services will be reduced. Suspect cancer cases and other urgent care will continue, unless advised by the applicable Trust.

Venues for services may change as Trusts try to manage and centralise in order to attempt to maintain services.

For patients who need follow up as outpatients, Trusts are planning for greater use of telephone contact and other digital technology, where appropriate.

Patients will be contacted directly by Trusts with regard to any changes to already scheduled appointments.

All HSC Trusts will also be focusing sustained attention on ensuring patients who are medically well are promptly discharged from hospital, with appropriate care arrangements, to ensure hospital beds are available for any increase in admissions.

Trusts must also plan ahead for levels of sick leave amongst staff, which will inevitably impact on capacity.

Minister Swann continued: "I obviously want to apologise to everyone who will have appointments and treatments postponed. Unfortunately, this is unavoidable.

"This is undoubtedly the biggest public health challenge for at least a generation.

"It will require a Government-wide and society-wide response, not only caring for those who fall ill but also providing support to anyone impacted by self-isolation and any social distancing measures that are put in place in the weeks ahead. "I am very grateful for the support that has been evident right around the Executive table."

327. This is the backdrop to the minutes of the SAGE meeting which took place on 13 March 2020. The next COBR meeting was scheduled to take place on 16 March which was also the date of the next scheduled Executive meeting.

328. The SAGE meeting took place on the afternoon of 13 March 2020 where they advised: *1. Owing to a 5-7 day lag in data provision for modelling, SAGE now believes there are more cases in the UK than SAGE previously expected at this point, and we may therefore be further ahead on the epidemic curve, but the UK remains on broadly the same epidemic trajectory and time to peak. 2. The science suggests that household isolation and social distancing of the elderly and vulnerable should be implemented soon, provided they can be done well and equitably. Individuals who may want to distance themselves should be advised how to do so. 3. SAGE is considering further social distancing interventions – that may best be applied intermittently, nationally or regionally, and potentially more than once – to reduce demand below NHS capacity to respond. The modelling sub-group is discussing potential interventions on Monday 16th, for review by SAGE on Tuesday 17th. 4. The behavioural science suggests openly explaining to the public where the greatest risks lie and what individuals can do to reduce their own risk and risk to others, even if this is ahead of measures announced by the Government – but SAGE recognises that taking individual measures may be more feasible for some than others. Greater transparency could enable personal agency, send useful signals about risk and build trust. 5. Measuring the impact of all interventions depends on sufficient, relevant data delivered on time: it is a priority to ensure accurate and complete data are available with minimal delay*".

329. Later that day there was a meeting of the UK CMOs at which I believe we discussed the latest update from SAGE. This was also the day on which the Health Minister announced the curtailment of health services across NI. I believe

that Ministers were and should have been fully aware of the way in which things were ramping up and the consequent need to curtail health services. I would have briefed the Health Minister on the need to develop new data streams. My experience is that all Ministers want to have data to hand on any major issue and we needed more data for both monitoring and modelling purposes to manage our response and inform advice to the Health Minister and the Executive. Throughout the pandemic I regularly advocated for the need for consistent clear messaging and the Health Minister and Department adopted the approach of releasing as much accurate data as possible to inform the public. Surge planning continued throughout this period and on 21 March 2020 the Department's surge Directorate ran a workshop at which participants looked at various scenarios including the possibility of an extreme surge [**MM2/117 INQ000425608 MM2/117a INQ000425607** (DoH Ref: MMcB/0171)] and [**MM2/118 INQ000426795** (DoH Ref: MMcB/0172)].

330. As I have stated elsewhere in this statement, data streams were limited at that time due in part to low levels of testing, and across the UK at that stage data tended to be skewed to the impact of Covid-19 on hospital activity. The briefing prepared for the Health Minister [**MM2/119 INQ000425609** (DoH Ref: MMcB/0173)] in advance of the COBR meeting on 16 March 2020 largely reflected the information which was readily to hand at that point in time:

- As of 13 March 2020 at 15.00, DHSC has reported 133,527 confirmed cases of Covid-19 worldwide, 80,813 of these are in China. There have been 4,957 fatalities, 3,176 of these have occurred within China, while 1,781 fatalities have occurred in other countries.

- As of 13 March 2020 there are now 29 confirmed cases of Covid-19 in Northern Ireland. 315 tests have been completed.

- In the UK, as of 13 March 2020 the total number of confirmed cases now stands at 798, which includes 645 in England, 86 in Scotland, 38 cases in Wales, and 29 in Northern Ireland. As of 13 March, there have been ten

Covid-19 related deaths in the UK, all ten in England. All patients had underlying health conditions. At that date there had been no deaths in NI.

- There are now 70 confirmed cases in the Republic of Ireland, at least two of which are believed to have been due to 'community transmission'. There are no known implications for NI at this stage.

331. It was a feature of SAGE meetings from early in the pandemic that evidence papers and discussion reflected an expectation that there would be a further wave of the pandemic, and that in discussion of NPIs there was an understanding that at the point at which NPIs began to be relaxed, Covid-19 transmission would increase amongst the population. These are points which were reflected in my briefing to the Health Minister and to members of the Executive.

332. The first two weeks of March 2020 marked the period in the lead up to the policy decision on the 16 March 2020, which was to ask people to avoid social contact: to work from home and to avoid public places such as pubs and restaurants. On that day, household contacts of a symptomatic person were also advised to self-isolate and social distancing for people who were moderately clinically vulnerable was also introduced. Taken together, these were major policy decisions. Each policy decision was significant in its own right, and represented a drive to reduce social contact and community transmission. These decisions also provided advice to the public on how to reduce their own risks and the risk to others through the introduction of social distancing, and mobility data from that time shows that peoples behaviours had changed in advance of 23 March 2020, and the decision to introduce the first "lockdown.

333. I have considered handwritten notes of the Executive meeting on 16 March 2020 [**MM2/120 INQ000065689**] which I have reviewed. I have not previously seen or been asked to consider or approve comments attributed to me or the Department. As I recall this was a lengthy Executive meeting with a number of complex and complicated matters under consideration, including approaches to mitigate the impacts of the pandemic. I am not able to comment on the completeness or accuracy of the note, other than to observe that it appears very abbreviated and, in

my view, may not capture the points made, or the explanations provided, given the complexity of some of the matters being discussed.

334. There were in effect two theoretically possible approaches to the pandemic which were at opposite ends of the spectrum. The first was to let the peak of infection reach its natural height without any intervention. The other extreme was to go for what was subsequently known as “Zero Covid-19” and suppress the virus with an ambition to have almost zero cases for the entire duration of the pandemic however long that would be or until such times as effective medical countermeasures were available, although how long this would be was then unknown.

335. The policy decision in the UK, as in most other Western nations, was to try to suppress the peak incidence and therefore reduce the number of people who would become infected, however given the transmissibility of the virus cases were bound to occur once those interventions were eased and that zero Covid-19 was to all intends and purposes practically unrealistic, particularly over the prolonged period of a pandemic given the considerable harm to the health of the population and the costs to family life and to the economy. The term 'flattening the curve' was a way of trying to express the middle path of three possible options. The purpose of NPIs during the pandemic was to achieve this middle path and to allow time to better understand the severity of the pandemic, build additional capacity in health and social care, and develop new treatments and vaccines. This approach, in view of our level of knowledge and the lack of availability of a viable alternative at the time such as a vaccine or effective treatments, seemed in my professional view the most realistic option.

336. Allowing the peak to reach its maximum without interventions would in my view have both lead to a much high number of people being infected, more severe illness and deaths and other serious consequences, including Long Covid although we were initially unaware of this condition and its significant severity. It would have also resulted in the health service being overwhelmed, and avoidable deaths for both people with Covid-19 requiring hospital care and those people with other non-Covid conditions unable to access emergency care. Avoiding both of these

scenarios was the strategic aim of the policy to save lives and prevent harm which I fully supported from a professional perspective.

337. While as was advocated by some, there was an entirely legitimate case for considering trying to suppress Covid-19 to a very low level until such times as we had highly effective medical countermeasures available, it was however entirely uncertain if this was feasible at all or how long that would take. The initial view which we considered in discussions at the UK CMO meetings was that would be likely more than a year, and possibly many years, before we had highly effective medical countermeasures. The question therefore was the extent to which it was achievable or even desirable to attempt to suppress the virus for this significant period of time given the known harms of the widespread societal interventions which would be required over a potentially indeterminate period.

338. While it might have been possible to keep Covid-19 at almost zero for a short period it was thought not to be realistic, nor was it my view that this was possible in the UK or the RoI over the prolonged period of a pandemic given how transmissible the virus was with no prior population immunity. This would be particularly the case in the winter when the transmission of all respiratory viruses is increased. This was the considered view held by most other countries and in my view zero Covid-19 was never realistic other than perhaps in small geographical areas for very short periods of time and in countries that were less networked into global travel. The "New Zealand" approach, either for the island of Ireland or for the UK and Ireland together, would have been a difficult policy decision politically and practically with profound consequences and would have required significant travel restrictions and would have required the agreement of respective Governments in the UK and Ireland.

339. My view at the time was, and remains, that when Covid-19 became a pandemic that it would remain indefinitely and become endemic over time. It was difficult to diagnose, with asymptomatic infection and transmission, is highly transmissible and we had then no vaccines or other highly effective countermeasure. Even if the consequence of the NPIs was that the transmission virus could be suppressed to

zero in NI or the UK, it would inevitably soon be reintroduced from other countries given the global travel and how connected the UK and RoI was with NI.

340. I publicly explained during the pandemic that in my view, a position shared by all CMOs, that deaths during the pandemic would occur for a number of reasons and the true excess mortality would only become clear sometime after the pandemic was over. This included deaths directly from Covid-19, indirect deaths if the health services was overwhelmed and people with treatable conditions such as heart attacks and strokes or those requiring emergency surgery couldn't access care or because intensive care units were full. Other deaths and harm would occur as a consequence of both the introduction of NPIs and measures introduced by the health service causing delays in less urgent surgery and other services such as mental health. Finally, the longer-term harms caused by loneliness, increased unemployment, lower educational achievement and increased deprivation on health outcomes and the health of the population given the established links between deprivation and chronic or premature ill-health.

341. For example, during one of the regular press conferences with the Health Minister, on 14 October 2020, I made the following points, in response to reported calls from "doctors leaders" for tighter Covid-19 restrictions on the economy:

"…there are no easy solutions or simple answers to this, only a series of hard and very difficult choices, all of which have bad outcomes. Bad outcomes in terms of health - impact on health services – but also wider impacts on society and wider impacts on the economy.

"Now what's good for our health is good for the economy and what's good for the economy is good for our health. I've said many times standing here that socio-economic deprivation - unemployment, poverty - shortens and costs lives.

"And that's why these decisions made by the Executive are so very difficult because the Executive is seeking to balance all of those factors – the immediate pressures on our health service, to stop our health service and those working in it being overwhelmed, and the medium and longer term consequences on wider

society, and on our mental health and well-being, on those people who have been shielding in the past, and on the wider economy. Because a good job is good for our health.

"And there are significant and fundamental risks in terms of young people and their long-term educational attainment and life opportunities which again I as Chief Medical Officer and I would urge all other doctors to be very mindful of. Poverty kills people. It always has, it always will do. And it's those difficult decisions that the Executive has had to struggle with." **MM/121 INQ000446233** (DoH Ref: MMcB/0174)]

342. Similar points were made by the Chief Scientific Adviser and me in our advice to the Executive, as the minutes below illustrate:

The Chief Medical Officer and the Chief Scientific Adviser acknowledged the difficult decisions facing the Executive, and advised that it was more likely that they would be obliged to return to the Executive in mid-December to seek further interventions if easements were made to the current restrictions. The Chief Medical Officer advised of the prospect of excess deaths.
The Chief Medical Officer advised of his view that the COVID pandemic would lead to excess deaths no matter which approach was agreed by the Executive, but that the likely level of excess deaths would depend on decisions made by the Executive at this meeting; and on future actions; and that having some restrictions in place was preferable to allowing all current restrictions to fall. However, any reduction in restrictions may lead to a further intervention being required before Christmas. He recognised the difficult decisions required to balance short term COVID restrictions with longer term economic wellbeing.
The Chief Scientific Adviser recognised the difficult choices facing the Executive as it sought to balance the need for health protection with economic difficulties resulting from COVID restrictions, advising that the nature of a pandemic is to cause deaths no matter what measures are put in place, but reiterating that anything leading to an increase in the R rate would have a short term and more visible impact.

343. The aim of "lockdowns' and other NPIs was to reduce the number of direct Covid-19 deaths and those also those deaths due to the health service being overwhelmed. My advice however throughout the pandemic was clear, that there would be harm and indirect deaths caused by the very measures we were using to control the virus and its impact and that the more extensive and longer those measures were in place the greater the harm would be. This is reflected in the content of the paper submitted by the Department to the Executive on 7 May 2020 [**MM2/121 INQ000425610** (DoH Ref: MMcB/0175)], the second review of the Coronavirus recommendations, in which the Department provided an assessment of the wider impacts of the introduction of NPIs including "*The impacts on health are also profound, from the stepping down of screening programmes and elective care procedures through to the long-term impacts on health from interrupted education, job loss and financial stress. There has been a sharp downturn in people presenting to GPs and emergency departments, including a significant decline in the number referred for cancer investigations and treatment. We are also seeing a sharp rise in all-cause mortality, not all of which can be attributed to COVID infection and disease. We also know that there is a very real relationship between the level of deprivation in our communities and health outcomes."* The Department recommended to the Executive that proportionality be one of the guiding principles in assessing the continuing need for restrictions. The paper also explicitly described the likelihood of further waves of- the pandemic when restrictions were eased. The definition proposed for proportionality was:

> "*Proportionality. The detrimental impacts on health, society and the economy that can reasonably be attributed to the restriction or requirement should be tolerated only as long as the risks associated with withdrawal or modification are assessed to be more severe."*

344. There was no easy way, and there were only ever difficult decisions for Ministers, and a very difficult path to walk between introducing measures late and not extensively enough resulting in a large wave and excess direct deaths or introducing measures too early and too extensively with excess indirect deaths and harms. Separately Ministers also needed to consider the wider societal, educational, and economic consequences.

345. I will discuss the advice that I gave to Ministers between around 15 March 2020 and the Prime Minister's announcement of the decision to lock down, and how my advice changed over the course of that period.

346. It was fairly clear by 16 March 2020 that significant restrictions were going to be needed and were being introduced in countries around the world. The 16 March was extremely busy, beginning with a UK Government call with the DAs, a meeting of UK CMOs, SAGE and then COBR (M). There was also a meeting of the Executive that day which I did not attend. The Health Minister had received a submission with briefing for that meeting [**MM2/122 INQ000425611** (DoH Ref: MMcB/0176)]. Also, on 16 March the Department received an email which had been sent to all Departments by TEO [**MM2/123 INQ000425612** (DoH Ref: MMcB/0177)] which stated that *"Given the pace of developments, the C3 arrangements need to be activated forthwith. The hub will stand up formally tomorrow morning, staffed initially by the Civil Contingencies Policy Branch. My strong advice is that all departmental operations centres need to do likewise."*

347. The decisions made that day reflected moving ahead immediately with SAGEs options 2-4 from the COBR (M) meeting of 12 March 2020. My advice to the Health Minister and I recall the FM and dFM was that this was the right thing to do.

348. There was only 1 further Executive meeting prior to 23 March 2020 and that took place on 19 March and which I did not attend. On 19 March the Health Minister made an urgent written statement to the Assembly which reflected my advice to him at that time [**MM2/265 INQ000103640** (DoH Ref: PM0044)]. In the statement he said:

"***From the planning assumptions available to the HSC in a reasonable worst-case scenario - if we fail as a community to take action to slow down the transmission of the virus in line with the recommended public health guidance - up to 80% of the Northern Ireland population will be infected during this epidemic. Up to half of these may occur in a period of three weeks centred around the peak. Simply put, no health service in the world is***

equipped to cope with the volume of cases that we will see if this scenario comes to pass. However, we have the ability to reduce the potential impact of COVID-19 by protecting our families, friends, and all of the vulnerable people across Northern Ireland, by reducing social contact as much as possible and, if any of us have symptoms, to stay at home. If social distancing and other measures are implemented by the population, with a combined effect they could reduce the peak by some 50% and reduce deaths by up to a third. Planning assumptions also indicate that 8% of infected people will require hospitalisation, 0.7% will require critical care, and 1% will die – although these figures will vary highly depending on age and other health factors. There is no doubt that these measures come at a cost. They will be difficult for people to stick to. They will have significant social and economic impacts. But we must always remain mindful that they will save lives."

349. The statement accompanied the publication of a surge plan [**MM2/261 INQ000130410** DoH Ref PM0300] which detailed the actions being taken within the HSC to expand and free capacity to meet the demands of Covid-19. The Health Minister in his statement said:

"***This plan summarises the key actions taken by Health and Social Care (HSC) NI that will apply from mid-March to mid-April 2020 to ensure that there is sufficient capacity within the system to meet the 2 expected increase in demand from patients contracting COVID-19 during this period. This is a dynamic plan and will be constantly refined in light of emerging issues."***

350. COBR (M) Met again on 18 March 2020 and the Health Minister was sent a briefing submission in advance of the meeting [**MM2/124 INQ000425613** (DoH Ref: MMcB/0178)]. The submission advised the Health Minister that: "According to media reports it is expected that all schools will be closed in Scotland and Wales from this Friday." The submission also enclosed the following data:

- As of 17 March 2020 at 12.00, DHSC has reported confirmed cases of 179,288 with 7,108 fatalities, mainly in China including 2,158 in Italy.

- There are now 62 confirmed cases of Covid-19 in Northern Ireland. Some of the cases are connected and the patients are all receiving the appropriate care. As of 18 March 2020, 1482 people have been tested in NI. All the tests carried out are analysed at the Belfast Regional Virology Lab. In line with agreed protocols any positive results have to be verified by a PHE lab. Daily updates on the number of tests completed and positive results in NI are released at 2pm.

- As of 17 March 2020, there have been 57 Covid-19 related deaths in the UK. All patients had underlying health conditions.

- As of 17 March 2020, 361 further people in England have tested positive for Covid-19, bringing the total number of cases in England to 1,557. The total for the UK now stands at 1950, which includes 195 in Scotland, 136 cases in Wales, and 62 in Northern Ireland. Contact tracing is underway for all cases including where the route of transmission is not yet clear.

- There are now 223 confirmed cases in the Republic of Ireland and two deaths. There are no known implications for NI at this stage.

351. The SAGE meeting which took place on 18 March 2020 reached the following conclusions:

- Based on limited available evidence, SAGE considers that the UK is 2 to 4 weeks behind Italy in terms of the epidemic curve. The consensus is that growth of the UK epidemic is tracking at the same rate as in other countries.

- SAGE advises that available evidence now supports implementing school closures on a national level as soon as practicable to prevent NHS intensive care capacity being exceeded.

- SAGE advises that the measures already announced should have a significant effect, provided compliance rates are good and in line with the assumptions. Additional measures will be needed if compliance rates are low.

- Reliable data on the health impacts of existing interventions will only be available in 2-3 weeks. This would not be in time to inform judgements on additional interventions to limit NHS pressures, which are likely to be significant within 2-3 weeks. It may be possible to collect intermediate data, and this should be a priority.

- Social distancing based on a) places of leisure (restaurants, bars, entertainment and public spaces) and b) indoor workplaces depend on compliance with the guidance issued earlier in the week. We do not yet have reliable compliance data and therefore collecting reliable compliance data should be a priority.

- If the interventions are required, it would be better to act early.

- Transport measures such as restricting public transport, taxis and private hire facilities would have minimal impact on reducing transmission in London.

352. On 22 March 2020 I received an update from Chris Whitty [**MM2/125 INQ000425614 MM2/125a INQ000425615** (DoH Ref: MMcB/0179)] entitled 'my overview'. I don't recall that during this period I had amended my advice from that provided to Health Minister or the Executive ahead of the 18 March meeting in relation to the decisions which were then made on 23 March 2020. My resolved advice at that time was that further measures over and above those introduced on the 16 March were required in line with SAGE recommendations. In advance of the COBR (M) meeting on 23 March the Health Minister was sent a briefing

submission [**MM2/126 INQ000425617** (DoH Ref: MMcB/0180)]. A significant focus was on the introduction of shielding for the Clinically Extremely Vulnerable.

353. The UK CMOs met on 20 March 2020 and again on 22 March 2020. I have no recollection that there was any discussion or advance warning at these meetings that a lockdown paper would be tabled by the Prime Minister at COBR on 23 March 2020. Whilst there was no advanced warning of the paper to be tabled on Monday 23 March 2020, I believe that the proposals were a natural progression from decisions made previously by the UK Government and the Devolved Administrations, most particularly the pronouncements on social distancing on 16 March. It is it my recollection that at the UK CMO meetings on the 23 March in advance of the COBR meeting that we discussed that further action, and more measures were needed. While there had been a positive response to the announcements on the 16 March it was our collective view that more was needed. Once it became clear that non-mandatory requirements to socially distance were not effective enough to stem the spread of Covid-19 then a "lockdown" was the next step. In the background to these discussions during this period was the evidence of the impact that Covid-19 was having in London which was somewhat ahead of the rest of the UK in the spread of Covid-19.

354. On 23 March 2020 there was a meeting of UK CMOs, then SAGE, then COBR (M) and then the UK CMOs. SAGE minutes recorded that the estimated R number for the UK was 2.6 to 2.8 which was extremely serious and would have required a significant additional response, which is the view which I would have communicated verbally to the Health Minister and FM and dFM. To the best of my recollection, it was only on that day that I became aware of the detail of the proposals going to COBR (M) that day. I cannot recall what discussion if any had taken place on 20 March or 22 March. The paper proposing temporary additional social distancing measure was tabled late that afternoon. The most significant factor influencing my advice was the estimate by SAGE of the R number at 2.6 to 2.8.

355. During February and into March 2020, the pandemic was moving westward across Europe, and equally across Europe, countries were introducing more and more

NPIs to try to contain the spread of Covid-19. Within the UK, for February and into the first part of March there was an absence of hard data about Covid-19 and its impact within the UK on which to base assumptions and advice. As is evidenced by SAGE papers throughout this period, scientific papers were based on what was known based about the spread and impact of previous viruses and started from our knowledge of influenza with some data and evidence on Covid-19 coming from China and then from parts of Europe. Throughout that period in particular SAGE papers acknowledged these data limitations and the wide confidence intervals associated with much of the research findings.

356. By the middle of March data was being generated within the UK. Although skewed towards those cases which were hospitalised, this data was then being used to inform and update papers being discussed at SAGE. In NI we had only a small number of cases, insufficient numbers to underpin any detailed analysis. At the time we had limited testing capacity which will have affected the number of cases identified and we can reasonably say now that it is likely that there were more cases than were being identified by testing at that time. In the period 15 March 2020 to 23 March 2020 there were three changes in the evidence and assessments coming from SAGE, firstly in relation to self-isolation requirements, then in relation to school closures and then finally in relation to lockdown when SAGE on 23 March assessed that the R number in the UK was between 2.6 and 2.8. Before and during this period it was evident that more restrictions were going to be needed, it was mainly a question of when they were introduced and how far they would go. I believe that the Health Minister, the FM and dFM and Executive Ministers understood this and it is reflected in the COBR (M) papers from around that time.

357. During the period 15 March 2020 to 23 March 2020, I updated my advice to Ministers to reflect the scientific evidence coming from SAGE and therefore to support the recommendations being made by SAGE. The reality is that this tended to be in real-time, happening at speed, and focused on COBR (M) meetings, with decisions made then being reflected in subsequent submissions, press releases and Ministerial Statements. Faced with an R number of 2.6 to 2.8 I don't believe

even in hindsight that at that time there was any other viable option other than Lockdown, which is what I advised. This remains my view.

358. There was at that time a significant investment of time and resource in developing a range of data streams in NI so that by the time we moved beyond this first wave we had a good foundation of NI data on which to base advice to the Executive and of course by that time unfortunately we had more Covid-19 cases to report on. The range and sources of data was added to incrementally throughout the pandemic and a significant volume of data was placed into the public domain. Alongside this we developed NI specific modelling. Although UK colleagues were producing modelling data for NI it tended to lag behind what was able to be produced locally in order to inform advice to the Health Minister and the Executive.

Spring into Summer 2020

359. In May 2020 the Executive agreed a five-stage plan for how NI would move out of NPIs and lockdown, and the approach that would be taken when deciding how to ease NPIs and wider restrictions. The paper was published on 12 May 2020 to assist with decision making and to ensure openness and transparency about the basis of decisions. Throughout the early part of this period the Department was planning for the second wave which we fully anticipated [see **MM2/121 INQ000425610** (DoH Ref: MMcB/0175)]. This assessment was also reflected in advice that we provided to the Health Minister and the Executive and I believe it reflects dFM comments on 7 April 2020, at the Ad Hoc Committee on the Covid-19 Response when she said: "*Based on the recent modelling, it looks as though we will potentially face a second surge, and, if that is the case and we have another peak, we need to prepare for that now and for what is coming down the line.*" [**MM2/127 INQ000425618** (DoH Ref: MMcB/0181)].

360. On the 11 May 2020 the UK government published its Covid-19 Recovery Strategy, and I have considered the witness statement from Holly Clark, Deputy Director of the Constitution and Rights Group NIO to Module 2C which states: "*…on 11 May 2020 when the UK government published its Covid-19 recovery strategy and the NIE published its Coronavirus Executive approach to decision-*

making document the following day. Both plans favoured a phased approach to the relaxation of restrictions, but the NIE chose not to remove any restrictions at that stage and declined to allocate provisional dates for the relaxation of restrictions" [**MM2/5 INQ000148325**, paragraphs 139 to140].

361. CMOG colleagues, the CSA and I provided input into a paper entitled "Executive Approach to Decision Making [**MM2/128 INQ000137371**], published on 12 May 2020. At the time I felt it was almost inevitable that there would a further wave in the autumn and winter and I and the CSA advised Ministers to adopt a phased and gradual approach to the relaxations of restrictions followed by an assessment of the impact of any relaxation before further relaxations were made. I advised against providing provisional dates although there was significant discussion at the Executive about adopting such an approach. I advised that the approach should be guided by "data not dates" and consideration given to further relaxations only once the impact on community transmission of previous relaxations could be fully assessed. I believe this was a more prudent approach rather than an arbitrary date-based approach which I felt would raise public expectations and commit Ministers. The approach of the Executive was in my view well summarised by the dFM in media interviews on 12 May when she described that NI must exit the lockdown in "baby steps."

362. The Executive paper and plan subsequently agreed and published on the 12 May set out the five 'Guiding Principles' for future Executive decisions on regulations. Principle 2, Protecting healthcare capacity, stated: "*the healthcare system should have sufficient capacity to treat Coronavirus patients while phasing in the reintroduction of usual health and care services. The system should not be allowed to be overwhelmed by a second or subsequent wave of the pandemic.*" This reflected concerns regarding a second wave happening later in 2020. I have set out below some of the important details agreed by the Executive in relation to its approach to decision making, as the best summary of the objectives that had been agreed by the Executive in advance of the second wave.

363. The Executive's plan 'Coronavirus - Executive Approach to Decision-Making' [**MM2/128 INQ000137371**] described that in reviewing the regulation the Executive would consider the following criteria: i) evidence and analysis relating to the pandemic, including the most up-to-date scientific evidence; ii) capacity of the health and social care services to deal with Coronavirus cases as well as the need to resume normal services; iii) assessment of the wider health, societal and economic impacts of the Regulations, including identifying the areas where greatest benefit and lowest risk would result from relaxation. Furthermore, it described the guiding principles that would inform decision making:

"2.6 Bearing in mind the primary purposes of the Regulations – minimise the numbers of cases and deaths, and ensure as far as possible that the health care system has the capacity to care for Coronavirus patients and care for all patients, present and future – the Executive has adopted the following principles to be applied when considering whether a specific restriction or requirement should be retained, withdrawn or modified."

364. The 5 Guiding principles were:

- Controlling transmission. Progress on the path of recovery depends primarily on controlling the rate of transmission. The key metric for this purpose is the reproduction number 'R'. A restriction or requirement should only be relaxed when there is a reasonable prospect of maintaining R at or below 1.

- Protecting healthcare capacity. The healthcare system should have sufficient capacity to treat Coronavirus patients while phasing in the reintroduction of usual health and care services. The system should not be allowed to be overwhelmed by a second or subsequent wave of the pandemic.

- Necessity. In accordance with the terms of the Regulations, a specific restriction or requirement should be retained only as long as it is considered necessary to prevent, protect against, control, or provide a public health response to the incidence or spread of Coronavirus.

- Proportionality. The detrimental impacts on health, society and the economy that can reasonably be attributed to the restriction or requirement should be tolerated only as long as the risks associated with withdrawal or modification are assessed to be more severe.

- Reliance on evidence. Proposals for change or for the retention of a restriction or requirement should be informed by the best available evidence and analysis.

365. After describing these five guidelines, this section of the Executive paper states *"In addition to drawing on the WHO guidelines, our guiding principle of proportionality ensures that the Executive will consider at every stage whether the benefits of the restrictions in controlling transmission and protecting health service capacity continue to outweigh and justify the very significant damage the restrictions are inflicting on our society, economy and wider health outcomes".*

366. The Executive paper on the approach to the review of the regulations and the agreed 'Coronavirus - Executive Approach to Decision-Making' was referenced in Department papers and advice provided by myself and the CSA when the Executive was considering relaxation in NPIs. I considered these five principles when providing advice to Ministers in respect of NPIs. However, I was also taking account of all the scientific, public health and clinical evidence available at that time, and ultimately I and the CSA had to make judgements on the advice that we provided. Others may have arrived at different judgements but ultimately as the decision makers, Ministers made their own judgements and decisions on the proportionality of any response.

367. As described in the "Coronavirus - Executive Approach to Decision-Making', during this period the Executive continued to consider the public health response, while recognising the importance of keeping society and the economy as open as possible. For Executive Ministers, the choices in respect of NPIs represented a series of difficult decisions about the least-worst options recognising that the NPIs had significant societal, educational, and economic consequences. As such the

Executive had agreed that NPIs individually and collectively would only remain for as long as was necessary to protect the public and the health service from being overwhelmed. As vaccines and drugs became available the contribution of, and necessity for, NPIs became less, although for the first two years there remained a heavy reliance on NPIs.

368. I had concerns about the plan adopted, particularly having regard to SAGE advice in May and June 2020 (for example in [**MM2/129 INQ000061546**] and [**MM2/130 INQ000061551**]). As described in [**MM2/131 INQ000120519**] at the 36th SAGE meeting of the 14 May 2020, my general concern was consistent with that in the minutes "*SAGE has advised previously against making too many changes at once*." and again in the minutes of the 43rd meeting on the 23 June 2020 and in particular paragraphs 9 to18 [**MM2/130 INQ000061551** paragraph **2** and **MM2/130 INQ000061551** paragraph **3**] and at paragraph 9 "*Releasing a significant number of measures in combination presents a material risk of accelerating transmission…*" My concerns were that the relaxation of NPIs would be not as controlled as they needed to be and that a decision to relax a significant number of measures in combination or in quick succession would result in a significant rebound in infections and significant increases in community transmission. This was a consideration which I and the CSA sought to impress upon Minsters.

369. A mechanism for regular review of the statutory restrictions was built into the Health Protection (Coronavirus Restrictions) (Northern Ireland) Regulations 2020 which were made and brought into operation on 28 March 2020. Regulation 2(2) requires that:

> "*The Department of Health must review the need for restrictions and requirements imposed by these Regulations at least once every 21 days, with the first review being carried out by 18th April 2020.*"

370. Regulation 2(3) further required that:

> "*As soon as the Department of Health considers that any restrictions or requirements set out in these Regulations are no longer necessary to prevent,*

protect against, control or provide a public health response to the incidence or spread of infection in Northern Ireland with the coronavirus, the Department of Health must publish a direction terminating that restriction or requirement."

371. This mechanism enabled the Executive to formally regularly review whether there was a continued need for the statutory restrictions. The first review was completed and a paper [**MM2/132 INQ000425619** MM**2/132a INQ000425620** (DoH Ref: MMcB/0182)] submitted by the Department for consideration at the Executive meeting held on 15 April 2020. Between that date and 9 July 2020 there were five reviews in total of the continued need for restrictions which were put in place under these regulations. In each instance the reviews were submitted as papers for consideration by the Executive on 7 May 2020 [**MM2/266 INQ000103613** (DoH Ref: PM0015)],18 May 2020 [**MM2/267 INQ000346706 (**DoH Ref: PM0400)] ,18 June 2020 [**MM2/268 INQ000346707 (**DoH Ref: PM0401)] ,9 July 2020 [**MM2/269 INQ000346708 (**DoH Ref: PM0402)]. Subsequent iterations of these regulations and travel regulations which were also made also included this built in requirement for regular reviews. At the conclusion of each review the Health Minister made a recommendation for Executive decision on whether or not there was a continued need for the regulations.

372. As the Executive was reviewing the continued need for restrictions on a regular basis it was important that in any consideration of further relaxations it was understood that it would be at least 3-4 weeks before the impact of any relaxations was evident in the data. My concerns were also in the context of the almost inevitability of a further wave in the autumn and winter, which I and the CSA had indicated both in Executive meetings and publicly. The likelihood of a second wave in the Autumn was something which had featured in the considerations of evidence by SAGE from early February 2020 onwards.

373. I have considered notes of Executive meetings of the 7 May 2020 and the 15 June 2020 and comments attributed to the Justice Minister and myself on the 7 May, and the DAERA Minister, CSA and myself on the 15 June. As indicated at paragraph 812 below, with perhaps two exceptions, I did not see Executive

minutes during the pandemic, nor did I approve or agree minutes to ensure that my comments or verbal advice was accurately recorded.

374. The minutes and notes of both meeting are very brief, and they do not in my view capture the detail, complexities, nuances, or the range of views expressed in discussion. The informal notes of some Executive meetings which I have also now seen because of evidence disclosures to the Inquiry, while somewhat more extensive, are perhaps limited to what the notetaker perceived as being the key points. The verbal advice I and the CSA provided to Executive, the questions asked, and the responses we provided do not appear to have been recorded.

375. As CMO my role was to provide health advice and scientific advice, the latter informed by and agreed in discussion with the CSA, to inform discussions and decision making by Ministers. The advice I gave was medical and scientific in nature and focused on health considerations, with only occasional references to other areas such as the economy and education as they related more narrowly to the public health implications. Whilst policy decisions could be informed by my advice, they could not be led or directed by it as policy decisions are solely the prerogative of Ministers. Throughout the pandemic medical and scientific advice from a health perspective was particularly important in informing policy decisions. Ministers, in my view correctly, also needed to take account of a range of other factors including the impact on the education of children with regard to the closure of schools, family life, societal impacts and the economic impact. Ultimately as decision makers Ministers needed to balance all of these considerations.

376. It was an inevitable, in my view, that Executive decisions did not always align with my advice and that of the CSA, although this was mainly in respect of the timing of decision making on the introduction or relaxation of NPIs. Executive Ministers had responsibilities for their respective Departments and sectors, and this understandably informed their views and was a factor in Executive discussions and decisions. My view was that there were also different weights placed on scientific evidence at different points in time and by different Ministers, for example as the pandemic progressed into the second wave the Executive placed more weight on the impact on the continuing economy, children, families and society. This

reflected views and debate in the public domain in respect of "the science" and ensured that diverse views were expressed and considered in Executive discussion. One example of the public debate on the "science" was consideration of the relative benefits of the wearing of face coverings. I believe all of this was entirely understandable given the challenges faced by Ministers and the consequences of decisions.

377. There were some occasions when a Minister or group of Ministers looked for greater certainty than was possible and occasionally sought a more directive input and a simple "yes or no" answer or a level of detail and granularity with respect to modelling which was not possible. On other occasions again, a particular position or views were strongly expressed by Ministers. All policy decisions are for Ministers and my role as CMO was to provide my best advice to inform those decisions while setting out the potential consequences of various decisions. I did so to the best of my ability notwithstanding the level of uncertainty and I believe that was for the most part understood by Ministers.

378. The challenges and pressure that Ministers faced and the implications of the choices and decisions they had to make should not be underestimated and I have no doubt that the burden of the responsibility weighed heavily as it did with those providing the advice. What is now perhaps difficult to appreciate, and even to fully convey, was the sheer pace and complexity of events as they unfolded. There were no easy answers and there was significant uncertainty. My role was to provide the best advice I could, and I did so. In general, I thought that Ministers listened carefully to the advice provided, sought clarification when that was required and at other times sought to test the public health and scientific advice as was appropriate given the implications of their decisions.

379. At the Executive meeting on 7 May 2020 two separate documents were discussed. The first set out a high-level approach as to how the Executive could ease restrictions through a structured formal review mechanism whereby other Departments requests for the relaxation of any restrictions could be prioritised by their Department and assessed with input from the CSA and myself. The second paper was a more detailed departmental paper which explained the principles and

approach that were to be applied to the second review of the Health Protection (Coronavirus restrictions) (Northern Ireland) Regulations 2020 [**MM2/378 INQ000346705**] and would be applied to subsequent reviews.

380. I have reviewed and considered the handwritten notes of the Executive meeting on 7 May 2020 and the comments made by the Justice Minister [**MM2/133 INQ000065724** page 8] who considered the papers under discussion as being contradictory and amounting to "an a la carte approach, which is what they would not do."

381. At the Executive meeting on 15 June 2020, with respect to social distancing I said that I was "*extremely uncomfortable with move to less than 2m*" and the DAERA Minister appears to have said that the Executive was following science "currently unproven, best guess". The *CSA "respectfully disagrees re science - always based on uncertainty...decisions shd be informed by science, but need to take other considerations into a/c - economic"* [**MM2/134 INQ000065730**]. The CSA and I, in presenting evidence and advice to the Executive, highlighted caveats, limitations with data and in so doing often had to present data values e.g. the R value as a range. Understandably there was a desire by Ministers for as much certainty as possible in making decisions and I can understand that some Ministers may have been frustrated that we could not provide them with greater certainty.

382. Policy decisions in relation to the relaxation of the restrictions and amendments to the regulations were matters for Ministers. My role as CMO was to provide advice to inform those decisions while setting out the potential consequences of various decisions to the best of my ability. As I recall on 7 May 2020 I advised that Ministers needed to consider the cumulative impact of any relaxation of restrictions and amendments to the regulations as decision makers. I believe this is reflected in comments attributed to me in the note of the meeting: "*consider [ing] the cumulative impact and provide risk/benefit analysis to provide structure & qualitative advice"* [**MM2/133 INQ000065724**, page 6]. I believe these comments represent the challenges and pressures Ministers faced in reaching decisions in

considering the cumulative impacts of relaxations and wider impacts of restrictions. There were no easy answers and significant uncertainty.

383. Throughout the early part of the summer the number of confirmed cases in NI was too low to allow an accurate estimate of R with respect to cases. Daily Covid-19 cases were in low single figures, and hospital numbers were low and falling. At the Executive meeting on 9 July 2020 the notes record the update from the Health Minister, on the advice of the CSA and I, that the use of the R number was being suspended and the Department was looking to use a wider set of figures [**MM2/135 INQ000065764**]. To put this in context at this meeting the Health Minister also reported that there had been no Covid-19 deaths reported for the last five days and there had been no people in ICU for eleven days and outbreaks in 149 Care Homes had now closed.

384. During the summer of 2020 the CSA and I provided public health and scientific advice on a range of relaxations at the request of the Executive. Examples of this included, indoor marriages, baptisms, and related celebratory events; reopening of indoor fitness studios and gyms; reopening of outdoor leisure playgrounds, courts, and gyms; reopening of cinemas; outdoor horse racing and equestrian competitions from 11 July 2020; competitive games and sporting events; reopening of libraries; reopening of indoor sport and leisure facilities, including skating rinks and leisure centres (**MM2/136 INQ000353631**).

385. On 25 June 2020, the Executive agreed an indicative timeline of further relaxations during June, July and August which would be implemented if the R rate remained below 1. As described in the M02C-DOH-01, Wave 2 statement, at paragraph 26, up until August 2020 there had been a gradual relaxation of restrictions, with Executive decisions guided by the plan of May 2020.

"Eat out to Help out"

386. In August 2020 the "Eat out to help out" scheme was implemented. As I recall, this was largely a decision made at a UK level, and I have no recollection or record of being asked for my advice on this scheme from a health perspective. I cannot

remember any other specific examples where this was the case. While the scientific and public health advice was an important consideration that informed Ministers' decisions, it was not the only factor, and it was inevitable that decisions did not always accord with the advice from a health perspective. It was appropriate that Ministers took these wider factors into consideration however they were not matters I could advise on.

387. Around that time the CSA and I expressed concern about the progression of the pandemic and advised that Ministers should reconsider their decision to reopen non-food serving pubs and bars in NI on Monday, 10 August 2020 [**MM2/137 INQ000207272**]. I have provided this advice in full as it highlights our concerns that while NI had not yet seen the increase in infections experienced elsewhere in the UK and RoI that there had been significant increases in cases from the start of July. We flagged our concerns that the situation would deteriorate further and that while recognising the economic impact on the sector we advised that reconsideration be given to the proposed reopening of the sector, to create the best possible context for the re-opening of schools:

"A delay in the reopening of non-food serving pubs and bars will undoubtedly dismay the hospitality sector and we recognise the economic damage that will be caused to some businesses This something the Executive will wish to consider carefully in coming to a decision as to the best way forward. However, this sector and the wider economy will be much more severally impacted if Covid-19 prevalence climbs to a level that puts general lockdown measures back on the agenda. We are also very conscious that schools are scheduled to start a new term in a few weeks' time. Opening schools is an important priority, given the implications of closure for the health and wellbeing of children, and one we are keen to support. However, there is no doubt that school opening will also tend to increase community transmission and we believe that the combination of this shortly after wider opening of the hospitality sector creates too great risk at present. We must continue to take all feasible steps to suppress the virus, not least to create the best possible context for schools to reopen."

388. At that time both I and the CSA were very concerned about the impact of opening non-food serving hospitality venues at that time and as such wrote to the Head of Civil Service (HOCS) [**MM2/138 INQ000353636** & **MM2/139 INQ000277966**]. The advice we provided at that time to Ministers highlighted the risks of increasing interactions in indoor settings where social distance was unlikely to be maintained and face coverings could not be worn. We were not specifically asked about "Eat out to help out." Inevitably if the scheme was to be successful and have the desired effect of increasing the number of people making use of hospitality this would lead to an increase in transmission of the virus due to increased mixing and the nature of the interactions. If I had been asked about the scheme this is the advice I would have provided. More generally the subject of return to work was also raised during a meeting of the Executive on 6 August 2020 specifically in relation to reopening Civil Service offices. The CSA and I indicated that we did not believe this was advisable and indicated as such to Ministers.

389. By mid-August 2020 the number of Covid-19 cases were increasing. At the meeting on 20 August 2020 the Executive considered two papers, one tabled by the Health Minister, the first review of the Health Protection (Coronavirus, Restrictions) (No. 2) Regulations (Northern Ireland) 2020 [**MM2/270 INQ000276510** (DoH Ref: PM2192)], the second tabled by the FM and dFM [**MM2/140 INQ000425623 MM2/140a** INQ**000425622** (DoH Ref: MMcB/0183)]. The Department's review paper recorded concerns about significant local rises in virus transmission, and advised of the potential need for local restrictions, recommending a voluntary approach be adopted at that stage. As a matter of urgency, it also proposed the tightening of restrictions on indoor and outdoor gatherings, both in public spaces and private dwellings to reduce virus transmission. These proposals were presented in the paper from the First Minister and deputy First Minister on the same day. The Executive agreed to tighten restrictions on gatherings, with effect from 25 August 2020.

390. A particular feature of the early months of the second wave was the Executive's decision to introduce restrictions in localised geographical areas of NI, for specified periods, to interrupt community transmission occurring in certain postcode areas where the prevalence of cases was significantly higher than the regional level.

These developments are described in detail later in this section of the statement. There are also descriptions of the scaling up of restrictions that were necessary to curtail virus spread in the weeks leading up to and following Christmas 2020.

391. As indicated previously, my advice and that of the CSA was focused on health considerations, both direct and indirect with only occasional references to other areas such as education, the economy, and the wider societal impacts and then only from the narrower public health perspective. This is not because I was unaware of the importance of these consideration rather because as CMO they were outside my professional and technical expertise.

392. At the same time as the introduction of the "eat out to help out" scheme, the CSA and I were providing advice on the reopening of schools. The UK CMOs had discussed and had agreed the importance and priority of reopening schools given the profoundly negative impact of closure on children's education and emotional and mental health and well-being. My advice at this time on schools is summarised in my M2C- CMO-01 statement, at paragraph 168, which I have summarised again here given its relevance. The 4 UK Chief Medical Officers published a consensus statement in August 2020 [**MM2/58 INQ000137374**] summarising the current evidence of the risks and benefits to health from schools and childcare settings reopening. We concluded that while the reopening of schools would put some upward pressure on transmission that we were confident that schools were less important in the transmission of Covid-19 than for some other respiratory viruses. I was also at that time advising on the risks and benefits of schools reopening in NI in September and Ministers were considering the likely increase in community transmission against the health and educational benefits of reopening schools. It was my firm view that, despite the upward pressure on community transmission that would result, that it was important that schools reopened as planned. From recollection some of the media coverage at the time represented this as a "pubs or schools" debate.

393. I have reflected and considered whether there was any impact on the response to the pandemic of the approximately three-month absence of the HOCS between

August and December 2020. The Department remained fully focused on managing the health consequences of the pandemic and as CMO my priority, as in the first wave, was on trying to mitigate those consequences while ensuring an effective public health response. At the end of the first wave and throughout the early part of the second wave my primary consideration was the health perspective with the primary objective of controlling transmission to prevent severe disease and death, and to prevent the health service from being overwhelmed in an almost inevitable second wave, while also preparing for a subsequent second wave. Effective NPIs would continue to be necessary as part of a robust and sustained public health response to the pandemic during the second wave. This was in the context of policy decisions by the Executive at the end of the first wave to incrementally ease restrictions in keeping with the Executive plan published on 12 May 'Coronavirus - Executive Approach to Decision-Making' [**MM2/128 INQ000137371**]. As previously described, in reviewing the regulation and statutory NPIs the Executive would consider the following criteria: i) evidence and analysis relating to the pandemic, including the most up-to-date scientific evidence; ii) capacity of the health and social care services to deal with Coronavirus cases as well as the need to resume normal services; iii) assessment of the wider health, societal and economic impacts of the Regulations, including identifying the areas where greatest benefit and lowest risk would result from relaxation. Furthermore, decisions would also be informed by the guiding principles set out at paragraph 364 in this statement.

394. During the period July to September 2020, restrictions were eased in specific areas of economic and social activity to enable society to return to a semblance of normality. The main exception to this was the use of face coverings in certain indoor settings, including shops which were made mandatory on 10 August 2020. Irrespective of changes in senior roles within the NICS, the Department's focus remained unchanged. The concerns of the Department are best summarised in Assembly statements by the Health Minister during this time. On 28 July 2020 the Health Minister advised that for the 14th consecutive day, up to 27 July 2020, NI had recorded no Covid-19 related deaths [**MM2/271 INQ000276488** (DoH Ref: PM2180)]. In a statement on 30 July 2020 the Department announced that R was estimated at 0.5 - 1.0 (see the M02C-DOH-01, Wave 2 statement, paragraphs 32

to 34, describing The Value of 'R') [**MM2/272 INQ000276512** (DoH Ref: PM2194)]. At that time R continued to show a high degree of volatility and to be heavily influenced by small local clusters. By 6 August 2020, the Health Minister warned in a statement that the latest total for new Covid-19 cases provided a "wake-up call for the complacent" [**MM2/273 INQ000276513** (DoH Ref: PM2195)] with the Department's Covid-19 Dashboard reporting a daily increase of 43 positive cases. The Health Minister continued: "This figure underlines the fact that the threat from the virus remains very real. If anyone still thinks Covid-19 is going to fade away, let them think again. We must all do everything we can to stop the spread of this virus." In a joint statement on 9 August 2020, the CSA and I warned against carelessness and fatigue, highlighting concerns about the increase in confirmed Covid-19 cases and the R number. We recognised the sacrifices already made by many to protect those more vulnerable to the effects of the virus and themselves. We expressed concern about the consequences of a sharp peak in cases in the autumn and winter and we asked for continued vigilance and adherence to the public health advice [**MM2/274 INQ000276514** (DoH Ref: PM2196)]. I have outlined the public statement[6] in full as it summarised the level of our concern at this time. The full statement was very detailed and read:

> *"The headlines in recent days have understandably caused deep concern. We have seen a rise in the number of confirmed COVID-19 cases, the R number increasing and a delay in the re-opening of non-food serving pubs. These developments underline the stark reality that the Coronavirus is not fading away. It is here for the long-term and remains highly infectious. It needs no second invitation to spread. The people of Northern Ireland have done really well in terms of following public advice during this pandemic. Many younger people put their lives on hold to protect their parents and grandparents. Many people at most risk shielded for many months and many people saw their livelihoods suffer. Great sacrifices have been made and many lives have been saved as a result. But there have been worrying signs that fatigue has led to carelessness and that some complacency might be creeping in. We remain deeply concerned that COVID-19 cases could peak*

[6] https://www.health-ni.gov.uk/news/we-can-stay-top-covid-19-we-need-everyones-help

sharply here in the autumn or winter. Whether this happens or not is up to us all. The virus doesn't have a plan - its spread depends on our actions. The consequences for many individuals and for our health service could be extremely serious – not least because health and social care provision is always especially fragile during winter. However, we should not be defeatist about the months ahead. As ever, the challenge involves plotting a sensible course between complacency and panic. With a sustained collective effort across society, we can stay on top of the situation. We can keep protecting ourselves and others, especially those most vulnerable to the virus. We now know much more about COVID-19. We have built up our testing and contact tracing infrastructure and we have some more effective treatments. This remains a vicious virus which can be lethal for many and we need to protect them. As ever, everyone at all levels of the health and social care system will do their best to keep the population as safe as possible. They will not be found wanting. Now that the clapping has stopped, please continue to protect our health service and staff by doing the right thing. Every citizen has to play their part. That means following these five key steps we keep talking about:

- *Watch your distance.*
- *Keeping your distance remains essential when you are out and about. Remember, the virus doesn't spread itself. People spread it, particularly through droplets from the mouth and nose.*
- *Wash hands well and frequently. This is particularly important after touching hard surfaces that may have other people's droplets on them.*
- *Wear face coverings in enclosed spaces and where social distancing is difficult. This is now legally required for certain indoor settings, including shops. Don't be a droplet spreader. And when you are not wearing a face covering, cover your nose and mouth when you cough or sneeze.*
- *Co-operate with the Test, Trace and Protect programme in terms of getting tested and self-isolating when required. Download the StopCOVID NI proximity app to support contact tracing and help break chains of transmission.*

Given what we have been through as a society this year already, these five steps are surely not beyond us all. Life continues to be tough for so many of our citizens. There is no easy way to get through this unprecedented period in our lives, no simple solution to the challenges we face. We obviously want to take every feasible measure to prevent the spread of COVID-19. At the same time, another lockdown would have very serious consequences for our economy, our society, our health service and the mental and physical health of many individuals. We have no option but to work together and take all the necessary steps to stay safe. WATCH, WASH, WEAR. We really must do it to get through it. This is a responsibility on all of us."

395. It was, in my view, inevitable with a highly transmissible virus to which levels of immunity remained low that as restriction were eased allowing increasing population mixing that transmission and numbers of cases would increase. I believe this is summarised in the evidence which I provided to the Northern Ireland Assembly Health Committee on 5 November 2020, where it is recorded that I stated:

> *"As we saw during the summer months, there are unfortunate results when we relax measures. In June, R was somewhere in the region of 0·5 or 0·7. We relaxed measures and allowed some sectors to open up, and, by October, R had got to between 1·4 and 1·6."*

396. I have considered whether what happened in August 2020 and onwards was because of restrictions being eased too quickly or without adequate planning or was enough being done from August onwards to manage the increase in transmission. Given the detrimental impact of the measures to control transmission, the relaxation of the measures over the summer period agreed by Ministers were, I believe, an attempt to maintain a balance between the health consequences and the wider impacts of those measures.

397. Unfortunately, the concerns expressed by the Health Minister, the CSA and I proved to be all too accurate and over the course of the autumn and winter of 2020 the Executive incrementally approved the reintroduction of restrictions to combat the spread of the virus and to prevent the health service from being overwhelmed by excessive demand from Covid-19 patients.

398. As described in the M02C-DOH-01, Wave 2 statement, during this time and into the second wave the Executive Office's approach to providing advice to the Executive to inform decisions by Ministers about the escalation and de-escalation of domestic restrictions changed from that taken during the first wave. The majority of the decision papers presented to the Executive during the first wave comprised the medical and scientific advice and recommendations were submitted by the Department, whereas during the second wave the Executive Office increasingly led on the tabling of decision papers for meetings of the Executive with the medical and scientific advice from myself and the CSA included as appropriate. Many of the papers were informed by discussions at the TEO-led Covid-19 Cross-Departmental Working Group which was meeting weekly during this period and in which the Department participated. On other occasions Executive papers making recommendations about NPIs were drafted solely by the Department and submitted to the Executive. Increasingly, during the second wave, Executive papers involved advice being provided directly by other departments concerning social and economic factors impacting on the decisions to be taken by the Executive. During this period the Department continued to carry out the required review of the restrictions and regulations and any subsequent amendments to the regulations arising from the Executive's decisions.

399. These changes were in my view a positive improvement in the support to Executive decision-making. As the lead department the Executive Office was then preparing and submitting papers to the Executive in collaboration with other Executive departments. In my view this was an appropriate change as TEO was best placed to ensure that the Executive was given comprehensive advice about the likely impact of its decisions on all aspects of social and economic life in NI affected by the pandemic, in addition to the health consequences.

400. Through the period following the retirement of the then HOCS, the CSA and I continued to provide medical and scientific advice to inform decisions taken by the Executive concerning NPIs and other measures, and to provide guidance and support to other Departments. I do not believe it impacted on the work within the Department or the wider Health and Social Care system in terms of managing and responding to the health consequences of the pandemic. As to whether the three-month period without a HOCS materially impacted on the effectiveness of the Executive or cross-government coordination of the response to the pandemic I am unable to say. TEO and other Departments may be better placed to comment. I do however believe that it would have been preferable to have a HOCS in place during this period and this was subsequently addressed with the appointment of Ms Jenny Pyper in December 2020.

Autumn to December 2020

401. From the peak of the first wave until the autumn of 2020 my clear view and advice, and that of the CSA, was that a further wave in the autumn and winter was almost inevitable and that further inventions would be required. The fifth review of the coronavirus regulations [**MM2/269 INQ000346708 (**DoH Ref: PM0402)] which was tabled at the Executive meeting on 9 July 2020 stated: *"It remains unclear how long those who have recovered from COVID-19 will retain immunity. Furthermore, at present best estimates continue to suggest that less than 5% of our population are likely to have had the infection and recovered, which is not a sufficiently high level of population immunity to confer protection from further spread of the virus. Therefore, the absence of a vaccine means we will continue to have to plan for a potential second wave of COVID-19 cases later in the year, and possibly further waves, once restrictions are eased or lifted and normal life gradually resumes."*.

402. From late autumn to the end of December 2020, there were several considerations that contributed to policy debate over this period. First a discussion about the effectiveness of local as opposed to NI wide lockdowns to limit the wider harm and impact of the restrictions and/or if they should be imposed at all. Second the news that on 2 December 2020, the MHRA had approved the Pfizer/BioNTech vaccine

for use in the UK, the first vaccine to receive this approval, meaning a way out of the pandemic was now likely, with the vaccine being rolled out from December 2020 onwards. Third the first results of clinical trials of drugs and other treatments that were leading to a reduction in case fatality, albeit this was still significant, with the potential of breaking the link between infection and severe disease. Fourth, the availability of widespread population Covid-19 testing which resulted in a new option to control transmission based on existing test, trace and isolate principles. Another relevant factor at this point, although perhaps less tangible, was a sense that prior to the announcement of the development of the vaccine that the population were beginning to lose hope, seeing no end in sight despite all of their efforts and sacrifices and all that they had endured. As I recall media statements and comments reflected my concerns and as I recall the concerns of the Health Minister and the Executive. This is illustrated in the comments by the Justice Minister at the Executive meeting of the 8 October 2020 when she said "If problem seems overwhelming people will lose heart. Positive messaging, change attitudes" [**MM2/141 INQ000065756** page 9].

403. The trajectory of the pandemic over this period saw a continued increase in cases until the emergence of the Alpha variant in the second half of the second wave, in around November 2020, which led to a further acceleration. The Alpha variant was significantly more transmissible and posed a very serious threat throughout the UK, the RoI and internationally. The second wave should be seen as happening in two stages: the first initial Wuhan wave in the early stages with a then subsequent overlapping Alpha wave. Given the Alpha variant was much more transmissible this meant that many of the previous assumptions that informed modelling and the scientific advice were no longer fully valid. Because of the continued growth in the pandemic despite earlier intervention, towards the end of this period the Executive subsequently agreed on the 19 November 2020 to introduce a two week "circuit breaker" to come into effect from the 27 November to reset the trajectory of the pandemic, to prevent excess deaths and to prevent the health service from being overwhelmed. With the introduction of this "circuit breaker" NI had in effect then reverted to the lockdown situation that had applied earlier in 2020 during the first surge of the pandemic, with the difference in this circuit breaker being that the schools remained open [see Exhibit CMO037 –

INQ000276593 and [**MM2/142 INQ000425624** (DoH Ref: MMcB/0184)]. I have covered this period in more detail in paragraph 439.

404. In the period preceding this "circuit breaker", on 20 August 2020 the "Executive agreed that the imposition of restrictions in response to high rates of transmission in local areas should not be adopted at this time but this option should be kept open" [**MM2/143 INQ000048486**]. In a handwritten note of the meeting on 20 August 2020 the Health Minister is said to have observed "rather than regional lockdowns. Look at local area enforcement - targeted" and that several Ministers appear to discuss what they considered to be a worrying trend and the need to avoid a lockdown [**MM2/144 INQ000065790**]. As I recall during this Executive meeting, as reflected in the note of the meeting, there were discussions on the proportionality of further interventions and restrictions, and concerns about to the extent that public health advice was being followed and the enforcement of existing restrictions and regulations. At this meeting the Minister for the Economy also advised that the reopening of the economy and tourism had gone well and expressed concerns about the wider economic impacts of further restrictions and observed that a recent Department press conference had framed the response to the pandemic too narrowly i.e. from a health perspective. The Economy Minister's view was that this risked damaging business confidence and in respect of a lockdown "*won't be funded by the Treas, will be for the Exec to fund".* The Health Minister responded that he (as were other Ministers) was *"concerned re increase in COVID cases. Act now to avoid a fully lockdown*." The Justice Minister is recorded as saying "*need to monitor behavioural change to opening up…people relaxing too much. Life/livelihood …have to choose life*." I believe this meeting and the notes of the later Executive meeting from 9 November 2020 to the 12 November represents the dilemmas and difficult choices that Ministers were faced with in attempting to weigh up and balance the health and non-health related impacts of their decisions. My view is that Ministers at all times considered carefully my advice and that of the CSA, however while their decisions were informed by that advice, they considered a number of other relevant factors when arriving at their decisions.

Local Restrictions

405. As indicated in my M2C-CMO-01 statement, at paragraph 157, on 10 September 2020 the Executive did consider and agreed the introduction of local restrictions in Greater Belfast, Ballymena [**MM2/145 INQ000048488**] and three postcode areas from 16 September 2020 with a further postcode from 18 September 2020. Within the next two weeks it became clear that these needed to be extended across NI and this was agreed by the Executive on 21 September 2020, and introduced from 22 September 2020.

406. In a handwritten note of the Executive meeting on 10 September 2020, the Health Minister is noted as saying that he was against an increase in general restrictions as some areas were not seeing increases like other areas. He was also noted as asking for localised restrictions as soon as possible with my support and that of the CSA. The same note records comments attributed to me where I am recorded to have said: "*least worst option, material risk to population, will lead to increase in cases. Profoundly concerned re risk, urge Mins to take affirmative action as in paper. May need worse action soon. Don't have days to wait.*"

407. At the time I was concerned about the continued increase in numbers of cases and wished to impress upon Ministers the need for an urgent decision on the need for further interventions. I believe I made my concerns clear. The return of schools - which I supported recognising the significant adverse consequences on children - the associated increased mixing and associated changes in behaviour coming into the autumn and winter when it was high likely that Covid-19, like most other respiratory viruses would circulate more effectively along with seasonal influenza and this would all result in further upward pressure on transmission. In this context I was indicating in my comments that even if local restrictions were implemented, further and more stringent intervention and restrictions were likely to be required soon.

408. The local restrictions introduced in NI were an attempt by Ministers to find a balance between NI wide restrictions or a full lockdown and allowing the virus to run out of control. In the context of the Wuhan variant there was at least the possibility that local restrictions would have been sufficient, if highly effective

measures were in place in those areas with higher transmission and adherence was also high. Local restrictions were not however able to hold community transmission later once the Alpha variant became dominant as it was much more transmissible and, in my view, only a further lockdown was likely to be effective at that stage.

SAGE Advice

409. I have included significant detail from the SAGE advice and recommendations at that time as in my view SAGE provides a good summary of the scientific advice that I and the CSA provided to Ministers in the early autumn of 2020, and which remained relevant throughout that autumn period.

410. At its 21 September 2020 meeting SAGE recommended that consideration should be given to measures including a circuit breaker as one of the options to reduce Rt to less than 1. These SAGE minutes [**MM2/146 INQ000425625** (DoH Ref: MMcB/0185)] were forwarded to the Health Minister and TEO. By the 24 September SAGE was advising [**MM2/147 INQ000425626** (DoH Ref: MMcB/0186)] that unless current measures reduce Rt below 1 soon that the additional measure would be required to prevent the health service being overwhelmed.

411. On 21 September 2020 SAGE provided the following advice:

- COVID-19 incidence is increasing across the country in all age groups. The effect of opening of schools, colleges and universities has only just begun to affect this increase. Even so, the latest data suggest that the doubling time for new infections could currently be as short as 7 days nationally. COVID-19 related hospitalisations and intensive care bed usage have started to rise. SPI-M has modelled the potential increases.

- A package of interventions will need to be adopted to reverse this exponential rise in cases. Single interventions by themselves are unlikely to be able to

bring R below 1 (high confidence). The shortlist of non-pharmaceutical interventions (NPIs) that should be considered for immediate introduction includes:

- a circuit-breaker (short period of lockdown) to return incidence to low levels
- advice to work from home for all those that can
- banning all contact within the home with members of other households (except members of a support bubble)
- closure of all bars, restaurants, cafes, indoor gyms, and personal services (for example hairdressers)
- all university and college teaching to be online unless face-to-face teaching is absolutely essential

- This shortlist is based on assessment of the effectiveness and harms of different NPIs at a population level. Effect on R has been estimated for each intervention where possible, though these are not necessarily additive. in determining the number and scale of NPIs to be suggested, it has been assumed that there will be no other policy decisions which would lead to further increases in transmission (no lifting of any existing restrictions) when these measures are introduced.

- There are important interventions which have a significant effect on reducing individuals' risk, which are not considered here because their population level effect would be small (for example because they address situations which occur relatively infrequently).

- All the interventions considered have associated costs in terms of health and wellbeing and many interventions will affect the poorest members of society to a greater extent. Measures will be urgently needed to mitigate these effects and to achieve equity and social justice, some of which could be introduced

relatively quickly. Policy makers will need to consider analysis of economic impacts and the associated harms alongside this epidemiological assessment. This work is underway under the auspices of the Chief Economist.

- The more rapidly interventions are put in place, and the more stringent they are. the faster the reduction in incidence and prevalence, and the greater the reduction in COVID-related deaths (high confidence). Both local and national measures are needed: measures should not be applied in too specific a geographical area.

- A more effective response now may reduce the length of time for which some measures are required. However, some restrictions will be necessary for a considerable time (at least throughout the winter) and therefore consideration should be given to their sustainability.

- A consistent package of measures should be adopted which do not promote, or appear to promote, contradictory goals. This will enable clear, consistent communications that can explain the rationale for measures, which in turn will support adherence.

- Communication should increase public understanding of risk and should explain the importance of everyone adhering to guidance and reducing contacts, as anyone can contribute to transmission (even if they have previously been infected). Adherence will continue to be central to the effectiveness of measures, and it should not be assumed that people will respond in the same way that they have done previously.

- The rapid rise in cases means that a raft of complementary operational response measures is even more important to reduce transmission, particularly in care homes, hospitals and other enclosed settings, such as prisons and hostels for the homeless. SAGE has previously noted the risks associated with

discharged people from hospitals into the community without testing to ascertain whether they may be infectious.

- Specific attention to reducing spread to Care Homes and within Hospitals is critically important. This needs to be considered when assessing prioritisation within constrained testing capacity.

- Measures such as social distancing, hand hygiene, ventilation and appropriate use of face coverings will remain important contributors to reducing transmission.

- It is important that studies are undertaken to evaluate the risks in different settings and populations and the impact of different control policies in order to inform future decisions on which NPIs to apply. The existing evidence base for the effectiveness and harms of individual interventions is generally weak.

- SAGE endorsed paper Summary of the effectiveness and harms of different non pharmaceutical interventions' subject to minor changes" [**MM2/148 INQ000061566**].

412. On 24 September 2020, SAGE further advised:

- Incidence across the UK continues to increase rapidly. The latest estimate of R for the UK is 1.2 to 1.5.

- Unless current NPIs reduce R back below I soon, it is possible that infection incidence and hospital admissions will over time exceed scenario planning levels. Further measures will be needed to bring R below 1 in the event that current measures do not do so. The earlier additional measures are introduced the more effective they will be.

413. The level of community transmission in different parts of NI varied throughout the pandemic and this information was presented to the Executive on many occasions. As described in my M2C-CMO-01 statement, at paragraph 221, this geographic epidemiology variation occurred at various times between the parts of the UK, within regions at the individual county level and between NI and the RoI. At times the epidemiology in NI was much closer to that of the RoI than the rest of the UK. This information was used to inform engagement with local Government in NI and local action and to agree cross border action between respective public health organisations and Departments to address high transmission rates in certain border counties. Again, this information informed Executive agreement, on 1 October 2020, to introduce enhanced restrictions in the Derry and Strabane district area from 6 October 2020. The Executive subsequently agreed on 14 October 2020, to revoke the specific restrictions on Derry City and Strabane District Council area and introduced restrictions for a period of four weeks across the whole of NI from 16 October 2020.

414. Prior to this decision there had been a progressive rise in Covid-19 cases following the introduction in September 2020 of the localised restrictions in those local areas with the highest Covid-19 case incidence. As had been agreed at the Executive meeting of the 10 September 2020, the impact of these localised measures on the trajectory of the pandemic remained under close review with the weekly publication of the R paper and the CMO and the CSA providing regular presentations to the Executive. On 22 September 2020 the restrictions on household mixing were extended to the whole of NI. As described in paragraph 413 above, there were additional localised restrictions introduced in the Derry City and Strabane Council area, on 1 October 2020, for a time limited period of a minimum of two weeks, to be reviewed weekly. These restricted all indoor gatherings to members of one household and limited numbers at outdoor gatherings to a maximum of 15. At around this time on 12 October COBR meeting [**MM2/149 INQ000083851**] Londonderry/Derry was noted as highest rate of incidence in the UK and hospital admissions were rising.

415. At various times during the pandemic rates of transmission in the border counties between NI and the RoI were a cause of concern, sometimes higher in NI and sometimes higher in the RoI. On 25 September 2020 at our regular CMO meeting with respective teams from NI and the RoI we discussed the growing prevalence of the virus in both jurisdictions and underlined the need for ongoing cooperation between NI and the RoI, including the respective public health teams under the existing Memorandum of Understanding. Following this meeting we issued a joint statement in which we said "*Given the current number of new cases in Donegal and neighbouring areas of NI in Derry/Londonderry, Strabane and Fermanagh we would appeal to everyone to avoid all but necessary travel across the border. It is also recommended that employers on both sides of the border make every effort to facilitate employees to work from home in so far as is possible. We realise that for those living in border areas this will not be welcome news but we must prevent further spread of this virus and we can only do so by working together to protect each other.*" [**MM2/275 INQ000276623** (DoH Ref: PM2300)]. We appealed to the public across the island to continue to follow public health advice to keep themselves and others safe. We also noted specific concern with regard to the significant proportion of cases in young people in both Donegal and Derry/Londonderry, and appealed to teenagers and those in their twenties and thirties in particular to reduce their social contacts.

416. On 8 October 2020 the Health Minister, the CSA and I provided an update to the Executive, which included developments in the Covid-19 pandemic, including the R number; the position in Care Homes; number of deaths; admissions to hospitals; contact tracing figures; capacity of the testing system. At the meeting the Health Minister provided a paper which modelled the course of the pandemic [**MM2/276 INQ000276520** (DoH Ref: PM2203), **MM2/277 INQ000276521** (DoH Ref: PM2204), **MM2/278 INQ000276522** (DoH Ref: PM2205)] and recommended to the Executive that an intervention to reduce R to 0.7 was required as soon as possible to prevent the hospital system from being overwhelmed and to prevent deaths.

417. A verbal pre-brief was provided to the First Minister and deputy First Minister on the evening of the 7 October 2020 and with the First Minister on 12 October 2020 prior to the Executive meetings of the 8 October and 13 October 2020 respectively

at their request. The Executive minutes from the meeting on 8 October 2020 record that as part of the discussion the Economy Minister asked for early discussion of her paper on the economic impacts of restrictions. The Executive agreed that "*Ministers would meet individually or in small groups with the Minister of Health, the Chief Medical Officer and the Chief Scientific Adviser over the coming days to consider and discuss a range of matters relating to future measures to combat the COVID-19 pandemic.*"

418. The Health Minister submitted a paper to the Executive on the 13 October 2020 [**MM2/279 INQ000276523** (DoH Ref: PM2206), **MM2/280 INQ000276524** (DoH Ref: PM2207), **MM2/281 INQ000276525** (DoH Ref: PM2208), **MM2/282 INQ000276526** (DoH Ref:PM2209)] which summarised the further progression and current state of the pandemic. The paper confirmed that the Covid-19 pandemic in NI had reached a phase of exponential growth and that immediate consideration and decisions were required by the Executive to prevent the hospital system being overwhelmed, and to prevent adverse direct and indirect health consequences, including significant morbidity and mortality from Covid-19 and non-Covid-19 related conditions as a consequence of the impact on health and social care services. The paper confirmed that there was evidence that the household restrictions applied on a postcode basis and subsequently NI wide had had some impact on reducing transmission and slowing the rate of increase in new cases. The paper also indicated that NI had also begun to see some of the counter effects of Executive decisions on the opening of higher and further education colleges and "wet pubs" as well as some seasonal impacts.

419. From a scientific perspective the paper indicated that it was unlikely that the then current NI-wide restrictions combined with an extension of the additional measures introduced for from 1 October 2020 in Derry City and Strabane local government district would be sufficient to bring R back to less than 1 and highly improbable that this would reduce R to less than 0.7. A significant package of interventions would therefore be required to prevent a further exponential rise in transmission of the virus and that no single wider interventions was likely to be sufficient. A package of measures with a level of adherence similar to the impact of the full lockdown in late March 2020 was now required. The paper outlined in detail the significant

challenges faced by the health service and community care including Care Homes. The paper drew parallels with a comparable period in wave 1 when R was significantly above 2 and the decision to move to a complete lockdown on the 28 March 2020. Modelling was presented for a range of scenarios including reducing R to 0.7 or 0.9 for varying periods of time of between 3 and 6 weeks to illustrate the impact of different decisions.

420. By early October 2020 and the Executive meeting of the 8 October the CSA and I advised that a further significant intervention was required including the option of a "circuit breaker" set of restrictions was required. A note of this meeting indicates I said that I had *"never been more concerned as CMO than I am now. Short window of opportunity. Sooner rather than later – intervention now to avoid situation in 2/3 weeks."* [**MM2/141 INQ000065756**]. At that time, we estimated that Rt was 1.5 which the CSA indicated was in excess of the Executive agreed objective of keeping R less than 1.0. The note of the meeting records the CSA as having said *"objective…keep R less than 1. Currently 1.5. Start of epidemic R = 2.8. Lockdown R = 0.7. Variety of scenarios. Full lockdown, schools, hospitality open hard to keep R below 1. R above 1 …epidemic will increase."*

421. The notes of that meeting also reflect the discussion about the need for restrictions [**MM2/141 INQ000065756**]. The DAERA Minister is recorded as having said that the CSA was *"looking for v damaging approach"* and that *"people are not listening to us…not going after where problem exists. Afraid to say where problem is."* In making these comments I believe that the DAERA Minister was indicating his concern that public adherence needed to be improved as opposed to further restrictions and general concern that the population was growing tired of restrictions.

422. This was a period when there was a rapid increase in the pandemic, as was described in papers submitted to the Executive meeting [**MM2/150 INQ000353644**, **MM2/151 INQ000353645**, **MM2/152 INQ000353653**, **MM2/153 INQ000353654** & **MM2/154 INQ000353655**] and I believe the implications and consequences were fully understood by Ministers and were clearly articulated by myself and the CSA. At this time in early October, we estimated that Rt was likely to be above 1.5 and

case numbers and hospital pressures were increasing rapidly. From a health perspective, both the CSA and I were seriously concerned and believed that urgent NI wide action was required to avoid the hospital system from becoming overwhelmed with direct and indirect deaths consequently. At that time, it was our view that realistically a circuit breaker or lockdown was needed. The primary objective of our advice then as at all other times throughout the pandemic was to save lives and to avoid the hospital system from being overwhelmed. Due to the enduring commitment and dedication of staff and the support and behaviour of the vast majority of the public, I believe that this objective was achieved. Given the recognised harms of restrictions we wanted these to be as limited as possible and in place only for as long as necessary to achieve that objective, while allowing time for the vaccine programme to be implemented.

Geographical Variation in transmission

423. On 19 October 2020 it was publicly reported that the DAERA Minister said the difference in transmission between nationalist and unionist areas was "*around six to one…*". [**MM2/141 INQ000065756**] relating to increased transmission in certain geographical areas. I have no knowledge of the basis of this analysis and the Department issued this response to media queries: "*It is vital to stress that Covid-19 represents a threat to everyone in society, regardless of their background, and that it is spreading across the community in NI. For the record, data on Covid infections is not collected according to religious or political affiliation*."

424. I was also asked by the media about the DAERA Minister's comments and stated: "At no stage would we have publicly or privately suggested that there is a link between the transmission rates of Covid-19 and people's political affiliation or religion. There is no such evidence, we don't have that evidence. Our approach throughout this has been guided by the evidence. I know of no such evidence." [**MM2/155 INQ000425627** (DoH Ref: MMcB/0187)].

425. Data was collected and published on the prevalence of the virus by geographical area as this was important in informing local engagement and action to address. For example, I and the CSA used this information to engage with the Local

Government CEOs in whose areas there was higher transmission, which we did in late September/early October at the time of the introduction of local restrictions. Sometimes these engagements were organised with the support of TEO and led by Juniors Ministers in order to support local action to reduce levels of transmission.

426. Geographical differences in transmission and information on those council areas where transmission was higher was provided verbally by the Health Minister in his Covid-19 summary and by the CSA and myself at almost all Executive meetings and was also publicly available on the Covid-19 Dashboard. During the period when policy on local restrictions was under consideration and following introduction, when the impact data on transmission was being assessed this was also broken down into postcode areas [**MM2/156 INQ000353667**]. Such information was important to inform understanding of progression the pandemic and to identify appropriate action and this was consistent with the approach taken throughout the UK and RoI. Information on such geographic variation was also included in the meeting on 8 October 2020.

427. There are multiple factors which contributed to these differences between geographic areas, and at no stage did I or the CSA advise that one community was adhering to public health advice more than another and further we had no evidence to support such a conclusion. It is the case that clusters and outbreaks did contribute to these variations, and this may have been associated with certain events which occurred at that time. When we had evidence to suggesting demographic differences in adherence to the public health advice for example by age, sex or related to socioeconomic differences we did highlight these with a view to considering how they might be addressed through for example engagement and targeted public messaging.

428. I believe the DAERA Minister's comments may have possibly related to an oversimplified interpretation of information about specific clusters of infections at the time, which had been linked to particular social activity or events. The note of the Executive meeting on 8 October 2020 [**MM2/141 INQ000065756**] records that the DAERA Minister was expressing concerns that the Executive did not have the

financial capacity to support a full lockdown, and correctly pointed out that there were these geographical variation in his comments *"Dashboard – R containable in some areas, out of control in other areas…but want to apply solution to all areas."* Information on clusters and outbreaks was published by the PHA, and the reports were presented at Executive meetings [**MM2/157 INQ000425628** (DoH Ref: MMcB/0188)]. Prior to the reports being published, verbal updates were given at Executive meetings. Any emerging themes and points of concern were highlighted to inform discussion of what action would be needed. The published reports did not however contain information that would have identified premises or events, although on occasion, some of the larger clusters and outbreaks became the subject of media coverage. The contact tracing service required the cooperation of the public and all sectors to be effective and it was important not to compromise this through the identification of particular events or premises.

429. Following the briefing provided by members of the Public Health Agency to the Northern Ireland Health Committee on 15 October 2020, there was a suggestion that modelling work had significantly underestimated the development of the pandemic in NI at that point. I do not believe that this is correct. The discussion at the Health Committee on 15 October 2020 was in the context of the ability of the Test, Trace and Protect service to deal with the number of cases which were being identified. As described at paragraph 676, the CSA had previously provided modelling estimates of potential staff requirements to assist the PHA with plans to expand their contact tracing service.

Late Autumn to Christmas 2020

430. The main focus of action from the emergence of the Alpha variant at the end of 2020 to the end of the main Alpha wave in February 2021, when it was overtaken by the even more transmissible Delta variant, was on trying to provide advice to minimise mortality through a "lockdown" to save lives and prevent the health service being overwhelmed, while attempting to reduce the impact of the new variant in a way that was also less disruptive to health and social services, education, wider society and family life than was the case in the first wave. During this time the vaccination programme and the effort to deliver the first vaccines to

maximise uptake and protect as many as possible as quickly as possible was a matter of significant discussion, with JCVI and the 4 UK CMOs leading the scientific and public assessment and advice to Ministers.

431. As indicated in my M2C-CMO01 statement, at paragraph 134, towards the end of this period the Executive decided to impose a complete lockdown immediately after Christmas on 26 December 2020. It was my view then and remains so that this was the last possible moment to impose restrictions that would prevent the hospital system being overwhelmed. By the 20 January 2021 the number of people in hospital reached the highest levels at any time during the pandemic. As in the first wave the primary objective of the advice which the CSA and I gave to the Health Minister and the Executive at all times was to save lives and avoid the hospital system from being overwhelmed. During this period Health and social care teams right across the system were under severe and unrelenting pressure. Due to the action and behaviour of the vast majority of the public and the commitment and dedication of all frontline care providers, the health and social care service was not completely overwhelmed. At the same time, I and the CSA wished restrictions to be as limited as possible and in place for as short a time as possible to achieve our primary objectives, with the aim of allowing the roll out of the vaccine as widely as possible.

432. As indicated previously there were occasions, after having considered the health advice of the Department, the CSA and I along with the wider societal and economic impacts, that the Executive made decisions not solely based on the health advice. As indicated in my M2C-CMO-01 statement, at paragraph 84, this is the prerogative of Ministers. These were extremely difficult decisions to make in achieving a balance between the health and wider consequences. An example is in relation to the Executive's meeting of 9 November 2020 **[MM2/283 INQ000116292]** which had to be reconvened on the 10, 11 and 12 November for Executive Ministers to reach agreement on an extension of restrictions, and also comments made on the first day of this meeting by the Minister for Communities on the 9 November.

433. From my reading of the incomplete note of the Minister for Communities comments these appear to relate to the "*COVID support payment and use of public money*" and what evidence existed on the impact such payments had on increasing self-isolation and hence on virus transmission. This was not a matter on which the Department had data to allow any estimates. As I recall the Department had written to the Minister for Communities asking that her Department consider assisting individuals testing positive and as those who were close contacts with a payment to support self-isolation particularly those on low income. I believe the reference to modelling was in terms of the numbers of individuals for whom a payment might be required. As I indicated during the meeting this was not a matter for the NI Modelling group to provide estimates about, although I indicated that projected numbers could be provided by the contact tracing service. However, any further analysis would possibly require a survey by NISRA. At times there might appear to have been an incomplete understanding by some Ministers of the purpose of population modelling of the pandemic and also the limitations of modelling.

434. The restrictions being considered were those that had been introduced for a four-week period beginning on 16 October 2020. The Department had submitted a paper [**MM2/158 INQ000137345**] for the 9 November Executive meeting recommending that these restrictions be extended for a further two weeks. At this time the note records that there were "*396 in-patient and 51 in ICU – highest figs yet.*" At the conclusion of this meeting on the 12 November, the Executive agreed on only a one-week extension to restrictions. The Department, as reflected in my advice and that of the CSA, had recommended a two-week extension. The final minutes of this meeting record the differences of opinion of Executive Ministers regarding this decision.

435. The minutes of this meeting also record comments made by myself and the CSA which reflected my views on the challenges faced by Executive Ministers in making these difficult decisions:

"The Chief Medical Officer and the Chief Scientific Advisor acknowledged the difficult decisions facing the Executive and advised that it was more likely that they would be obliged to return to the Executive in mid-December to seek further interventions if easements were made to the current restrictions. The Chief Medical Officer advised of the prospect of excess deaths-;"

"The Chief Medical Officer advised of his view that the Covid-19 pandemic would lead to excess deaths no matter which approach was agreed by the Executive, but that the likely level of excess deaths would depend on decisions made by the Executive at this meeting; and on future actions; and that having some restrictions in place was preferable to allowing all current restrictions to fall. However, any reduction in restrictions may lead to a further intervention being required before Christmas. He recognised the difficult decisions required to balance short term Covid-19 actions with longer term economic wellbeing-;" and

"The Chief Scientific Advisor recognised the difficult choices facing the Executive as it sought to balance the need for health protection with economic difficulties resulting from Covid-19 restrictions, advising that the nature of a pandemic is to cause deaths no matter what measures are put in place, but reiterating that anything leading to an increase in the R rate would have a short term and more visible impact."

436. The Department paper and the advice of the CSA was clear that from the public health and scientific perspective that what was required was a further two week extension of the restrictions agreed on the 16 October 2020. The note of the meeting reflects the difficult considerations that the Executive was debating in seeking to achieve agreement and consensus when considering the wider social and economic impacts as well as the health impacts. This is perhaps best summarised in the comments by the Health Minister at the meeting when he said: "*Not a choice between health + economy - all decisions will bring harm."* [**MM2/159 INQ000116294** page 31]. The decision was ultimately a matter for the Executive to collectively agree and the debate in the meeting was at times in my view understandably tense given the matters under consideration and the potential

impact on lives and livelihoods. The Health Minister provided further comments to the Executive meeting over this three-day period in a written statement on 13 November 2020 [**MM2/284 INQ000276546** (DoH Ref:PM2227)].

437. At a subsequent meeting of the Executive on 19th November 2020 Ministers decided to introduce restrictions for two weeks from 27th November 2020. This reflected the fast changing nature of events which resulted in Executive Ministers arriving at this new decision. These decisions had far reaching implications, and the difficulty faced by Executive Ministers in making them was reflected in the discussions which took place at these Executive meetings. There were several occasions where one or more Ministers registered their disagreement with recommendations on restrictions which had been included in papers submitted by different departments. In some instances, Ministers recorded their disagreement with the final Executive decisions in minutes of Executive meetings. There were other occasions when Executive meetings were paused to allow for discussion between Ministers and/or officials around particular proposals and these are also recorded in the minutes of Executive meetings.

438. The CSA and I were concerned and advised of the risks over the Christmas period and I note at the awareness of the Executive of the significant risks posed by behaviours and increased mixing in the run up to and over the Christmas holiday period is summarised in a SitRep dated 17 November 2020 [**MM2/160 INQ000065956** page 8] where it is recorded that "*The Executive will do all it can to "protect" as much of the Christmas period as possible*." It is worth noting that R as reported in this SitRep had increased from 0.7 – 0.95 to 0.9 - 1.1 and the percentage of positive tests had also increased from 10.7% to 11.6% indicating that the pandemic was again beginning to grow. The comments made at the Executive meeting are entirely consistent with the advice that the CSA and I had provided the Executive at that time including the views expressed by Professor Ian Young when he indicated that mid-December could be the "big risk period" (BBC News)." We were concerned about the impact of the Christmas period and any relaxation of restrictions which increased mixing outside of households including in retail, hospitality and places of worship. As I recall from discussion at the Executive at that time there was in my view correctly a desire to enable people to

spend as much time together as possible over the Christmas holidays recognising the importance to family life and the increasing toll on mental health and wellbeing. The advice that I and the CSA provided to the Executive at this time was entirely consistent with and informed by the advice of SAGE at its 69th meeting on 19 November 2020 meeting where the minutes record the advice:

> *"2. As previously noted, evidence shows that the earlier and more rapidly interventions are put in place, and the more stringent they are, the faster the observed reduction in incidence and prevalence. Recent data show uniformly shrinking epidemics as a result of the implementation of tier 3 restrictions in England, and national restrictions in Northern Ireland, although this is more mixed for the Welsh firebreak and Scotland central belt restrictions. Tier 3 restrictions in England were heterogeneous, with most areas having additional restrictions above the minimum set for this tier…*
>
> *5. Relaxation of interventions over the festive period presents a significant risk of increased transmission and increased prevalence, potentially by a large amount (high confidence). Keeping prevalence low before the festive season would reduce transmission during any relaxation period (high confidence)."* [**MM2/161 INQ000071857** page 1]"

439. During this time there were also ongoing discussions on the approach to schools after the Christmas holidays as described in the M02C-DOH-01, Wave 2 statement, paragraphs 120 to122. The Health Minister, in a paper to the Executive on 19 November 2020 [**MM2/162 INQ000137370**], highlighted that the experience from NI and advice from SAGE suggested that opening schools contributes around 0.2 to R. The modelling paper presented at this meeting demonstrated the impact with and without schools closed. The Executive announced on 19 November 2020 that there would be a two week 'circuit breaker' lockdown which would be effective from 27 November 2020. [**MM2/285 INQ000276593** (DoH Ref: PM2269)] This circuit breaker was designed to slow the spread of Coronavirus in the community and protect the health service. At this point, NI reverted to the lockdown situation that had applied earlier in 2020 during the first surge of the pandemic. The major difference in this lockdown was that in this circuit breaker, the schools remained

open. In an oral statement to the Assembly's Ad Hoc Committee on 21 December 2020 [**MM2/286 INQ000276594** (DoH Ref: PM2270)] the Health Minister said that while the Executive agreed that the continuation of Education had to be a priority, he had written to the Education Minister, stressing the need for further urgent engagement indicating that he did not believe that a return to school as normal in January 2021 was a sustainable position, and he made this clear in his letter in which he stated: *"we cannot disregard the evidence as it evolves and in order to suppress transmission of the virus both within schools and amongst the wider public, at such a critical phase of the pandemic all options should be considered."* The Health Minister's view on this matter was informed by the advice of myself and the CSA. On 29 December 2020 the CSA and I wrote to the Permanent Secretary in the Department of Education to ask that *"careful consideration should be given to the other options which have been highlighted before, including an extension of the Christmas holidays, face to face teaching for key years only, alternate weeks of distance learning and face to face teaching, and half classes only to be taught face to face on alternate weeks."* [**MM2/163 INQ000276567**]. The CSA and I subsequently met with DE officials on 30 December 2020. Given the importance that the 4 UK CMOs attached to the reopening of schools in our previous letter in August 2020, and similarly the priority that the CSA and I attached to schools, this reflected our significant concerns at this time.

440. As described in the M02C-DOH-01, Wave 2 statement, at paragraphs 120 to122, the Executive decision on the 19 November 2020 was informed by a paper from the Health Minister to the Executive which contained my advice and that of the CSA: "Modelling the course of the COVID pandemic and the impact of different interventions and recommendations" [**MM2/162 INQ000137370**]. The paper confirmed that while there had been a reduction of approximately 50% in cases since the introduction of restrictions on 16 October 2020, the numbers of cases, admissions and people in hospital including ICU and deaths remained at a relatively high level and higher than reached in wave 1 and was declining only very slowly with the hospital system and staff under very significant pressure. The paper highlighted that the decisions agreed by the Executive on the 12 November 2020 and planned relaxations over the next two weeks beginning 20 November 2020 would result in R rising significantly above 1 with a subsequent increase in

cases, admissions, inpatients and ICU occupancy in December 2020 in keeping with the considerations of the Modelling Group which was included. The paper highlighted that the Executive had several possible options on actions and interventions to consider. These were outlined in the paper which also explained that if no intervention occurred in late-November 2020 it was likely that the hospital system would be overwhelmed in mid-December 2020 with a significant increase in Covid-19 and non-Covid -19deaths, and that even if a full lockdown was introduced beginning around the 14 December 2020 this would be insufficient to prevent the then current levels of hospital pressures being significantly exceeded.

441. The paper [**MM2/162 INQ000137370**] highlighted that the only intervention to date that had been effective in reducing transmission of the pandemic involved the use of restrictions, and that two weeks of restrictions from the 27 November 2020 offered the best option to avoid the need for further interventions before January 2021. The paper described that experience from NI and advice from SAGE suggested that non-essential retail and churches contribute around 0.2 to R, and that the opening of schools contributed around the same value. Therefore, the most effective intervention would involve closing these sectors along with close contact services, leisure and entertainment sectors. The modelling paper demonstrated the impact with and without schools closed. The paper recommended that people should work from home where possible, and otherwise stay at home except for certain purposes and highlighted the importance of securing maximum public adherence. Following discussion of the paper the Executive adjourned briefly to enable the Health Minister, myself and the CSA to provide a summary of our proposals for the Executive to consider. These were then discussed, and the final decisions of the Executive were recorded in the Executive minutes. The Executive decided to introduce significantly tighter restrictions for two weeks from the 27 November 2020: The Executive also agreed that the Minister for Health would make a statement [**MM2/287 INQ000276547** (DoH Ref: PM2228)] to the Assembly and that these restrictions would be communicated as a time limited "circuit breaker" to end on 10 December 2020. During this two-week circuit breaker schools would remain open and from 27 November 2020, a controlled 'click and collect' service for retail would be able to operate.

442. I have reviewed and considered the Finance Minister's letter dated 19 November 2020 [**MM2/164 INQ000130122**], with regards to the Heath Minister paper to the Executive on 19 November 2020 [**MM2/162 INQ000137370**] and comments made where he said:

> *"This paper does not contain a recommendation from you as Health Minister or from the CMO/CSA. This is not sufficient and falls short of what is expected from a Health Minister when the Executive is expected to make decisions to steer society through the coronavirus pandemic. It is my position, and I have continually said it at Executive meetings, that we must be guided by the medical and scientific advice. That remains the case. Such advice needs to be clear and concise and spell out exactly what the Executive needs to do in order to bring transmission rates down and protect our health service."*

443. The context for the paper which the Department had tabled at the Executive was the Executive meeting which occurred over a four-day period, from 9 to 12 November, with a number of adjournments prior to decisions being made by the Executive. At the time this was the subject of a written statement by the Health Minister on 13 November 2020 [**MM2/284 INQ000276546** (DoH Ref: PM2227)] where he remarked:

> *"…this has not been a good week for the Executive. Whilst the pandemic has undoubtedly confronted us with many immensely difficult decisions, the people and businesses of Northern Ireland deserved so much better than the leadership and political stewardship they were given. There is huge work required to repair the damage that has been caused but I would urge Ministers to look forward to the very real issues at hand rather than repeat the arguments that have been exhausted over recent days. At the forefront of all our minds is that the pandemic remains an immediate and serious public*

health threat. We must also remember why we decide to take the decisions we do."

444. As decisions in relation to NPIs and restrictions were matters for the Executive, following the meeting of the 9 to 12 November I believe the presentation of the paper by the Health Minister was to facilitate a way forward so that an agreed Executive decision could be secured by enabling the Executive to consider a range of options and their impacts. In his paper [**MM2/165 INQ000425629** (DoH Ref: MMcB/0189)] to the Executive on 19 November the Health Minister made two specific points:

- *As much as we agree that we must be informed by the science, that science, and the modelling, can only support our decision making – there is no one definitive and specific response or guide to the challenges we face; and*

- *It is important we learn from our less than satisfactory experience last week, when specific recommendations from me became a dividing line between Executive colleagues. My ambition with this paper is to help the Executive rapidly reach a consensus view on a response.*

445. At the same meeting on the 19 November the Infrastructure Minister and the Justice Minister made comments [**MM2/166 INQ000065739**] around decisions made by the Executive in previous meetings having considered the advice from the CSA and myself and that the Executive had made different decisions. At all times the advice the CSA and I provided was from a health perspective with a view to controlling the pandemic and maintaining R below 1 as had been agreed by the Executive, thereby achieving the Executive objectives with respect to health outcomes. Ministers however did take into consideration a range of other factors.

446. Ultimately the Executive discussed the paper and then the meeting adjourned briefly to enable the Health Minister, the CSA and me to provide a summary of our proposals for the Executive to consider. These proposals were then discussed, and the final decisions of the Executive were agreed and recorded in the Executive minutes.

Christmas 2020

447. At the 23 and 24 November 2020 Executive meetings, the FM and the dFM gave an update on discussions between UKG and DAs about Christmas restrictions. On 24 November 2020 a UK Government press release [**MM2/288 INQ000276548** (DoH Ref: PM2229)] announced the "*UK-wide Christmas arrangements agreed by the UK Government and the Devolved Administrations*." These arrangements were informed by the advice of the UK CMOs high level comment on the Cabinet Office's proposals for Christmas between the 23 and 27 December which I provided input to. We had concerns at that time with respect to transmission and also the impacts on family life and in particular mental health and wellbeing. We advised of the need for flexibility in the definition of households and bubbles between the 4 Nations. We agreed that the bubble could be in a home or place of worship but urged caution in respect of retail "especially if results in large groups." The advice also recommended that only in exceptional circumstances should travel be extended outside the designated window between the 23-27 December unless travelling to NI. [**MM2/167 INQ000071853**]. The minutes of the Executive meeting on the 26 November 2020 record that the dFM *"briefed the Executive on agreement reached by COBR on a common approach to Christmas in the context of COVID-19, advising of matters to be decided on by each administration, including Christmas Bubbles, and restrictions and arrangements for Christmas."* She advised *that "the views of the Chief Medical Officer and the Chief Scientific Adviser would be sought; and that account would be taken of the arrangements to be put in place by the Irish Government*".

448. On 3 December 2020, the Executive considered two papers prepared by TEO focusing on restrictions from 11 December 2020 and the Christmas 'Bubble Arrangements.' Both papers included the advice of myself and the CSA in respect of each of the possible restrictions including potential relaxation of some restrictions. The Executive meeting also considered a paper from the Department for the Economy on the economic impact. These papers reflected discussions which had been ongoing between the UK Government and the Devolved Administrations for several weeks and which were aimed at aligning Christmas

arrangements across the UK four jurisdictions, focusing on domestic settings, household bubbling and with a preference for a short period of time for relaxation of restrictions, possibly from 24 to 27 December 2020. However, it remained the responsibility of the Executive to ultimately decide the Christmas arrangements for NI. The R paper [**MM2/289 INQ000276549** (DoH Ref: PM2230), **MM2/290 INQ000276551** (DoH Ref: PM2231)] presented at the meeting records that the estimate of R was around 1 (0.9 to 1.1).

449. The paper advised:

> *"Given the current restrictions, we anticipate that numbers will decline slightly or remain stable until shortly before Christmas 2020 when they will begin to rise again. The rate of increase will depend on how much Rt increases following the 11 December 2020. If Rt can be maintained at 1.6 or below then intervention would not be required until the end of December/beginning of January. However, if Rt was to rise as high as 1.8 then intervention would be required a few days earlier than this."*

450. The minutes of the modelling group [**MM2/291 INQ000276552** (DoH Ref: PM2232)] held on 1 December 2020 record that an R of 1.8 would represent a doubling time of 1 week.

451. The Executive's decision recorded in the minutes of the 3 December 2020 meeting about Christmas 'Bubbling' was that this would be one bubble over Christmas with up to two other households from 23 to 27 December 2020. The Executive also noted the detail of additional supports and advice for the vulnerable, and noted that advice for Care Homes, residents and families would be developed. These minutes also recorded the Executive's decisions on restrictions from 11 to 19 December 2020 (inclusive) including the opening-up of non-essential retail, close contact services, sport and leisure activities and places of worship. The details of these changes to restrictions and of planned Christmas Bubbling arrangements were announced in a TEO press release [**MM2/292 INQ000276553** (DoH Ref: PM2233)] on 4 December 2020.

452. The TEO paper 03/12/2020E (20) 274 (C) Christmas Bubble Arrangements [**MM2/168 INQ000425630** (DoH Ref: MMcB/0190)] includes my and the CSA advice. TEO paper 03/12/2020E (20) 277 (C) Restrictions from 11 December 2020 [**MM2/169 INQ000425631** (DoH Ref: MMcB/0191)] also includes detailed advice from the CSA and me [**MM2/170 INQ000425632** (DoH Ref: MMcB/0192)] is the Departments internal Lines to Take and briefing for that meeting, the Department's paper 17/12/2020E (20) 294 (C) Post-Christmas Restrictions [**MM2/293 INQ000276555** (DoH Ref: PM2235)]. This paper highlights the growing concerns in the Department..

453. From a public health and scientific perspective, the decision by the Executive to agree limited reopening of non-essential retail, coffee shops and close contact personal services created further upward pressure on transmission. As ever Ministers needed to consider a range of other relevant factors in addition to the health advice.

454. I have outlined the details of subsequent days and events at it reflects the rapidly changing situation and the response to the identification of the Alpha variant. It was my assessment at that time in December that this was already present and circulation in NI and my advice to Ministers reflected these concerns. The Department's Modelling Group met on 15 December 2020 [**MM2/294 INQ000276554** (DoH Ref: PM2234)]. The minutes record that the Group considered various scenarios which were variously, based on: (i) no intervention; (ii) restrictions being implemented from 26 December 2020; or (iii) restrictions being implemented from 2 January 2021. Under the 'no intervention" option, the likelihood was that the hospital system would be faced with occupancy greater than 6,000 Covid-19 hospital inpatients by the end of January 2021 against a capacity of 2,900 beds across the HSC sector.

455. The advice that I and CSA provided at this time was at all times informed by the advice and recommendations of SAGE and NEVRTAG. This included the NERVTAG summary on 18 December 2020 which said: "*In summary, NERVTAG has moderate confidence that VUI-202012/01 demonstrates a substantial increase in transmissibility compared to other variants"* [**MM2/171 INQ000120454**] and on

21 December 2020, NERVTAG assessed: "*The committee therefore has high confidence that B.1.1.7 [Alpha] can spread faster than other SARS-CoV-2 virus variants currently circulating in the UK*" [**MM2/172 INQ000212114**]. Our advice also considered the advice of SAGE on 22 December 2020, when they advised: "*3. NERVTAG and PHE have assessed the currently available evidence on the new variant and have published their assessments and evidence. There is high confidence that this variant is spreading faster than other SARS-CoV-2 virus variants currently circulating in the UK, based on several different analyses.*"

456. On 17 December 2020 the Executive considered a paper submitted by the Department on post-Christmas restrictions. The paper [**MM2/293 INQ000276555** (DoH Ref: PM2235), **MM2/295 INQ000276556** (DoH Ref: PM2236)] provided options including taking no action or implementing restrictions from one of the following dates: 19 December 2020; 26 December 2020; or 2 January 2021. The paper highlighted that the R number for new cases was between 1.0 and 1.2 with both the 7 and 14 day incidence increasing to 175 and 340 per 100k respectively. The impact of the two weeks of restrictions introduced on 27 November 2020 had been disappointing and the paper outlined the pressures in the health system. The paper also indicated that it was anticipated that there would be a surge in cases after Christmas and emphasised the need for action to prevent the hospital system becoming overwhelmed. The minutes record that the Executive agreed the introduction of extensive restrictions, which amounted to a lockdown, from 26 December 2020 for a period of 6 weeks with a review after 4 weeks. A press release was issued by the Health Minister [**MM2/296 INQ000276557** (DoH Ref:PM2237)] which provided the details of the restrictions coming into effect for six weeks from 26 December 2020. The announcement of these changes in restrictions for NI [**MM2/297 INQ000276558** (DoH Ref: PM2238)] was a day in advance of similar steps by the UKG and DAs on 19 December 2020. In my view the announcement and implementation of the restrictions on the 26 December was the very last possible date to prevent the health service being overwhelmed.

457. The FM and dFM met with the other administrations and the Chancellor of the Duchy of Lancaster on the morning of 19 December 2020 prior to these announcements. The readout from that meeting [**MM2/298 INQ000276559** (DoH

Ref: PM2239)] records that attendees were briefed on the changing epidemiology. In the South and South East of England and London disease activity was increasing significantly despite Tier 3 restrictions, by up 50% in some areas within the last week, with growth in younger age groups and also more concerningly in 60+ age group. At this time hospital activity was increasing considerably. South Wales was also experiencing similar pockets of increased disease activity and hospital pressures.

458. At the meeting, the UK CSA gave an update on the new variant and its increased transmissibility although as yet there was no evidence on whether the increased transmissibility was impacting the clinical disease pattern or of an impact on immune response or vaccine response, and that there was ongoing work to assess this. The meeting was advised that the Prime Minister would announce at 4 pm that afternoon the following measures for England: South/South East/ London - new enhanced Tier 4 restrictions, to come in at midnight on 20 December 2020. This was to be a similar lockdown to that in November 2020: with a strong stay at home message; the closure of all non-essential retail and personal services; and that Christmas arrangements would not go ahead as planned, and people were asked not to extend bubbles further beyond what they already had in place; that churches should remain open for worship in a Covid-19 secure environment; travel would be restricted to within Tier 4 areas (into regulation); in the rest of England - tiers as they currently were, with a strong emphasis on 'stay at home'; and that there were to be 3x household bubbles for Christmas Day only. It was further indicated that the above was subject to ongoing discussion and could be refined through the day prior to the PM's announcement.

459. An emergency Executive meeting was held on Sunday 20 December 2020 to consider a paper [**MM2/299 INQ000276560** (DoH Ref: PM2240)] from the Department which outlined the emerging evidence from Public Health England (PHE) on the new variant of Covid-19. The Regional Virology Laboratory in the Belfast Trust had reported the detection of four positive cases with an unusual test profile which may be indicative of the new variant on 17 December 2020. Considering this, the paper recommended: a reduction in Christmas bubbling arrangements; further engagement between the Education and Health

Departments around the return to school in January 2021; and emphasised the stay at home message to the public. Following discussion, the Executive agreed that the Christmas Bubbling arrangements agreed at the Executive meeting on 3 December 2020 would be reduced from five days to one day, with flexibility on which day between 23 and 27 December people could meet to accommodate those working on Christmas Day.

460. The witness statement from Holly Clark, Deputy Director of the Constitution and Rights Group, NIO to Module 2C which I have now considered states:

> "*As Christmas 2020 approached, the UK government proposed a joint approach towards restrictions during this period with all Devolved Administrations. A joint statement to be issued by all UK jurisdictions regarding restrictions was then proposed on 16 December 2020 (exhibit* **MM2/173 INQ000091442***). Alignment on this statement was encouraged by the NIO and CDL, but the NIE decided not to endorse this statement, which was published with the support of the Scottish and Welsh governments. Instead, the NIE adopted a different course regarding NPIs"*

461. I became aware of this statement in my preparation of my witness statement to the Inquiry and the related Health Ministers WhatApp on the 24 December to the "Health 4 Nations Group." As ever, decisions on policy were ultimately for Ministers and the Executive informed by the advice of myself and the CSA. As UK CMOs we had provided agreed collective advice. I was not party to Ministers' discussions as to why a UK wide approach was not agreed.

462. On 21 December 2020 the Executive met and agreed, in response to a paper submitted by the Health Minister [**MM2/300 INQ000276561** (DoH Ref: PM2241), **MM2/301 INQ000276562** (DoH Ref: PM2242)] which contained advice from the CSA and me, that "*guidance should immediately be developed and issued advising against all but essential travel between Northern Ireland and Britain and the Republic of Ireland, with immediate effect. This should include asking all new arrivals here to self-isolate for 10 days following entry to Northern Ireland; and*

would be kept under regular review to ensure it remained appropriate." On 23 December 2020 the Joint Biosecurity Centre (JBC) [**MM2/302 INQ000276563** (DoH Ref: PM2243)] in its report advice to the four UK CMOs concluded that "*a COVID-19 pandemic is in general circulation; transmission is rising exponentially, and it is highly likely that across much of the UK, the NHS will exceed its assumed COVID-19 contingency capacity in the next 21 days*". The same update was repeated on 29th December 2020.

463. As described in this period having considered the advice of the CSA and I, the Executive made decisions on restrictions from 11 to 19 December 2020 including the opening-up of non-essential retail, close contact services, sport and leisure activities and places of worship are recorded in the minutes. The decision by the Executive on the 17 December to introduce in effect a "lockdown" from the 26 December was in my view the very last possible date to intervene to prevent the health service being overwhelmed. The decision by the Executive on the 20 December to reduce the duration of the planned Christmas bubbling was in my view proportionate and appropriate in the context of the levels of community transmission at the time and the emergence of the more transmissible Alpha variant. It was inevitable that there would be increasing mixing and family events over the Christmas holidays, and it was important that people had advice on how best minimise the risk to themselves and others. In this context, I believe that decisions about the relaxation of restrictions were generally appropriate in wave 2.

464. However, around the 20 January 2021 the number of people in hospital reached the highest levels at any time during the pandemic. As in the first wave the primary objective of the advice which I and the CSA gave to the Health Minister and the Executive at this time and throughout was to save lives and to avoid the hospital system from being overwhelmed. Health and social care teams right across the system during this time were under extreme and unrelenting pressure, many were exhausted and had significant moral distress about the prospect of people not getting the care they needed if health service capacity was exceeded. That these circumstances occurred was regrettable and the dedication and commitment of all cannot and should not be underestimated. Due to the action and behaviour of the vast majority of the public and the commitment and dedication of

all those providing frontline care I believe that our objective in preventing the health service being overwhelmed was achieved. At the same time, the CSA and I wished restrictions to be as limited as possible and in place for as short a time as possible, compatible with our primary objective, with the aim of allowing effective vaccination (which had commenced) to be widely rolled out.

January to June 2021

465. The Department's Modelling Group met twice over the new year period, on 29 December 2020 [**MM2/303 INQ000276564** (DoH Ref:PM2244)] and 5 January 2021 [**MM2/304 INQ000276565** (DoH Ref: PM2245)]. At the first meeting the minutes record that there was limited information on the prevalence of the new Alpha variant in NI. The group agreed that the latest estimate of the R number was above 1, between 1.4-1.8 for cases. The R number, based on hospital admissions, was agreed as 1.0-1.2. It was agreed that a reasonable scenario would be for the R number to remain at 1.4 to 1.8 for two weeks before reducing to 0.8 to 1.0 as the latest restrictions took effect.

466. The statement issued by the Health Minister on the 21 December did urge caution over the Christmas period and provided clear public health advice to the population of NI on how to keep themselves and others safe. I believe it was inevitable that people were going to mix over Christmas and it was therefore appropriate to provide advice on how to reduce the risks while recognising those risks were not insignificant. I believe that by that time most people were aware of the action that they could take to protect themselves and others, as had been demonstrated for some considerable time. I cannot provide an informed or objective comment on whether or not the message to "protect Christmas" led to confusion or a lack of a clear strategic approach. However, I have described in some detail in paragraph 463, the impact of the Alpha variant, pre-Christmas and post-Christmas behavioural change and mixing and the relationship to the approach to NPIs including lockdown decided at that time.

467. Ongoing consideration was given to the disproportionate impact of the restrictions throughout the pandemic as covered in paragraphs 615 to 620. While professional

and policy colleagues within the Department will be better able to provide detail of their specific work at around this time to assess the impact on vulnerable people, that it was having an adverse impact was not in doubt. A key consideration throughout the pandemic response was how best to manage and seek to minimise the detrimental impact on vulnerable people. For example, in relation to care home residents, there was a need to balance the serious risks from the Covid-19 virus with the potentially detrimental impacts of isolation and loneliness. My DCMO colleagues and particularly colleagues in CNOG and I provided professional advice throughput the pandemic to inform changes to visiting guidance for care settings. One such example from a practical perspective was, in December 2020, recognising concerns from care home providers about visiting and care partner arrangements over the festive season, I moved with the agreement of the Health Minister to ensure that Covid-19 testing was made available to visitors, who were not displaying symptoms of infection, as an additional risk mitigation to support visiting within the care home setting. This was an additional measure alongside existing guidance and infection prevention and control (IPC) measures to support care home visiting.

468. On 4 January 2021, the JBC issued their update and consistent with updates on 23 and 29 December 2020, concluded that "*a COVID-19 pandemic is in general circulation; transmission is rising exponentially; it is almost certain that across much of the UK the NHS will exceed its assumed COVID-19 contingency capacity in the next 21 days; and there is a material risk of healthcare services being overwhelmed in England, Wales and Northern Ireland.*" [**MM2/174 - INQ000276568** (DoH ref: PM2248)].

469. The 4 UK CMOs and the NHSE Medical Director met and agreed the following update:

> "*There has been sustained pressure on the health systems across the four nations now for a number of weeks and this is still increasing in many parts of the country. They considered the impact of the new variant and the fact there is currently very high incidence rates in the community, with continued rises almost everywhere, on a background of already high Covid caseloads. In the light of this they are no longer confident that the health system can*

*handle a sustained rise in cases and if this happened, there is a material risk of the NHS being overwhelmed in many geographies within 21 days without further action. There is, therefore, unanimous agreement that we should advise Ministers that all 4 nations of the UK should move to alert level 5 as soon as is operationally feasible." [***MM2/305 INQ000276569** (DoH Ref: *PM2249)].*

470. This assessment applied equally to NI and the data analysis carried out by JBC included data provided by NI. These data sources were provided by the PHA and IAD in the Department who will be best placed to provide further information.

471. On the same day the Prime Minister announced that everyone in England must stay at home, except for permitted reasons during a new coronavirus lockdown expected to last until mid-February 2021. All schools and colleges were directed to close to most pupils and switch to remote learning from 5 January 2021. An emergency meeting of the Executive was held on 4 January 2021. The dFM advised that the meeting had been convened in light of very serious developments in the Covid-19 pandemic and advised of a call earlier in the day involving herself, the FM, the Health Minister, the First Ministers of Scotland and Wales and the Chancellor of the Duchy of Lancaster. The Executive noted the public expectation that decisions would emerge from the meeting, and it was agreed that:

"a public statement should emphasise the fact that the Executive had made a pre-emptive move to introduce restrictions from 26 December, but that further measures, to include an extension of remote learning and the translation of the "Stay at Home" message into enforceable regulations had been agreed; the 'Stay at Home, Save the NHS' message; that a further meeting would take place the following day to consider the detail of the additional restrictions; and that a statement would be made in the Assembly on Wednesday 6 January."

472. The NI Modelling Group met on 5 January 2021 and recorded that the 7 day average of new cases had tripled over the Christmas period [**MM2/306 INQ000276570** (DoH Ref: PM2250)]. While there was some evidence in recent

data that case numbers and the test positivity rate was starting to level off, it was agreed that the R number was between 1.5 and 1.9 for new cases and 1.2 to 1.4 for hospital admissions. It was estimated that the number of hospital inpatients with Covid-19 would rise to at least 700, but potentially could exceed 2,000 by mid to late January 2021.

473. On 5 January 2021 the Executive considered a paper from the Department on strengthening restrictions [**MM2/307 INQ000276571** (DoH Ref: PM2251)]. The Department and the Department of Education had meet in the week prior to this Executive meeting to consider the impact of schools re-opening on R and the health system, and the CSA and I provided advice. The Department's paper on the January did not make recommendations on schools stating that "*The Executive has agreed the continuation of Education must be a priority however it must be noted that closure of schools and a switch to remote learning for all pupils would lead to a faster reduction in R. This would reduce the likely required duration of these most stringent of restrictions*." The Department's paper set out options and the Executive agreed that the additional restrictions should be introduced from Thursday 7 January 2021; a power for the Police Service of Northern Ireland to direct persons home should be reintroduced; a requirement should be introduced for all employers to conduct a risk assessment where employees were required to be in premises away from their home for work; that these restrictions would be in place until 6 February 2021 with a review point of 21 January 2021 in line with the restrictions agreed prior to Christmas; and that work on reducing crowding in retail settings would be progressed.

474. At this meeting the Minister for Education submitted a paper on education provision during lockdown. The paper recommended that *"all mainstream education providers, including pre-school education settings, primary and post primary schools required to provide remote learning at home to their pupils rather than face to face teaching in school until the half term break in the middle of February."*

475. On 21 January 2021 the Executive considered a paper concerning the sixth review of the Coronavirus (No 2) Regulation [**MM2/308 INQ000276572** (DoH Ref: PM2252)] submitted by the Department and agreed that the current restrictions should be extended by 4 weeks until 5 March 2021 and that the restrictions should be reviewed on or before 18 February 2021.

476. The Joint Biosecurity Centre update for the 11 February 2021 concluded that the *"NHS continues to work under severe pressure, threatening patient safety"* [**MM2/309 INQ000276573** (DoH Ref: PM2253)]. This assessment accurately summarised the situation in NI and again considered data provided from NI. The following day the 4 UK CMOs recommended that the Alert level should remain at Level 5 [**MM2/310 INQ000276574** (DoH Ref: PM2254)]. The Department's Modelling Group met on 16 February 2021 [**MM2/311 INQ000276575** (DoH Ref: PM2255)]. The group considered future impacts if R rose following relaxations of restrictions. Under an R of 1.4 the number of new cases would be expected to peak at just over 1,500 per day in June 2021 with hospital patients peaking at over 500 in July 2021. The respective figures for an R under 1.8 were 12,000 new cases per day in May 2021 with hospital inpatients rising to over 4,000 in June 2021 with cumulative deaths of more than 3,000 over the modelling period.

477. The Executive met on 18 February 2021 and considered the Department's paper, the seventh review of the Coronavirus (No. 2) Regulations [**MM2/312 INQ000276576** (DoH Ref: PM2256)]. The regular review of restrictions was one of the mechanisms in place to support the Executive's intention that restrictions should be in place for no longer than was absolutely necessary. At this meeting the Executive agreed that the current restrictions should remain in place until 1 April 2021, subject to review and would be formally reviewed on or before 18 March 2021. The Executive also agreed changes in relation to contactless click and collect for non-essential retail businesses to begin on 8 March 2021. This decision was against a background of new, more transmissible, variants; uncertainty about how effective vaccines would be against these variants; ongoing pressures on HSC hospitals; and concerns about the impact on HSC staff of having been on the front line dealing with Covid-19 for almost a year. At the same meeting the Executive considered a paper entitled "Options for Schools Return

from 8 March 2021" tabled by the Minister for Education. The Executive agreed Option 2 presented in the paper: "*A phased return on 8 March 2021 with agreed priority cohorts, such as key year groups and/or exam/assessment years coming back first, with all pupils back by 12 April 2021 or as soon as possible thereafter*" but with an amendment that remote learning, rather than Easter Holidays, would be extended for a week for P1 – P3 pupils.

Delta variant and Omicron Variant

478. I have provided an overview of my advice to the Minister and the Executive in light of the Omicron variant below and, in addition, I have also provided what I believe to be an important context and timeline and the experience leading up to the arrival of the Omicron variant and other important considerations which I believe to be relevant to the Inquiry.

479. As explained in my M3/CMONI/01Statement, at paragraph 75, RNA viruses such as SARS-CoV- 2 the cause of Covid-19 are more likely to mutate and change their genetic make-up when compared to DNA viruses. Throughout the pandemic new variants of the virus emerged some of which created additional challenges as they were more transmissible, with a varying ability to escape previously acquired immunity or to cause more severe disease. A number of these variants such as the Alpha and Delta variants in late 2020 and Omicron from November 2021, contributed to increased community transmission and outbreaks and health and social care surge pressures.

480. The professional advice I and the CSA is provided in relation to the Omicron variant, which rose in late 2021, is best summarised in relevant papers and submissions at this time. The advice provided by the CSA which I have referenced below reflects the collective and resolved advice from the CSA and myself notwithstanding the considerable uncertainties at this time which created dilemmas for Ministers in determining policy.

481. As was the case throughout the pandemic, our understanding of the Omicron variant and its potential implications and impact emerged incrementally and was informed by consideration and advice from SAGE. NERVTAG, UKHSA and a range of other scientific papers and evidence considered by the CSA, DCMO colleagues and myself informed our advice. In the initial period my understanding was also informed by discussions at UK CMO meetings following direct engagement with colleagues within OCMO in England with professional colleagues in South Africa who gave generously of their time and knowledge of the Omicron variant.

482. I believe it would be helpful to the Inquiry to understand the period leading up this including the experience and impact of the Delta variant which emerged in July 2021 and the third wave of the pandemic and the impact of a more transmissible variant causing more severe disease. The emergence of the Delta variant and the consequential rapid growth rate occurred at the same time as the UK was rapidly vaccinating its population and gradually lifting NPIs. I have made some general points on the evolution of the virus and have sought to summarise the period leading up to the emergence of the Omicron variant which I believe may be helpful to the Inquiry by way of context, without repeating the detail in previous statements.

April to end June 2021

483. The overall course of the pandemic improved between April and June 2021 although this was in the context of a population that was only partially vaccinated with variable levels of immunity from previous infection, vaccination, or both. Between early April 2021 until the end of November 2021 restrictions were gradually eased in keeping with the Executive's agreed 'Pathway out of Restrictions' plan although the pace of easements slowed from July 2021 onwards in response to changes in the Covid-19 situation with the emergence of the Delta variant. The situation deteriorated significantly between July 2021 and September 2021, which was the beginning of the third wave and there was a slower pace of easements of restrictions by the Executive for much of this three-month period informed by the advice of the CSA and myself. As such there was a very high

level of awareness of the potential significance of the impact of any new variant by decision makers, the health and social care sector and the public.

484. From late December 2021 until February 2022 additional restrictions were reintroduced, largely in response to the spread of the Omicron variant of Covid-19 and initial uncertainty in respect of the associated disease severity. However, by then new treatments for Covid-19 were available for those at most risk of severe disease, and population immunity was better, due to the roll out of the Covid-19 vaccination and previous infection. As a result, the link between the number of people infected and severe disease and death had been weakened. During this period, I would observe that the Executive when considering the appropriateness and proportionality of NPIs and restrictions, increasingly took more account of the adverse impacts on the economy, education and non-Covid-19 related health care when assessing the impact of the pandemic given that they had been in place for most of the last 12 months.

485. From June 2021, the CSA and I were advising caution in respect of further easements until robust data was available on the impact on transmission of easements implemented over the previous months. This is illustrated for example in our advice on the indicative decisions agreed by the Executive on 13 May 2021 to come into effect on 21 June 2021, subject to ratification on 17 June. On 10 June 2021 a TEO Executive paper proposed further relaxation of restrictions on Indoor/outdoor gatherings, household/bubbles, close contact services, licensed and unlicensed premises and live music/dancing [**MM2/313 INQ000357301** (DoH Ref: PM3229)] with indicative decisions dates for implementation. The TEO paper set out the context for the proposals contained in this paper to relax restrictions and the general advice provided by the CSA and myself as follows:

> *"Advice has also been sought from the Chief Medical Officer and Chief Scientific Adviser. You will note that their advice raises concerns about making further relaxations at this point due to a number of Delta variant related factors, i.e. the discovery of it within the community, the significant number of unknowns in relation to the efficacy of the vaccine in relation to it, and the relationship between cases number and hospitalisations. In light of*

the Delta variant concerns and the timing of data availability, this paper proposes ratification at a time when more data will be available to allow the Executive to make fully informed decisions. Whilst it is not ideal to give indicative dates, subject to further decisions, it is required given the concerns around the variant and the need to fully ascertain the impact of previous relaxations."

486. The paper also quotes the general advice from the CSA and me as follows:

"CMO/CSA have advised that they are very mindful of the current health service pressures and there is in their view little tolerance or capacity for significant increased COVID-19 admissions. If indeed admissions of the Delta variant are x 2.4 and vaccine effectiveness more dependent on second doses, then the Executive will need to factor this into the timing of decisions on any further relaxations which may be best deferred to middle to end of July."

487. On the 17 June 2021 the Department tabled a paper [**MM2/175 INQ000212981**] on the ratification of indicative decisions from the Executive meetings of 13 May and 10 June 2021 meetings for easements due to take effect on Monday 21 June and Thursday 1 July 2021 respectively. The 17 June 2021 paper states that:

"*The proposals, which were brought by The Executive Office and Cross Departmental Working Group as part of the Pathway out of Restrictions process, relate to indoor & outdoor gatherings, households & bubbles, close contact services, licenced & unlicensed premises, live music and dancing."*

And

"*The Executive previously agreed that the decision to ratify its previous decisions would be based on the data and overall picture of the pandemic at the time of ratification."*

488. The advice of the CSA and I was included in the paper as follows:

"The R paper for this week summarises the current state of the epidemic in NI and highlights the rapid increase in cases in other parts of the CTA as a result of the spread of Delta variant. *At present, Rt is around 1.2 in NI and increasing, as a result of relaxations of 24 May. Delta variant comprises around 30% of cases and based on experience elsewhere in the UK this % is likely to increase rapidly along with a further increase in Rt. Modelling which assumes Delta variant becoming dominant in early July indicates the potential for a significant wave of COVID cases in late summer / early autumn. Early additional relaxations are likely to accelerate this process and increase the peak of any wave. There is uncertainty about the extent to which hospital pressures will increase as COVID cases rise. However, early experience in Scotland and the NW of England clearly indicates that some increase in admissions will follow a rise in cases and this must be considered in the context of considerable hospital pressures as a result in "catch up" activity. Two doses of currently approved vaccines appear highly effective against Delta variant, and in particular against more severe disease. Progress in the vaccination programme is therefore critical in minimising the impact of Delta variant spread. For these reasons CMO / CSA advice is that there would be significant benefit from a health perspective in delaying further relaxations at present, as has been proposed in other parts of the CTA. This would allow a larger proportion of the population to be vaccinated before additional mixing occurs and would reduce the size of any third wave. Modelling suggests that the optimum period of delay would be 3-4 weeks. However, given the earlier closure of schools in NI compared with other parts of the UK it would be reasonable to review the position again at the beginning of July."*

489. The Department's 17 June 2021 paper recommended that the Executive not ratify the indicative decisions for relaxations which were due to be implemented on 21 June and 1 July 2021, but instead review the position again at the beginning of July 2021. Following discussion, the Executive agreed to delay implementation of these easements until the 5 July with a new ratification date of 1 July 2021.

<u>The Third Wave end July 2021 to May 2022</u>

490. During wave 3 the Department, the CSA and I continued to provide updates and advice to the Health Minister and the Executive on NPIs and restrictions including the monthly reviews of regulations and the proposals in the Executive Pathway out of restrictions. The CSA and I considered a number of factors in providing our advice to the Minister and the Executive including but not limited to:

- the direct impact of Covid-19 on the health and well-being of the population – particularly the spread/transmission of Covid-19; the hospitalisation of Covid-19 patients and deaths of those with a Covid-19 diagnosis;

- the impact on the non-Covid-19 related health and well-being of the population including reduced and delayed access to healthcare for non-Covid-19 conditions and the negative impact on public health. The impact on public health included issues around reduced screening; the impact on the mental health of the population and other concerns such as the impact of domestic violence and child protection concerns. While these concerns were present throughout Waves 1 and 2 the duration of the pandemic and the time over which NPIs were in use meant that these factors inevitably weighed more heavily in our as time progressed;

- the impact on the health and social care workforce (staff and volunteers) and on the health care system itself in a system that had been operating at over 100% of its capacity for some time and there was in the view of the Department an unparalleled level of risk to the health and wellbeing of staff for a prolonged period of time;

- the capacity of the Health system to respond to any Covid-19 related increase in demand including for hospital beds and ICU places;

- emerging new variants which might be more transmissible and/or caused more severe disease in circumstances where a new variant needed to be in

circulation for a period of time before hard data on its impact would be available;

- modelling on the trajectory of the epidemic including the likely future path based on best case, worst case and median case scenarios;

- scientific evidence and research into the epidemic and the effectiveness and sustainability of the responses including NPIs;

- evidence about the pressure on the test, trace, protect systems contact tracing; and

- evidence on vaccination uptake, adherence to advice on wearing of face coverings and changes in behaviours in relation to adherence with restrictions.

491. Alongside these considerations, most of which also informed the consideration of the need for NPIs during the previous waves of the epidemic, the advice provided to the Executive also took account of specific features of the pandemic which developed during wave 3:

- From April 2021 the need to consider the as yet only partial vaccination coverage of the population. By August 2021 the Department was highlighting the partial vaccination coverage amongst younger age cohorts and from September 2021 the Department was highlighting that vaccination coverage amongst younger age cohorts was lower than in other UK jurisdictions;

- By June 2021 the Department, the CSA and I were advising caution to the Executive in respect of new and further easements until there was hard data on what impact the easements implemented over the previous couple of months was having on transmission prior to agreeing further easements which could further increase upward pressure on community transmission of the virus;

- From July 2021, concern about the specific threats posed by the Delta variant;

- From July 2021, concern about recent relaxations relating to guidance on travel within the Common Travel Area which were likely to increase the prevalence of the Delta variant with this variant becoming the dominant variant in Northern Ireland by August 2021;

- By September 2021 the Department was linking and associating the higher levels of community transmission to recent relaxations in the context of the increased transmissibility of the Delta variant and decreasing level of community immunity, in addition to other factors. Between 7 July 2021 and 31 August 2021 community transmission as measured by the 7-day incidence of Covid-19 (cases per 100K population had increased dramatically in all Local Government Districts by a factor of anything between 2.5 and 13 fold;

- By September 2021 there was increasing concern that the effectiveness of vaccinations against Covid-19 maybe waning, and that third doses and booster doses of the vaccination would be required to protect against Covid-19 transmission and illness; and

- By January 2022 concern about the emergence of a new variant (Omicron).

492. As described from July 2021, there were significant concerns about the specific threats posed by the Delta variant and the CSAs and I expressed concern about recent relaxations relating to the NI Common Travel Area (CTA) guidance which was likely to increase the prevalence of the Delta variant, although we recognised it was inevitable that Delta would also become the dominant variant in NI, which it did by August 2021. This guidance has been agreed by the Executive having considered advice from the CSA and myself recognising the variation in transmission and rates of infection and the extent to which new variants had become established in the various jurisdictions within the CTA. Prior to the Executive agreeing to remove this guidance on the while not in legislation, the guidance provided advice for individuals travelling within the CTA requesting that if travel involved staying overnight in NI, that a rapid lateral flow device (LFD) test

should be taken before beginning the journey, only travelling if the test was negative and the individual was not suffering from any Covid-19 like symptoms. The completion of a passenger locator form (PLF) was not required unless the individual had been outside the CTA in the previous 10 days. In addition, the guidance also recommended taking LFD tests post arrival. By September 2021, the Department was associating the significant increase in community transmission with recent relaxations combined with concerns that the effectiveness of vaccinations against Covid-19 may be waning and that third doses and booster doses of the vaccination would be required to protect against further transmission and disease. Over the winter months of 2021 and into January 2022, concerns were emerging about the Omicron variant.

493. Whilst the number of Covid-19 positive inpatients was relatively low during June, from July the number of Covid-19 positive inpatients increased rapidly following the rise in cases associated with the Delta variant. This trend continued throughout August 2021. On Wednesday 1 September 2021 the number of Covid-19 positive inpatients was 446 (16% of occupied beds), adding severe pressure to the HSC system which was also dealing with sustained unscheduled pressures. On 1 September 2021, the hospital system as a whole was operating at 106% capacity in terms of bed occupancy, with 10 of our hospitals at, or above, capacity and 230 patients awaiting admission to a hospital.

494. By the end of September 2021 cases were declining in most age groups. Hospital admissions, inpatient occupancy and ICU occupancy were decreasing slowly. The conversion rate of cases to hospital admissions with a lag of 8 days had fallen to 1.6%. The numbers of deaths remained relatively constant. It was expected that it would be some weeks before the impact of the return of Universities would be apparent. Covid-19 positive inpatient numbers remained high across the system with 331 as of Monday 27 September. On the same day the hospital system as a whole was operating at 104% capacity in terms of bed occupancy, with 9 NI hospitals at, or above, capacity and 212 patients awaiting admission to a hospital. Over these three months the 7-day hospital death total rose from zero at the beginning of July to 24 in early August, rising again to 40 in early September, peaked at 44 in mid-September and then fell to 19 by the end of September.

October to December 2021 and the arrival of the Omicron Variant

495. The picture between October and November 2021 was subject to continued fluctuations in the course of the pandemic and the arrival of Omicron in December 2021 came at a difficult time as the hospital system was continuing to operate at over 100% of bed capacity. While there were initially uncertainties at the time about the Omicron variant, particularly the severity of disease caused, given its increased transmissibility the even if a smaller number of people required hospital care, a smaller percentage of the very large number likely to be infected was very concerning particularly given the then pressures on the health service. I have provided a high-level overview of my advice and that of the CSA at that time to inform policy decision and have provided further details in later paragraphs.

496. After the end of the third "lockdown", the Omicron variant in late autumn and winter 2021 marked the next significant phase in the pandemic. At the start of the first UK Omicron wave, from the available data we were certain of only two things. First that Omicron was significantly more transmissible even than Delta, and that there were multiple genetic variations which might have been associated with vaccine escape or give the virus other benefits. While there were media reports of the virus being less severe in South Africa, the formal technical advice from South African authorities was considerably more cautious. South Africa had just come out of a significant Beta wave, and this made interpreting the epidemiology from South Africa and applying it to a UK context challenging as we had not had a significant Beta wave. Initially there was uncertainty that it was less severe and if it was by how much. In that context, the advice that the CSA and I provided to the Health Minister and the Executive was in my view appropriately cautious. This was a new significantly more transmissible virus, even if it transpired that it may be slightly less likely to cause severe disease, it could still lead to very high numbers of severe cases especially if there was some degree of immune escape from the vaccine. Even if the number of people experiencing severe disease was less, as the CSA and I said at the time in advice to the Executive on the number that may require hospital care "*a small percentage of a very large number is still a large number.*" It was unfortunate that despite the significant uncertainty about the

potential impact of Omicron, a narrative developed that this was just a trivial infection and nothing to worry about as this was certainly not based on the data available at the time.

497. Despite the then high levels of vaccination and immunity from previous infection, Omicron caused a significant increase in people requiring hospital care. If it had been the case that Omicron caused even slightly more severe disease, or the vaccine was just slightly less effective against a virus that was very different genetically, what could have unfolded could have been significantly much more serious. None of this was known with any certainty in late 2021, and correctly in my view, the CSA and I advised of the need for a cautious approach by the Executive and in public messaging. It was important in our view to slow the spread of the virus with social measures and interventions while reinforcing public messaging and widening access to and accelerating the rollout of the booster vaccines. Without the considerable support and precautionary caution exercised by the public over the Christmas holiday period the Omicron wave would probably have been considerably worse. In my view the policy approach and the response of the public significantly slowed the wave, buying time for the rollout of the vaccine booster and this was of significant benefit. On the 12 January there were 479 people in hospital in NI, most with Omicron.

498. By November 2021 many countries including the UK had reached their highest rates of sequencing of the virus. In Southern Africa and travel-related cases in Hong Kong this identified a new variant of concern as soon as the first 4 sequences had been uploaded by Southern African researchers to the online sequence database GISAID. As described Omicron had a very large number of mutations, including 35 across the spike gene which meant it was very different to the original Wuhan wild type virus and this combined with waning immunity in the population raised major concerns about its potential impact and required a rapid implementation of a vaccine booster programme to counteract the waning of immunity associated with this variant as it became dominant. The vaccination programme is covered in detail in the M02C-DOH-01 statement and is the subject of my M4/CMONI/01 statement, so I have not repeated here, although as covered in these statements the roll-out of the vaccine, including boosters and new

antivirals increasingly meant there was less reliance on NPIs to control the pandemic.

499. The NI Modelling at that time was based on the assumption of no changes in Covid-19 policy or restrictions by the Executive. There were indications of an increase in vaccine uptake following the decision to increase the use of domestic Covid-19 certificates and other policy decisions, and enhanced messaging was likely to have led to some positive improvement in behaviours and greater adherence to public health advice. We anticipated pre-Christmas mixing to increase from early December 2021 and that this would tend to increase community transmission. The view of the Department, informed by the advice of the CSA and I, was in addition to the other considerations described at the paragraphs above was that the health services would be better able to cope with any adverse impact of Omicron if hospital pressures were lower and therefore reducing transmission as much as possible before Omicron became dominant was therefore a priority.

500. SAGE advice remained that the earlier measures to reduce transmission were introduced, the more stringent they were, and the wider their geographic coverage, the more effective they would be. Previous SAGE advice on measures to reduce transmission remained highly relevant including the advice on face coverings, hand hygiene, reducing contacts by for example working from home, advice on ventilation and the importance of effective testing, contact tracing and isolation. At that time the hospital system as a whole was operating at 103% capacity in terms of bed occupancy, with 6 of our hospitals at, or above, capacity. As a consequence of the direct impact of the Covid-19 pressures facing the HSC system the delivery of elective care continued to be heavily impacted.

501. In the first half of December 2021, the R number was in and around 1. However, during the second half of December the numbers of positive cases increased rapidly and by 28 December the estimates of R, for new positive tests was, 1.40 – 1.80 (7 days previous 1.10 – 1.40) and for hospital admissions was, 1.10 – 1.30. By the end of December 2021 Covid-19 transmission was likely to have been at its highest ever level in the community with a dramatic increase in cases in those

aged 18-30s years, followed by those aged 30 – 50s. There were also significant increases in older age groups most likely to be a result of transmission within families and household spread given the increased transmissibility of the Omicron variant. The frequency of severe illness requiring hospital admission after Omicron infection remained uncertain although it was believed that this was likely to be 20 – 80% lower as compared with the Delta variant. By the end of December 2021, it was expected that a peak in case numbers would occur in early to the middle of January 2022, with hospital admissions and occupancy peaking in late January into early February.

502. In the three-month period between October and December 2021 the approach to easements in restrictions had changed. The papers submitted to the Executive were focused on which restrictions were still in place and advice on when they might be eased as opposed to indicative proposals for the easement of restriction. In effect easements to restrictions under the Executive's agreed Pathway Out of Restrictions process stopped by the end of October and there were no proposals on easements to restrictions tabled to the Executive Office after the 21 October 2021, until a TEO paper was tabled on 20 January 2022.

503. TEO tabled no papers on proposals regarding the response to Covid-19 between 22 October 2021 and 22 December 2021, when TEO tabled a 'ECT written update: Winter Planning – Impact of Omicron Variant' paper which detailed the measures put in place in response to the Omicron Variant.

504. While TEO did not table any pathway out of restrictions papers for a period of two months, the Executive continued to meet regularly. Both the CSA and I attended these meetings and provided updates on the pandemic including presenting the 'R' papers. These updates and consequent discussions are reflected in the minutes of Executive meetings. The Executive and in some instances the Department published regular press statements updating the public on decisions, ongoing work, new guidance, developments with for example vaccinations, the trajectory of the epidemic, Christmas arrangements with restrictions and the outcome of Executive discussions. These press statements also urged adherence to the restrictions which were in place and that the public continue to follow the public

health guidance. The contents of a number of these press statements are referred to in the sections below.

505. The detail of my advice in relation to the Omicron variant is summarised in the M02C-DOH-01, Wave 3 statement, paragraphs 142 to 170, on which I provided input. I have not sought to repeat this detail here although I have summarised key points of the paper which reflect the advice I and the CSA provided.

506. On 2 December 2021 the Department submitted papers to the Executive on measures in response to the Covid-19 Omicron variant [**MM2/176 INQ000213741**, **MM2/178 INQ000213743**, **MM2/177 INQ000213742**] and dealing with travellers into NI. The Department also submitted the ninth monthly review of the restrictions and regulations [**MM2/314 INQ000357306** (DoH Ref: PM/3236)] which highlighted the continuing pressures in the hospital system, including ICU admissions and deaths; high levels of community transmission due to continuing relaxations; that the Delta variant was the dominant variant in NI; incomplete vaccination coverage, particularly among younger cohorts below that of other UK countries; and the at the time recent emergence of Omicron as a new variant of concern and potential impacts of which were then uncertain. These papers were informed by the advice of the CSA and I.

507. In a statement issued on 2 December 2021 [**MM2/315 INQ000357318** (DoH Ref: PM/3248)], the Executive announced that it had received an update from the CMO and CSA on the latest Covid-19 situation, and particularly the emergence of the Omicron variant. The statement said:

> *"The emergence of this new strain of the virus is a serious and concerning development worldwide. And while there is no need for alarm, it is vitally important that everyone redoubles their efforts to drive infection rates down. The evidence on the new variant is being very closely monitored. And our public health experts will continue to liaise with colleagues in other jurisdictions as the situation develops globally and locally. No cases of the Omicron variant have yet been confirmed here, but that situation is likely to change in the coming days. The public will be kept informed and health*

protection measures will be actioned as appropriate. It is still unclear whether the clinical impact of this new Coronavirus variant will be more serious so it is essential that we take preventative action now. We must use this time wisely to drive COVID-19 infection rates down. We are grateful to the public for how they have responded so far. People's actions are already having an impact and we thank everyone for the steps they are taking. The effectiveness of the booster vaccination programme is evidenced in reduced hospital admissions; the large number of people coming forward for first dose vaccine in recent weeks will make a real difference; and the collective effort to adhere to the public health advice has helped in reducing the number of cases. We know what works. And as we approach Christmas, it is vital that we all continue to work together to keep our society open, protect our health service and save lives. We urge everyone to remain vigilant and play your part in slowing the spread of the virus by following these simple steps:

- *Get first and second vaccine doses, and get your booster when eligible- up to date information is available at nidirect.gov.uk/covidvaccine(external link opens in a new window / tab);*
- *limit your social contacts;*
- *Meet outdoors when possible;*
- *If meeting indoors, make sure rooms are well-ventilated;*
- *Wear a face covering in crowded or indoor settings;*
- *Work from home if possible;*
- *Practise good hand and respiratory hygiene;*
- *If you have symptoms of COVID-19, isolate immediately and get a PCR test as soon as possible."*

508. On 7 December 2021 the Department issued a press statement [**MM2/316 INQ000357319** (DoH Ref: PM/3249)] announcing that the first Omicron Covid-19 variant cases had been confirmed in NI. The statement said: *"This is a development we have been expecting and preparing for since we were first made*

aware of the Omicron variant. Targeted actions by the Public Health Agency, including testing and enhanced contact tracing, were taken to investigate and assess these cases. There was no evidence at this time of wider community transmission in NI."

509. At the Executive meeting on the 9 December 2021 the minutes [**MM2/179 INQ000207229**] record the following: "*The CSA advised that Omicron spreads more easily than the delta variant, and noted evidence that the doubling time of Omicron could currently be between two and three days. He advised that Omicron would likely result in a steep rise in infections, and noted more data was required to determine both the extent to which it will lead to an increase in hospital admissions, and to understand how effective the booster vaccine might be in protecting against infection. He advised that it was unlikely Omicron could be prevented from becoming the dominant variant by sometime in January, but that its spread could be delayed."*

510. In a statement issued the same day (9 December 2021) after this meeting, the Executive announced that it had met to discuss the latest situation regarding the Covid-19 Omicron variant and the next steps in the Executive's preparations to tackle it. The statement said:

> "*Our medical and scientific experts are monitoring the situation very closely, both in terms of what's happening across these islands, and across the world. We have already activated our Autumn / Winter contingency plan. An early intervention was made to stall the progression of Omicron here with additional restrictions on travel and plans to identify any spread of the variant have been activated. Engagement has been taking place with administrations and public health officials across these islands. We await the emergence of further data in the coming days, which will allow for a scientific assessment of the variant and the impact it is likely to have. However, the evidence from elsewhere indicates that Omicron has potential to spread rapidly. That means it could have very serious implications for our health system, which is already under significant pressure. The situation is*

potentially very serious and that's why it is vital that we all redouble our efforts to drive down community transmission."

511. The minutes of the Executive meeting on 16 December [**MM2/180 INQ000048551**] record the following update from the CSA which summarised our collective advice:

"He outlined the position in relation to the Omicron variant, advising that it was much more transmissible than delta (with a projected doubling time of around 2.4 days) and that without further intervention cases could rise to over 10k per day by the New Year. He noted that it was still not known the extent to which these cases will lead to hospital admissions, but suggested Omicron would need to be around 90% less severe than delta not to result in an increase in admissions. He provided some outline modelling and advised that in order for the 'pessimistic' scenario to be avoided additional measures may be necessary in addition to the accelerated booster vaccination programme."

512. I am noted as saying *"…advised of the importance of introducing additional measures immediately after Christmas, and noted that the Health Service was likely to come under severe pressure."*

513. In a statement on the 16 December 2021, the Executive announced that it had met to consider the developing situation regarding the Covid-19 Omicron variant, and its potential impact. The statement reported that there were 151 cases of Omicron confirmed in NI, and evidence from other jurisdictions indicated that this was likely to increase rapidly in the coming days. The statement confirmed that there was no doubt that Omicron had the potential to be very serious, and engagement had been stepped up between Ministers and officials across these islands. It was also confirmed that public health experts were working intensively to analyse the evidence and would continue to keep the Executive updated as the necessary data became available. Scenario planning was underway to develop a package of potential measures to deploy to slow the spread of the virus and when would be the most effective time to deploy them. The statement indicated that those decisions would be underpinned by scientific and medical advice and the

Executive would meet again in the following week to review the data and consider next steps.

514. On 22 December 2021 TEO tabled a paper at the Executive meeting detailing a package of measures in response to the Omicron variant [**MM2/181 INQ000065662**]. The paper stated:

> *"In terms of approach, we have considered the measures which have been applied by other Nations across the Common Travel Area (Annex A) and the proposed package of measures is broadly comparable with steps being taken elsewhere. In the absence of significant funding from Treasury, affordability of the measures is also a factor and both Wales and Scotland have said that the absence of funding is a constraint in public health decision making. Department of Finance has identified £195m which is available in the current financial year and could be directed towards restrictions support. This is a combination of some new money announced by Treasury together with monies identified through the January monitoring round."*

515. The paper then detailed the proposed package of measures: health advice in relation to citizens and input from other Departments in relation to the direct financial cost together with wider economic and societal impacts. Where relevant the paper also included feedback from the sectors.

516. The advice provided in the paper by the CSA and myself was as follows:

> *"At this time while there remain significant uncertainties it is inevitable that Northern Ireland will experience a very significant wave of community infections over the next 2 months with Omicron becoming the dominant variant before Christmas. The scale and rate of growth of this wave of infection is likely to be significantly larger than previous waves if current doubling times continue. While we cannot be certain as previously advised the current wave will most likely reach a peak in middle third of January. Any hospitals pressures will follow with a lag of 10-14 days. The lag times between infection, severe illness, and adverse outcomes means that some*

degree of harm to individuals and pressures on health and social care systems are already inevitable. Without significant additional interventions it would be unwise to plan on the assumption that this wave will peak before we see very large numbers. This will result in significant workforce challenges across all sectors including health and social care and critical infrastructure with staff unwell, self-isolating or caring for others. The speed of onset of this wave will present different challenges to previous waves and the impacts on society, the economy and the health and social care service including mortality is likely to be over a much more concentrated period. Continued actions by individuals and society which reduce community transmission remain important as a way to limit the degree to which these harms will impact our communities over a very concentrated time period. Maximising the number of people who receive a booster or first, second or third dose remains a key mitigation against hospitalisation and serious harm and should continue to be expedited and prioritised. Given the speed of transmission and likely simultaneous infection of many people, intervention by the Executive needs to be urgently considered if the policy aim remains to avert the health service potentially being overwhelmed. Unfortunately, any decision by Ministers will inevitably have to be in advance of full information given the current observed doubling times. Previous advice from ourselves and SAGE about the relative effectiveness of interventions remains largely valid and the brief comments below should be considered alongside this. In this context the most recent SAGE minutes and the SPI-M consensus statement are particularly relevant. Earlier and stronger intervention will be more effective in protecting hospital capacity. The lowest risk would be achieved by full lockdown in the near future, although we recognize that this would also carry the largest likelihood of harmful consequences in terms of family life, societal impacts and economic impacts, and that all of these factors need to be balanced in coming to policy decisions. Considerable uncertainty remains about the severity of Omicron infection. Lower levels of intervention may turn out to be sufficient if severity is significantly lower than Delta; however, by the time this is clear from real world data from elsewhere in the UK it is likely that even a strong intervention would be too late to prevent hospital pressures associated with previous waves being exceeded.

Therefore, in terms purely of the COVID epidemic strong early intervention will carry the lowest risk, while less stringent or delayed interventions will carry greater levels of risk."

517. The minutes of the Executive meeting [**MM2/182 INQ000207230**] record the following update from the CSA: *"The Chief Scientific Advisor provided an update on the current position, noting a substantial rise in case numbers. Testing was at its highest level since the pandemic began; test positivity has plateaued at 6%. The largest increase in cases had been seen in the 18-30 age group, and this was largely the result of the Omicron variant. Overall, Omicron now accounts for over 50% of new cases. Hospital admissions had declined. In terms of modelling, there remained a degree of uncertainty in terms of hospital admissions in the coming weeks. The CSA noted that Omicron would need to pose substantially less risk of hospitalisation compared to delta in order to avoid a severe impact on hospitals during January."*

518. Following discussion, and consideration of advice provided by the CSA and myself, the Executive agreed a range of interventions to take effect mainly from 27 December 2021.

519. In a statement issued on 22 December 2021, the Executive announced this package of measures. The statement said:

"These measures, and their effectiveness, will be kept under continuous review as the situation develops. The Department of Health will take forward the amending of regulations where required. While there are still some uncertainties about the full impact of this new variant, we know from the evidence available that the infection rate here will rise sharply in the coming days and weeks. Omicron is now the dominant strain in new cases reported daily. The scale of infection and the rate of transmission will be extremely challenging for our whole society and will result in significant pressures in hospitals, the Health and Social Care system and the wider workforce. An intervention is therefore required alongside the vitally important booster vaccine programme. This package of measures has been informed by

medical and scientific advice, based on the best evidence we have available at this time. It also takes into account wider economic and societal impacts…. Given the unpredictability of the Omicron variant at this time, the Executive and our officials continue to plan for different scenarios so that we are in a position to respond rapidly to the emerging evidence should further steps be needed".

520. The following day on the 23 December 2021 in a press statement [**MM2/317 INQ000357320** (DoH Ref: PM/3250)] issued by the Department, the Health Minister was strongly warning against complacency in the community over the Omicron variant. The Health Minister emphasised that Omicron posed a significant threat to health and social care services. The Omicron variant was at that time dominant in NI, accounting for a majority of new Covid-19 infections. The Health Minister said:

"There remains a great deal of uncertainty about Omicron. Some early research from Great Britain suggests it may be less severe than the Delta variant in terms of the proportion of infected people who require treatment in hospital. More information is still required and the findings are not definitive. I must emphasise that this early research definitely does not mean that Omicron should be taken any less seriously. It is much more infectious than Delta and will therefore lead to much greater levels of infection. Even with a lower proportion being hospitalised, if the number of cases rises to very high levels, the number of Covid in-patients will increase as well. Pressure on our hospitals could therefore be significantly increased. In addition, Omicron has largely spread to date among young people and more data is still required on its full impact – including potential hospitalisation rates among older people. Furthermore, widespread transmission in the community will inevitably lead to more staff absences in essential services. That has the potential to seriously impact health and social care provision. It is therefore absolutely vital that we don't let our guard down or be swayed by uninformed talk on social media. We must keep doing all we can to protect each other and limit the spread of Omicron. Get boosted as soon as you can. If you are not yet

vaccinated, please don't delay any further. If we all keep making safer choices in our daily lives, we can help push infection rates down."

521. The Executive met on 30 December 2021 and received updates from a number of departments including the CSA on behalf of the Department. The minutes [**MM2/183 INQ000022455**] record the CSA update as follows: "*The Chief Scientific Advisor provided an update on the current position, noting a dramatic rise in case numbers and an increase in test positivity. The largest increase in cases was in the 18-30 age group, with significant increases in the 30-40 and 40-50 age groups. Omicron is now the dominant variant, accounting for 90% of new cases. There has been a slight increase in hospital admissions. The Chief Scientific Advisor advised that there was still uncertainty around the level of severity of Omicron, but further data should emerge in the next one to two weeks."*

522. In a statement [**MM2/318 INQ000357321** (DoH Ref: PM/3251)] published on 30 December 2021, the Executive announced that it had agreed that the then current package of Covid-19 measures remained a proportionate response to the Omicron variant at that time. While the situation remained under continuous review, the Executive had agreed not to introduce additional restrictions following its latest considerations. The Executive also discussed self-isolation requirements and the proposal by the Health Minister on the advice of the CSA and I to reduce self-isolation from 10 to 7 days subject to a negative LFD test on day six and a second negative LFD test taken at least 24 hours later on day seven. This change was expected to take place from 31 December 2021 with further details to be announced. Omicron had become the dominant variant of Covid-19 before Christmas Day and the daily infection rate had increased dramatically in the last week of December. It accounted for around 90 per cent of cases in NI. While there remained a great deal of uncertainty about Omicron, there was some encouragement from initial research which suggested it may have been less severe than the Delta variant in terms of the proportion of infected people requiring hospitalisation. The Executive statement pointed out that further data on illness severity would emerge in the following one to two weeks in the first two weeks of

January and this would help further inform modelling and the Executive's considerations.

523. The trajectory of the pandemic during this time is described in the content of 'R' papers produced during this period. For most of January 2022 the estimates of R for new positive cases was around 1 rising briefly in the third week above 1. During the same month the estimates of R for hospital admissions was above 1 in the first two weeks before settling at around 1 in the second half of January. During January 2022 the number of Covid-19 positive inpatients increased from around 360 at the start of the month to 420 by the end of the month whilst the number of Covid-19 positive patients in ICU fell over the course of the month from 31 to 23. Analysis of data on testing from January 2022 was affected by a change in policy which resulted in a shift from PCR testing to LFT and it was unknown the extent to which the results of LFTs were being uploaded. By the end of January, we were beyond the peak of the third wave and likely to also be beyond a secondary peak in mid-January of case numbers for the Omicron wave, driven by the return of schools. Omicron remained the dominant variant mainly the BA-1 lineage. However, during January 2022 a growing percentage of cases were of the BA-2 strain. At the time early evidence suggested that BA-2 may be more transmissible than the dominant BA-1 lineage and therefore may in due course become dominant. There was still some Delta virus (<5% cases) which was likely to decline slowly, and which continued to contribute disproportionately to the number of severely ill patients in hospital. As observational data became available, Omicron severity appeared to be substantially reduced when compared with the Delta variant (closer to 80% reduction than 20%) and it was believed that the measures in place would be sufficient to maintain peak hospital numbers at a significantly lower level than the previous January. By the end of January 2022, it was expected that hospital numbers would fall slowly over the following number of weeks, with some day-to-day variation.

524. During February 2022 the estimates of Rt were at or below 1. Covid-19 case numbers had continued to fall, in the context of a reduction in testing. The

percentage of positive tests remained stable but at a high level. By the end of February there was a continued decline in the number of school-aged children reported to have tested positive. The number of cases in other age groups was reducing or stable. The Office for National Statistics (ONS) Coronavirus (COVID-19) Infection Survey (CIS) results reported that around one in 14 people in NI had Covid-19 in the week up to 20th February, which remained around peak levels. Most infections at that time in NI were due to the BA.2 Omicron sub-lineage. In the week commencing 14 February, 82% of sequenced samples were BA.2, which was higher than elsewhere in the UK. The total numbers of Covid-19 inpatients were fluctuating at high levels, partly due to nosocomial infection rising from 440 in early February (7-day average) to 627 on 1 March 2022. However, the number of Covid-19 positive cases in ICU stayed low during February (14 or less) and 1 March 2022 the number had decreased to 6.

525. The CSA provided an update to the Executive at its meeting on 6 January 2022 stating that there had been an "*extraordinary rise in case numbers and increase in test positivity.*" The increase in cases had been in most age groups, and the CSA expected cases among the younger age groups to increase as schools returned. There had been increases across all local government districts. The CSA advised the Executive *"that case numbers should soon no longer be viewed as providing a complete account of the spread of Omicron, given the limitations imposed by testing capacity. He noted that hospital admissions and occupancy had increased, and that it was likely there will be an increase in hospital acquired COVID."* There had been no increase compared to previous waves in the number of patients requiring respiratory support, and the length of the average stay in hospital had also declined, suggesting those patients with Omicron were less unwell.

526. In a statement issued on 6 January 2022 [**MM2/319 INQ000357322** (DoH Ref: PM/3252)] community transmission of Covid-19 was at an all-time high. The Executive therefore urged everyone not to let their guard down, get boosted, test and report. The statement said:

> *"The Executive had received an update today from its medical and scientific advisors on the latest public health situation. As expected, the highly*

infectious nature of the Omicron variant had led to a dramatic increase in the number of positive cases. The number of cases was expected to remain very high for the next few weeks." The statement continued: *"The Executive has agreed not to make any changes to the package of measures currently in place to manage this Omicron COVID wave. There are still some uncertainties around the full impact of the Omicron variant and we are keeping the situation under continuous review. Further data on potential hospital pressures will emerge in the next week and will help to inform our considerations. There are undoubtedly significant workforce pressures across essential services and wider society arising from the extraordinarily high levels of infection throughout the community."*

527. On 13 January 2022 the Chief Scientific Advisor provided an update to the Executive and noted *"a decline in case numbers resulting from a change in testing strategy (with daily PCR tests having fallen from around 12k per day to 3-4k per day in the past week)."* There had been the expected increase in cases in school age children. As part of his update, he advised that "the effective reduction in the severity of Omicron compared to Delta was potentially around 60%-80%".

528. On the same date the Executive considered a paper tabled by the Department, which was titled 'Health Protection (Coronavirus, Restrictions) Regulations (Northern Ireland) 2021 Tenth Review of the need for the restrictions and requirements' [**MM2/184 INQ000065604**]. The recommendations in the paper included asking the Executive to agree: that the current restrictions and requirements in both the Health Protection (Coronavirus, Restrictions) Regulations (Northern Ireland) 2021 and the Health Protection (Coronavirus, Wearing of Face Coverings) Regulations (Northern Ireland) 2021, as amended, were at that point in time an appropriate and necessary response to the serious and imminent threat to public health which was posed by the incidence and spread of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in NI; that overall the restrictions and requirements imposed by these Regulations continued to be proportionate to what the Regulations sought to achieve, which was a public health response to that infectious disease threat.

529. The minutes of the meeting [**MM2/320 INQ000357323** (DoH Ref: PM/3253)] of 13 January 2022 record that the First Minister and Ministers of his party did not support these recommendations, on the basis of their assessment that "the requirement for Covid-19 status certification and the requirement to prove a medical exemption to face mask wearing were not considered proportionate or necessary based on the current evidence."

530. In a statement issued on 13 January 2022 [**MM2/321 INQ000357324** (DoH Ref: PM/3254)], the Executive thanked the public for their ongoing efforts to limit the spread of Covid-19, given that at that stage health data indicated that case numbers were likely to be at or around their peak in that Omicron wave. "The impact of Omicron continues to be a matter of concern. Community transmission will remain high over the coming weeks. Hospital pressures are severe and it will take more time to determine when they have peaked. So we are asking everyone to keep doing all they can to protect themselves, protect others and protect the health service. The increasing evidence that Omicron is considerably less severe than previous variants of the virus is welcome. However, the transmissibility of Omicron, which has resulted in very high numbers of cases across the community, is hugely disruptive. Our workforce, essential services and the economy will remain under significant strain for a number of weeks."

531. On 20 January 2022 TEO tabled a paper outlining an approach to the Relaxation of Omicron restrictions [**MM2/322 INQ000357325** (DoH Ref: PM/3255)]. The paper stated: *"The Omicron variant remains highly transmissible and there will be ongoing pressures. However, based on the latest data, in particular around hospital pressures, ECT has reviewed the restrictions introduced in response to Omicron as well as the Autumn Winter measures and has set out below a phased approach to removal."*

532. The paper included the advice from the CSA and me as follows:

> "*CMO and CSA have advised that the stepped approach to relaxing some of the measures put in place as a result of Omicron could be permitted as set out in paras 7 to 9 above [of the 20 January paper]. In relation to face*

coverings, the advice remains that it is important that 80% continue to use face coverings in appropriate settings to achieve the desired benefit. The mechanism to achieve this is a policy decision. On indoor standing events and nightclubs, CMO and CSA advise that these could be permitted to open as long as mandatory certification is in place although consideration could be given to changing to strong encouragement (guidance) in other settings where currently required in regulation. CMO and CSA also advise that the measures set out in para 10 [of the 20 January paper] above in relation to guidance on encouraging the use of LFD tests and [Working from Home] WFH should be retained as well as the legal duty on businesses to encourage the use of face coverings and on retail to take all reasonable steps to minimize transmission of the spread of the virus. These measures will be subject to review as part of the regular 4-weekly review cycle and further advice will be brought to the Taskforce."

533. The proposals in the paper were noted by the Executive.

534. In a statement issued on 20 January 2022 [**MM2/323 INQ000357326** (DoH Ref: PM3256)], the Executive announced that an approach for relaxing the measures had been put in place to manage the Covid-19 Omicron variant. The statement said: "*Ministers were updated today by the Chief Medical Officer and Chief Scientific Advisor, who have confirmed that we are likely to be past the peak in case numbers, although it remains possible that case numbers may rebound somewhat due to the impact of the return of schools. Hospital admissions and COVID bed occupancy as a result of community transmission have also peaked and are beginning to fall slowly. Based on current data, a rise in COVID ICU occupancy is not expected in this wave. The measures put in place in response to Omicron were a balanced and proportionate intervention based on the best available evidence. However, the improved outlook on hospital pressures allows us to relax some restrictions within the next week.*"

535. The statement also confirmed that the Executive had agreed a range of easements to restrictions from 21 January, 26 January, and 10 February respectively.

536. At a meeting of the Executive on 20 January 2022 the minutes [**MM2/185 INQ000048555**] record the following update from the CSA: "*The Chief Scientific Advisor provided an update on the current position, noting a recent increase in case numbers driven largely by increases in the 0-11 and 11-15 age groups. He noted a decline of around 10% in hospital admissions, and that the majority of inpatients do not become seriously ill. He advised that hospital pressures were following the optimistic modelling scenario.*"

537. On 21 January 2022, the Executive eased domestic restrictions by reducing the required self-isolation period after a positive Covid-19 test. Positive cases were able to leave isolation on day six, providing they had two negative lateral flow tests, at least 24 hours apart, no earlier than day five and day six. In a statement issued on 20 January [**MM2/324 INQ000357327** (DoH Ref: PM/3257)], the Health Minister had welcomed this decision commenting that:

> "*Thanks to a massive effort across Northern Ireland, the worst fears about the Omicron variant have not been realised. I want to pay tribute to everyone who has followed public health advice and helped us get to this point. The progress we have made is due in no small part to the rapid acceleration of the booster programme before Christmas. This roll-out was achieved by a health system and staff facing unprecedented pressures, supported by many volunteers. The pressures on the health service remain severe and I would again appeal to everyone to do all they can to help it get through the remainder of this winter. As I said to staff directly this week, the fact our health service is still standing at all is down to their heroic efforts. They will continue to experience those sustained pressures for some time yet. Cautious optimism will serve us best as we look towards a better future. There are still major uncertainties with this pandemic including the potential for a secondary peak in the coming days and weeks. We must stick to the approach that has produced dividends. That includes ongoing efforts to get more people boosted and vaccinated.*"

538. The Health Minister added:

"Let us not lose sight of the scale of the Omicron surge here in recent weeks. We significantly mitigated the impact, thanks to the efforts of the general public, the vaccination programme, the dedication and expertise of our health service workers, and proportionate policy decisions at Executive level. We must remain ready for all eventualities, while planning for further easing of restrictions just as soon as the situation allows." The statement concluded stating: *"This change has been introduced by the Department of Health, following detailed consideration by medical and policy officials including input from the Chief Medical Officer and Chief Scientific Advisor".*

UK Strategic Approach and the Coronavirus Action Plan

539. The policy approach and strategic planning being undertaken by the Department and the Executive in February 2020 was consistent with the approach of the rest of the UK. My advice and that of CMO colleagues is perhaps summed up best in the agreed UK Covid-19 Action Plan: A guide to what you can expect across the UK [**MM2/16 INQ000057508**] published on the 3 March 2020, outlined by the Health Minister in his statement of the 19 March 2020. Most of the work in developing this was led by policy team colleagues in UKG. This described what became known as the "contain, delay, research and mitigate" plan. The Coronavirus Action Plan of 3 March 2020 [**MM2/16 INQ000057508**] was premised upon "contain" still being a tactical objective at that time. This was a UK Action Plan and recognised the respective roles and responsibilities of the UK Government and the Devolved Administrations including the Executive. It outlined the steps that had already been taken throughout the UK and further plans to tackle the current coronavirus outbreak. The plan explained what was known about the virus and the disease caused, how plans and preparation for infectious disease outbreaks were in place, the actions already taken in response to the Covid-19 outbreak, what was planned next depending on the course the outbreak and the role the public can play in supporting this response, now and in the future. There was a common UK approach agreed by Ministers in the period up to the first lockdown. This approach was informed by discussions between UK CMO colleagues. In early March the primary focus was on the potential for a very high number of deaths in NI based on

scaling down from UK modelling for the NI population. At the time as I recall, while a consideration, there was not a specific attempt to estimate when health services might be overwhelmed. This became a focus from the end of March 2020 when the Department's Modelling Group was established.

540. The agreed UK plan followed the approach of most other European countries which accepted that Covid-19 would circulate, and the aim was to keep this at a lower level to reduce the risk of death, serious illness, and to prevent the health service being overwhelmed. In adopting this the alternatives of letting the virus spread with no interventions to reach its natural peak or to pursue what became known as a "zero Covid-19' policy had been effectively set aside as not viable policy approaches. It was recognised, as reflected in the Health Minister's comments at the Executive meeting on the 16 March [**MM2/186 INQ000228166**], that once any measures were relaxed that transmission of the virus would again increase and that it would place significant additional pressures on the health service if this increase occurred in the winter when other respiratory pathogens were circulating. I have considered a note kept by the FM on her behalf on the 14 March 2020 included *"herd immunity – can't possibly keep people cocooned for 16 weeks."* [**MM2/187 INQ000203348** page 4]. As previously indicated, flattening the epidemic curve was the objective and "herd immunity" was never the Executive's strategy.

541. With regards to whether the point of containment in Northern Ireland had passed by the 3 March 2020, I believe that the action plan as agreed at the time was and remains a reasonable strategic approach. The "contain, delay, research, mitigate" approach was one that I believe was also accessible to, and understood by, the public. With the benefit of hindsight, we did move too slowly in March 2020, not because of any failings in the UK Covid-19 Action Plan rather because we didn't then realise how far we were away from a significant wave of infection, mainly because of the limited testing capacity we had access to in the first part of the pandemic, and the fact that there had been widespread seeding of Covid-19 due to infections being imported from Europe in mid-February 2020 which were not known about at the time.

542. Given the level of testing and case finding and what subsequently became known about asymptomatic or minimal symptomatic disease it is highly probable that there were by this time more cases in NI than had been detected. In the absence of widespread population testing, it is not possible to be certain of the level of community transmission at that time.

Timing of the first lockdown

543. This was a global pandemic and arguably required not only a UK wide approach but from an epidemiological perspective ideally in my view a coordinated UK and Ireland approach to include the Common Travel Area, as I indicated in my evidence to module 1 of the Inquiry.

544. I have reviewed and considered the conclusions of the House of Commons, Health and Social Care, and Science and Technology Committees, Coronavirus: lessons learned to date: Sixth Report of the Health and Social Care Committee and Third Report of the Science and Technology Committee of Session 2021–22 and comments in Baroness Fosters Module 1 statement to the Inquiry on the timing of the first lockdown in NI [**MM2/188 INQ000205274,** paragraph 32].

545. The UK Covid-19 Action Plan published on the 3 March 2020 set out the UK wide strategic policy approach. The priorities being "contain, delay, research, mitigate" as outlined by the Health Minister in his statement of the 19 March 2020. I believe the action plan as agreed was at the time and remains a reasonable strategic approach. At no time then or subsequently do I recall any views expressed by Ministers or officials advocating for a different policy approach. As I have described earlier given the ask of the population and the need to secure their support for whatever approach was determined, the "contain, delay, research, mitigate" approach was one that I believe was also accessible to and understood by the public. As I have already stated at paragraph 541 with the benefit of hindsight, it is unarguably the case that the UK wide "lockdown" should have come earlier.

546. The advice I gave to Ministers in respect of the first lockdown was solely in respect of the public health impact and the benefits and harms. My advice was informed by and based on that of SAGE, although I provided my advice as the CMO in NI. It needed to consider the direct and indirect consequences and the wider public health implications in addition to the direct impact of Covid-19 in terms of severe disease, associated morbidity and death. As CMO it was my role and responsibility to take into consideration and provide an overview of all the public health concerns in respect of any measure introduced and not just the direct impact of Covid-19.

547. While the focus in the early part of the pandemic was understandably and appropriately on the direct impact of the virus, I was clear throughout in the advice that I provided that we also needed to consider the indirect impacts and health consequences of any measures introduced and the negative impact of NPIs including a lockdown. The primary purpose of my advice as CMO was to reduce mortality and morbidity both in the short and longer term, direct and indirect. In so doing, I needed to consider the number of direct Covid-19 deaths, the effects of the health service potentially being overwhelmed, as well as the longer-term effects of lockdown and other NPIs on the health and well-being of the population in NI. With the knowledge of what subsequently happened, and knowing now what we did not know then about the introduction of infection into the UK from Europe with the increases in transmission as a result, the various policy interventions taken in terms of social distancing and the first UK wide lockdown should have been Implemented earlier, although how much earlier is more uncertain, probably an imposition of lockdown up to a week earlier. That said, at the time of the introduction of the first lockdown I believe the pandemic was somewhat less advanced in NI than in other parts of the UK.

548. Given the consequences and impact on wider society and the economy and the complexity of the measures introduced from 16 March 2020 to 23 March and the first lockdown, the measures needed significant policy preparation. Others will be better placed to comment as to whether all that preparation was in place in NI Departments including the legal basis for those measures and the necessary financial supports for people and businesses.

549. Unfortunately, as I've indicated with the limitations in testing capacity and surveillance at the time, we were relying mainly on hospital admissions to estimate the number of cases. Admissions however lag behind the number of infections and tell us where the pandemic was in terms of new infections some weeks earlier as opposed to where it was now and didn't reflect the spread and growth of the pandemic at that time, particularly a pandemic that was growing exponentially.

550. The first case was identified in NI on the 27 February 2020 as a presumptive positive test in a returning traveller. As of 8 March 2020, the DHSC had reported 105,874 confirmed cases of Covid-19 worldwide, 80,695 of these are in China. There have been 3,585 fatalities, the majority of these were within China while 488 fatalities have occurred in other countries. In the UK, as of 8 March, 278 people have tested positive for Covid-19, 244 of these have been in England while there are 18 in Scotland, 4 Wales and 12 in NI. On 8 March, the third Covid-19 related death occurred in the UK. Two of the patients were from the 'most at risk' older cohort and one patient in his 60's had a number of under lying medical conditions.

551. In the UK, as of 13 March 2020 the total number of confirmed cases stood at 798, which included 645 in England, 86 in Scotland, 38 cases in Wales, and 29 in NI. As of 13 March, there had been ten Covid-19 related deaths in the UK, all ten in England. All patients had underlying health conditions. As of 17 March, sadly there had been 57 Covid-19 related deaths in the UK and again all of these people had underlying health conditions. As of 17 March, 361 further people in England had tested positive for Covid-19, bringing the total number of cases in England to 1,557. The total number of confirmed cases in the for the UK was 1950, which included 195 in Scotland, 136 cases in Wales, and 62 in NI. As of 22 March, there had been 230 confirmed Covid-19 related deaths in the UK, one of which was in NI. The total number of laboratory confirmed cases of Covid-19 in the UK was 5,018* which included 4,257 cases in England, 322 in Scotland, 280 in Wales, and 108 in NI.

552. Based on the numbers of confirmed cases in NI at the time, although they were increasing, I do not know in this context whether Ministers and the Executive would

have thought it proportionate and appropriate to implement the unprecedented measures that were later introduced, and to effectively prevent most social and economic activity, and to enforce this legally, given the widespread consequences of those measures, consequences which remained a concern to Ministers throughout the pandemic, in my view appropriately.

553. While others may be better placed to answer, it is also in my view questionable whether the Executive would have had either the financial resources or the capacity within Government to, in isolation from the rest of the UK, to put in place the legislation, guidance and infrastructure necessary to support a lockdown. This is leaving aside the implications of reserved matters and the extensive relationships between the population in NI, the population in the UK including the large number of students from NI in England, Scotland and Wales, and the economic and supply chain relationships including food supplies, medication and other essential products.

554. Looking back, while I was informed by the advice and recommendations from SAGE, and as indicated, I believe that the social distancing, the NPIs and subsequent lockdown were introduced relatively earlier in NI in terms of the progression of the pandemic, compared to some other parts of the UK compared to some other parts of the UK, albeit perhaps only by a matter of days. I certainly think almost everyone providing scientific and medical advice, myself included, with the benefit of hindsight would have preferred that we had advised that the measures were introduced relatively earlier across the UK. Given the numbers infected and the impact at the time I am less certain as to what decisions Ministers and respective Governments including the Executive would or could have made and as is always the case such matters are always clearer looking back.

555. I am even more uncertain about the difference it would have made even if decisions had been made a week earlier. There are several factors which may have resulted in a very different outcome had these decisions been made earlier. The level of public and political support may have been very different and how organised the response would have been, given the preparation required across

departments may also have been different. All of this is further complicated by the fact that some not infected in the first wave may have subsequently been infected in the second wave and instead had some immunity in the winter of 2020 and the second wave. I am of the view that this partly explained why in NI we had a worse second wave as a result of lower population immunity particularly with the emergence of the more infectious Alpha variant.

556. Even now, I fail to see any plausible scenario in the UK where it would have been possible to keep R predictably below 1 without a lockdown given how highly transmissible the virus we were dealing with was. Of note, almost all comparable countries with a similar demography, population density and international connections had to impose lockdowns to some extent prior to vaccination being available. Whilst there is a legitimate debate about the timing and potentially the elements of the first lockdown in NI, I believe it was largely inevitable if the Executive's principal strategic aim was to minimise mortality, both direct and indirect and to prevent the health service being overwhelmed. A more restricted set of NPIs would have slowed the rate of increase but not reliably got R below 1, which was the necessary aim of the strategic approach. Significant policy decisions were taken on 16 March 2020 to implement social distancing and again on the 23 March in what became known as the first "lockdown" across the UK including NI and undoubtedly this was of benefit in slowing the pandemic and reducing the peak.

557. From a NI perspective, as previously indicated it is my assessment that at the time of the first UK wide lockdown community transmission of Covid-19 in NI was somewhat lower as compared to England and London in particular, and this is reflected in comparative number of hospital admissions at that time as a more reliable indicator given the limitation in testing and surveillance. Relatively speaking the first lockdown in NI was therefore at an earlier point in the pandemic in NI as compared to elsewhere, although the differences were probably measured in days as opposed to weeks. As I have described, in my view this in part explains why the first wave of the pandemic in NI was less severe than elsewhere although there are likely to be other factors. For comparison in the 7 days up to 20 March 2020 Covid-19 admissions in England were 114 / million population and in NI 22.7

/ million and the 7 days up to 27 March 2020 Covid-19 admissions in England were 170 / million population and in NI 114 / million population.

558. As to whether NI could or should have implemented lockdown earlier based on the evidence and advice then available and how practical would that have been in terms of implementation of legislation, communication and financial support is ultimately a policy matter for Ministers, and others may be better placed to advise. Not unreasonably there were significant concerns about the very significant impacts of NPIs and what became known as lockdowns, which while reducing community transmission and direct Covid-19 deaths would contribute to significant indirect deaths and harms given their adverse impacts across wider society.

The Adverse Consequence of NPIs including "lockdown"

559. Baroness Arlene Foster provided a thoughtful and in my view reflective statement to Module 1 of this Inquiry, [**MM2/188 INQ000205274**, paragraphs 39 to 43] in relation to research and consideration of the consequences of NPIs where she said:

"*it is a matter of deep regret for me that, unfortunately, I do not believe there was sufficient research into, or consideration given to, the unintended but in some cases sadly predictable consequences of what transpired to be a lengthy period of lockdown...I consider that there was not sufficient information to allow us to properly balance the long-term harm, in terms of excess deaths from other causes, and long-lasting trauma it would cause. I very much regret the fact that people were not allowed to be with their loved ones when they were dying, and that their ability to grieve and attend funerals was restricted. I also believe the closure of schools, particularly for the most vulnerable children and families, was hugely detrimental. Further, not enough was known about the potential impact on those with disabilities and health difficulties, and the effect of isolation and loneliness on individuals, and as such these impacts were not properly taken into account. I also feel there was insufficient weight placed on the impact of removing cancer and other health screening, and I remain concerned about the ongoing impact on waiting lists. In summary, while I believe the decisions taken were in line with the best advice and guidance we had at the time, I consider that pandemic*

preparedness should include consideration of strategies other than lockdowns, or if lockdowns are unavoidable, strategies should be put in place to mitigate their impact on the most vulnerable...". At the start of the pandemic, the first guidance issued 31 March 2020 allowed only a maximum of 6 family members to attend a funeral. This was to avoid close contact between individuals. This maximum number was at the request of the NAFD who were extremely concerned that large numbers would attend, creating a potential risk for further spread of infection and putting the safety of their staff, clergy and council workers at risk.

560. The Executive collectively considered and made decisions on NPIs. The primary purpose of the advice that I and the CSA provided to inform those decisions was to save lives and to prevent the health service being overwhelmed. It was largely the case that specific decisions on restructuring services, freeing capacity, and standing down services were made within the Department. The implications of these decisions on wider public health, waiting lists and waiting times were understood and were highlighted in papers presented at SAGE for example. I have already highlighted the work which I commissioned during the pandemic to investigate the impact on health inequalities. The negative impact on other services was clearly described in press releases and Ministerial statements from the Department. Regrettably I do not believe there was any other way at the time in which it would have been possible to free the capacity necessary within the health service to respond to Covid-19 and to maintain other services. The alternative scenario of trying to maintain capacity across the entire health service, the health service being overwhelmed, and people being unable to access emergency care for other conditions, in my opinion would have resulted in not only more people dying from Covid-19 but also other acute conditions such as heart attacks and strokes. It was my observation that this is a point that Executive Ministers both knew and understood at the time. Other negative impacts for example from the closure of schools were known and understood at the time which is reflected in Executive discussions in the weeks prior to the decision to close schools.

561. On a personal and professional level, I very much regret the fact that people were not able to be with their loved ones when they were dying, and that their ability to

grieve and attend funerals was restricted. I personally, and professionally fully appreciate the human importance of such traditions. It is important to set these decisions in the context of what was known at the time. These decisions were made to protect family members, members of the public and staff, including undertakers, from transmission of the virus. Funerals in particular create circumstance where groups of people travel from near and far. Culturally in NI people attend wakes and visit the home of the deceased to offer condolences and support to the family. They are attended in NI by immediate families, extended families, neighbours, friends, and members of clubs and societies. People congregate in remembrance of the deceased joining together in prayer and other religious elements; they converse and catchup with family and friends they have not seen for some time; they offer physical comfort to the bereaved by way of embraces, hugs and handshakes as well as much appreciated emotional support. Older people in particular, who were more vulnerable to the virus, would have been very conscious of the traditions and importance of attending funerals. The PHA were monitoring incidents and clusters from around mid-2020 onwards and they would have been able to advise of any incidents and clusters which they identified as being centred on a funeral.

562. Considering and balancing the health, wider social consequences, impacts on family life, education and economic factors was one of the things that Ministers, and the Executive had to do in making policy decisions and did so throughout the pandemic. As such policy decisions were not solely or exclusively based on the scientific and medical advice. My role as CMO and that of the CSA was to provide scientific and public health advice, based where possible on the advice of SAGE or other scientific committees and other sources of evidence to inform the Minsters decisions. As CMO it was not my role, nor was it appropriate for me to provide advice on wider social or economic factors except from the narrower public health perspective.

563. Several SAGE papers and the advice provided by the CSA and myself highlighted the negative impact on other aspects of health and the health system. Steps were taken to try and mitigate impacts on the vulnerable, although there were limitations as to how effective these steps were. There were significant capacity issues in the

health service and real concerns with respect to infection prevention control and the risks of transmission of the virus to otherwise well individuals some of whom may have had underlying health conditions. While I am cautious of comments made in retrospect, it should have been apparent to all at that time, given these matters were repeatedly referenced in papers and my briefings to the Executive, that there were extraordinary pressures that were being experienced in health and social care. It simply in my view would not have been possible to keep elective care, screening services and care for people with severe Covid-19 all operating concurrently. At all times the balance of risk and harm was carefully considered prior to any decision with respect to pausing or to reduce routine services. These decisions weighed heavily on all, not least on those health care professionals and managers who were acutely aware of the potential consequences but also all in the HSCB, PHA, the Department and the Health Minister. In my view, given that the primary objective was to save lives and to prevent the health service being overwhelmed, it is only with benefit of hindsight that it could be suggested that choices existed when they didn't with respect to the measures introduced and their implications.

564. As is evident from SAGE research there is a large volume of research into epidemics and pandemics across the world including into the use of NPIs and their impact. In the context of the pandemic, I agree that further qualitative and quantitative research is required into the wider societal and educational and macroeconomic impacts of NPIs to inform future mitigations to reduce the harms should NPIs is required in future pandemics. I would comment however that at the time we didn't need research to know that the decisions were going to have a negative impact, research was helpful in quantifying what the impacts were. These impacts were discussed frequently at Executive meetings and in my view, Ministers did give due consideration to such matters when they made decisions.

565. As indicated earlier, I do not believe that had such research been available this would have avoided a lockdown in NI, elsewhere in the UK or RoI prior to vaccines being available. In my view it would not have been possible to maintain R below 1 given how infectious and transmissible Covid-19 is. In part this is due to the population density, demographic and international travel links of the UK and RoI.

As indicated earlier almost all other countries with a similar population characteristic had to impose some form of lockdowns. Irrespective of the availability of research I agree that some of the adverse consequences of NPIs were to be expected. I have outlined some of the practical steps that were taken in the Department and health and social care and in particular those for which I was responsible. Similarly, work was progressed by Child Health Care Policy colleagues in the Department for children receiving other services and support and this is covered in the M02C-DOH-01 statement.

566. As I have stated earlier in this statement at paragraph 546, the advice I gave to Ministers in respect of the first lockdown was solely in respect of the public health impact and the benefits and harms. My advice was informed by and based on that of SAGE, though the advice was mine. In providing my advice I considered the direct and indirect consequences and the wider public health implications in addition to the direct impact of Covid-19 in terms of severe disease, associated morbidity and death. As CMO it was my role and responsibility to consider and provide an overview of all the public health concerns in respect of any measure introduced and not just the direct impact of Covid-19. While the focus in the early part of the pandemic was understandably and appropriately on the direct impact of the virus, I was clear throughout that we also need to consider the indirect impacts and health consequences of any measures introduced and the negative impact of NPIs including a lockdown.

567. The purpose of my advice as CMO was to reduce mortality and morbidity both in the short and longer term, direct and indirect. In doing I needed to consider the number of direct Covid-19 deaths, the effects of the health service potentially being overwhelmed, as well as the longer-term effects of lockdown and other NPIs on the health and well-being of the population in NI. Quantifying the indirect effects was more difficult than quantifying the direct effects, although I understand there were attempts by SAGE and others to do so. It was however not my role to give economic or social advice, and I did not do so.

568. Deaths directly from Covid-19, and deaths and harm to patients with other conditions who couldn't access the care they needed, would have increased if the

health service had been overwhelmed. The NPIs that were introduced had a key role in preserving the ability of those with non-Covid-19 related health needs to access treatment including emergency care and allowed the health service to provide as much planned care and routine care as possible, with the additional limitations of the steps necessary to reduce and prevent infection when people accessed care and prevent outbreaks in health settings. This included the development of several innovative approaches to providing as much routine care as possible. Unfortunately, the role that NPIs had in allowing as much routine care as possible to continue while also treating those with Covid-19 is not well understood. Following the first wave, the health service worked extremely hard to maintain as much non-emergency and non-Covid-19 care as possible in the face of repeated waves of Covid-19 and those who achieved this deserve our recognition. Later, considerable efforts were made by teams across community, primary and secondary, Trusts the HSCB and PHA under the oversight of the Rebuild Management Board to achieve recover of services as soon as possible.

569. I have provided some examples of work that I led or provided advice or input into that sought to mitigate some of those direct consequences of the NPI's including lockdown in relation to other sectors outside of health and with consideration of the wider societal impacts. I have subsequently provided additional examples in relation to steps taken to mitigate the consequences of the impact of health care services in paragraphs 265 to 267.

Schools

570. During the pandemic one of the more challenging areas was the approach to schools, given the recognised educational, social, emotional, mental health and physical health benefits to children of being in school, and the significant contribution of education in improving life chances and in reducing health inequalities and disparities experienced by children. It was important to try and achieve a balance between no intervention in schools and the risk of increased transmission of the virus, and intervention to the extent there could or would be a disproportionate impact on children's education, social development, and future life opportunities. In the advice I provided I sought to ensure that all measures and interventions were proportionate to what was required to reduce community

transmission protecting those at risk and also considered the risk to children, so that healthy children missed as little time in school as possible. A combination of school closures and Covid-19 related absences did result in children missing out on a significant amount of school during the pandemic. As I indicated in my M2C-CMO-01 statement, I was very concerned about the impact of school closures particularly for vulnerable children and particularly those from socioeconomically deprived backgrounds and advised against the closure of schools. The task of maintaining children in schools while reducing the risks of transmission and outbreaks was complex. While the first attendance restrictions came into place on the 20 March 2020, schools in NI did remain open for face-to-face learning for vulnerable children and the children of essential workers.

Bereavement Support and Funeral Guidance

571. Recognising the profound impact on those bereaved during the pandemic I established the Department's NI Bereavement Care Workstream in early May 2020, building on the already established HSC Bereavement Network. The membership consisted of representatives from the voluntary sector, hospices, chaplains, NI General Practitioners Committee, Independent Health and Care Providers, NICS Departments such as the Department for Communities and Department of Education, HSCB (now SPPG), NISCC, PCC, PHA and HSC Trusts. The group produced a number of resource materials and booklets, for the general public including children, HSC professionals and care home staff and residents which provided advice to those who had been affected by a death with signposting to services for further support, if required such as Trust Bereavement Support Teams, pastoral services, children's services and wellbeing resources.

572. The work of the NI Bereavement Care Workstream culminated in a report entitled "Covid-19 Guidance: Bereavement Advice and Support" [see Exhibit MM/XX **INQ000408149** (DoH Ref: MMcB/6034)]. It made seven recommendations, one of which was "That the HSC Bereavement Network membership is expanded to become the Northern Ireland Bereavement Network, with responsibility for developing and leading the strategic bereavement plan for the next 10 years. The Northern Ireland Bereavement Network should include all relevant cross-

departmental and community organisations and agencies" (Recommendation 2). To take forward this recommendation, I appointed Dr Patricia Donnelly as Chair of the Northern Bereavement Network in March 2021 to take forward the remaining recommendations in the report.

Funeral Guidance

573. The necessary measures introduced to reduce the risk of transmission of infection associated with the remains of deceased persons and funeral services and burials was a particularly distressing aspect of the pandemic response with significant emotional and psychological consequences for the bereaved. It is deeply regrettable that the guidance and regulations had such significant impact on the cultural and spiritual rituals and religious rites associated with marking of respect for the deceased, the normal expression of condolences and support to those bereaved. Every effort was made to keep the associated guidance and regulations under regular review to ensure a proportionate and balanced approach, recognising the need to balance the risks of infection with the significant adverse human impact on those bereaved and grieving. Despite these efforts I recognise that these measures and restrictions were extremely distressing and for some this may have undoubtedly exacerbated the normal grief reaction at the loss of a loved one.

574. Guidance was developed by the Department for Funeral Directors in collaboration with the PHA and the National Association of Funeral Directors and took account of national guidance published by Public Health England and the differing cultural practices and rites of passage observed in NI when someone dies. The initial guidance was approved by me for consideration by the Health Minister and was first published on 2 April 2020. As the pandemic progressed, and with greater understanding of the virus and transmission in the context of community transmission and wider NPIs and restrictions in place, the guidance was regularly reviewed and revisions were made to the guidance to ensure it remained

proportionate to the risk and recognised the very real impact on those bereaved. The National Association of Funeral Directors, district councils, churches and the City of Belfast Crematorium were consulted when amendments were required and each of the revised versions were approved by me and subsequently the Health Minister prior to issue and publication.

575. The balancing of health, social, and impacts on family life, education and economic factors was one of the things that Ministers, and the Executive had to do. I did not provide advice on wider social or economic factors. I believe that qualitative and quantitative research is required into the wider societal and educational impacts of NPIs to inform future mitigations should they be required in the future. My role as CMO was to provide scientific and public health advice, based where possible on the advice of SAGE or other scientific committees and other sources of evidence to inform the ultimate decisions of Ministers.

Clinically Extremely Vulnerable (CEV) and Shielding

576. Initial reports from China in January 2020 indicated more severe disease and poorer outcomes amongst older men and that increasing age has remained the strongest risk factor for hospital admission and mortality. Over the next few months additional data emerged from China, and later Italy, suggesting that people with certain underlying conditions were at increased risk of death and disease. As cases began to appear in the UK the First Few Hundred (FF100) surveillance protocol provided basic information about the clinical presentation of the first cases and a description of the people most affected. This provided early indications of populations at greater risk.

577. Evidence from SAGE supported the assumptions that older people and people who were suffering from underlying conditions were more likely to die as a result of Covid-19. As more data became available as the pandemic progressed it confirmed that both vulnerable groups and older people were more likely to become seriously ill, be hospitalised, require intensive care and more likely to die. At the point in time when shielding was introduced, whilst the evidence from

experts providing evidence to SAGE supported these assumptions, there was still a paucity of actual hard data until the middle of March onwards.

578. There were discussions ongoing throughout March 2020 and across the UK on identifying those at most risk. As CMO, I and my DCMOs were fully engaged in UK CMOs and UK expert panel review of emerging evidence and discussions to identify those most at risk. Later, hospital admission data confirmed the increased risk of hospital admissions for older adults and in particular older men including those with certain underlying conditions and this was also reflected in Intensive Care admissions. Further details of this are considered in Chapter 2 of the UK CMO Technical report [**MM2/1 INQ000217254**] including the measures taken in mitigation.

579. These discussions culminated in the CMO for England circulating a short briefing note on shielding for the Prime Minister on 15 March 2020. The paper, which reflected the discussions which had been taking place between the UK CMOs, had been circulated to myself and the CMOs for Scotland and Wales earlier that day for any comments [see Exhibits **INQ000346717** (DoH Ref: MMcB/6007a) and **INQ000346718** DoH Ref: MMcB/6007)]. I am also aware that there were also direct communications between TEO, the other devolved administrations and the cabinet office on the policy intent of having a UK wide approach to the shielding policy [**MM2/394 INQ000346719**].

580. The primary advantage of the introduction of shielding was that it protected many of the most vulnerable in our society believed to be most at risk. It provided a focus for the development of a support infrastructure to enable this population, many of whom were extremely fearful, to shield. Alongside this, the introduction of shielding also benefitted the health system and reduced the risk of the system being overwhelmed as these were the groups who would have been most at risk of hospitalisation and requiring intensive care. Other arrangements needed to be put in place for those in hospital and for care homes. Guidance was issued by the PHA on 17 March 2020 [**MM2/189 INQ000425637** (DoH Ref: MMcB/0193)]. Revised guidance was issued by the Chief Social Services Officer on 26 March 2020 [see Exhibit **MM2/325** **INQ000087760** (DoH Ref: PM0122)].

581. The establishment of the shielding arrangements in NI was primarily led, within the Department, by a combination of staff from the Primary Care Directorate and Advisers from within the CMOG. In general terms professional advisors led on definitional issues and professional advice which included clinical interpretation and public health implications of the policy, whilst the Primary Care Directorate team led on the policy itself and operational issues such as the actual issuing of advice letters (in partnership with the HSCB and HSC Trusts) and the establishment of supports for the CEV population in partnership with other stakeholders including the Department for Communities. As with many other aspects of the response to the pandemic, the two teams worked closely with each other in effect as a single team to deliver on shielding.

582. The designation of the CEV categories of medical conditions was informed by the information and advice provided via the Department's participation in the UK National Clinically Extremely Vulnerable Group. Public Health England and SAGE guidance in relation to concerns about the risk of high mortality among the clinically extremely vulnerable because of Covid-19 infection also informed the development of this policy. The definition of CEV initially used by all four jurisdictions in March 2020 was agreed by the four UK CMOs. However, it remained the case that each of the jurisdictions could diverge if it so wished and ultimately the decision on the definition to be used for CEV in NI fell to myself as CMO. Under the UK wide criteria, General Practitioners also had a degree of flexibility to include patients they judged to be at high risk.

583. The policy of focusing on CEV established in March 2020 ensured that throughout the pandemic there was a focus on protecting those most vulnerable in society. The policy was predicated on identifying those who were 'clinically vulnerable' (CV) such as older people, those with specific underlying medical conditions and those of all ages in very specific and targeted groups or categories who were at extremely high risk in the community and were thus recognised and designated as clinically extremely vulnerable (CEV). Specific advice, guidance and supports including as to how they might shield themselves so as to avoid being infected with

the virus was targeted at the CEV populations and those who were in contact with them.

584. The overall approach taken was first, to identify those at higher risk and inform them so they would be able to better manage their own risk and second, to put a programme in place with guidance on managing risk, and support to do so, alongside a wider package of NPIs to reduce transmission in the community. To put measures in place only for those at higher risk, without a wider package of NPIs to reduce community transmission was not regarded as an appropriate response.

585. In October 2020 as part of the Great Barrington Declaration, there were those who promoted targeting NPIs to the vulnerable group alone or implementing shielding alone as an option to reduce overall severe disease and deaths while allowing the infection to spread in all others. It was my view and in fact the collective view of UK CMOs that there were serious questions about the practicalities, ethics and indeed effectiveness of such an approach. Covid-19 is a highly transmissible infection with often minimal symptoms, it was therefore extremely difficult to successfully target and protect specific people or groups. It must also be recognised that identifying the vulnerable is an inexact science and the level of vulnerability and associated numbers of those affected changed through the pandemic. Ultimately the most effective way to reduce risk for the vulnerable, the wider population and those in care homes was to reduce overall community transmission. Many of those shielding lived in households or settings with others who could be at risk of introducing infection when community rates were high, and those requiring care and support services also had regular contacts from outside the home. It was and remains my professional view that the Great Barrington Declaration was fundamentally flawed.

586. The list of diseases or conditions considered to be very high risk and listed in the first shielding letter issued from 27 March 2020 were:

- Solid organ transplant recipients;
- People with specific cancers, as follows:

- People with cancer who are undergoing active chemotherapy or radical radiotherapy for lung cancer;
- People with cancers of the blood or bone marrow such as leukaemia, lymphoma or myeloma who are at any stage of treatment;
- People having immunotherapy or other continuing antibody treatments for cancer; and
- People having other targeted cancer treatments which can affect the immune system, such as protein kinase inhibitors or PARP inhibitors;

- People who have had bone marrow or stem cell transplants in the last 6 months, or who are still taking immunosuppression drug;
- People with severe respiratory conditions including all cystic fibrosis, severe asthma and severe Chronic Obstructive Airways Disease (COPD);
- People with rare diseases and inborn errors of metabolism that significantly increase the risk of infections (such as Severe Combined Immunodeficiency (SCID), homozygous sickle cell);
- People on immunosuppression therapies sufficient to significantly increase risk of infection; and
- People who are pregnant with significant heart disease, congenital or acquire.

587. The letter that issued to those who were at highest risk from the virus advised individuals who fell into this group to 'shield' themselves by staying at home and avoiding all face-to face contact for the next 12 weeks. The letter provided information about actions to take in order to do so; how to access further information and support, including through the NI Community Helpline; advice on indoor exercise; and mental health tools as well as providing general information on the pandemic response.

588. People living with other underlying health conditions were identified at a UK-wide level as part of a wider clinically vulnerable group, not included in the shielding group but who should follow strict social distancing measures instead. This group included those who were:

- Aged 70 or older (regardless of medical conditions)
- Under 70 with an underlying health condition listed below (i.e. for adults this usually anyone instructed to get a flu jab as an adult each year on medical grounds):
  - Chronic (long-term) respiratory diseases, such as asthma, COPD, emphysema or bronchitis;
  - Chronic heart disease, such as heart failure;
  - Chronic kidney disease;
  - Chronic liver disease, such as hepatitis;
  - Chronic neurological conditions, such as Parkinson's disease, multiple sclerosis (MS), a learning disability or cerebral palsy;
  - Diabetes;
  - Problems with their spleen – for example, sickle cell disease or those who had their spleen removed;
  - A weakened immune system as the result of conditions such as HIV and AIDS, or medicines such as steroid tablets or chemotherapy;
  - Being seriously overweight (a BMI of 40 or above); and
  - Those who are pregnant.

589. The shielding policy included specific additional advice for those living with these individuals. The shielding advice was accompanied by CEV eligibility for and support with food and medicine deliveries, specific arrangements for GP follow-up and access to other services virtually. It included various other forms of support including statutory sick pay. The voluntary and community sector, many organisations, local communities and the Department for Communities played a major role in providing such support in a hugely impressive community response. The approach to "shielding" Is considered more fully in the UK CMO Technical report on the 19, Chapter 8, pages 255 to 259 [**MM2/1 INQ000217254**]. This extensive programme of shielding was essentially paused after the first wave.

590. Once the cohort had been identified, I corresponded directly with the CEV group on several occasions and provided updated advice on NI Direct, communicating the changing risks and advising of revisions in the guidance. Letters to the CEV group from myself were issued through GPs to those identified as clinically extremely vulnerable [see Exhibits **MM2/326 INQ000130313** (DoH Ref: PM0058), **MM2/327 INQ000120706** (DoH Ref: PM0059), **MM2/328 INQ000130388** (DoH Ref PM0242)] via HSC Trusts to specific patient groups, who were known to them in March 2020.

591. By 27 March 2020 letters were being issued to the CEV population by a combination of General Practitioners and HSC Trusts. In practical terms, it may have taken a couple of weeks for all of these letters to be issued. The CEV letters offered advice on staying Exhibits **MM2/326 INQ000130313** (DoH Ref: PM0058), **MM2/327 INQ000120706** (DoH Ref: PM0059), **MM2/328 INQ000130388** (DoH Ref PM0242)] and enabled those in receipt to access support schemes being offered to the most vulnerable by the Department for Communities (DFC). The only other practical advantage was in relation to Covid-19 regulations (SR 2020 No.55) made on 28 March 2020. These regulations prohibited "anyone from leaving the place where they are living without reasonable excuse. Examples of a reasonable excuse include the need to provide care or assistance to a vulnerable person, to travel for the purposes of work and to access critical public services."

592. There were subsequent changes to the definition of CEV in NI, all but one of which were agreed Nationally by the four UK CMOs:

- People with Motor Neurone Disease (MND) (added 2 April 2020 – elsewhere in UK added at clinical discretion);
- People who have had a splenectomy (added 15 May 2020 on advice from UK Clinical Panel for Shielded Patients to UK CMOs);
- Those undergoing renal dialysis (added after 24 April 2020 on advice from UK Clinical Panel for Shielded Patients to UK CMOs);

- Adults with Downs syndrome (added after 26 November 2020 on advice from UK Clinical Panel for Shielded Patients to UK CMOs); and
- Stage 5 chronic kidney disease (added after 26 November 2020 on advice from UK Clinical Panel for Shielded Patients to UK CMOs).

593. The groups which were added to the definition in April and May 2020 were sent a copy of the shielding letter and advice, first issued on 27 March, from myself. Groups added after the end of shielding on 31 July 2020 were updated on the guidance and advice from the date they were added to the CEV list.

594. The inclusion of MND patients in the definition of CEV was the only area where NI diverged from the rest of the UK in regard to the definition. As this was primarily a clinical consideration, the decision was made by myself, although the Health Minister would have been advised and aware of the decision given that he was receiving communications on the issue from political representatives. The vulnerability and risk in patients with MND primarily relate to reduced respiratory capacity and difficulty clearing secretions. Many MND patients will require respiratory support in the course of their illness as indicated and therefore would probably have been identified by GPs for inclusion on the CEV list at their discretion. The inclusion of MND in the NI definition of CEV was intended to offer additional reassurance to this population of approximately 140 people in NI at any one time [see Exhibit **MM2/329** **INQ000348674** (DoH Ref: MMcB6084)]. It is also important to note that NI probably issued more shielding letters per head of population than other parts of the UK unrelated to the inclusion of MND.

595. For the rest of the UK, the issue of including Motor Neurone Disease in the definition of CEV was discussed at a meeting of the UK Clinical Panel for Shielding Patients on 28 April 2020 [**MM2/395 INQ000348675**] which was attended by a representative from CMO Group. At the conclusion of the meeting the minutes record "Recommendation: Patients should be continued to be identified by GPs/Specialists for shielding on a case-by-case basis to reflect the varying degrees of severity of MND. To ask MNDA to collect/submit further data on outcomes for consideration by NERVTAG/SAGE. To work with RCGP and RCP to

develop the e-learning resources to include awareness of MND with regard to the shielded patient list. While other jurisdictions did not subsequently add the those living with MND as a category in their CEV lists, those with MND in other jurisdictions continued to be considered for inclusion through clinician discretion or by the clinical interpretation of the definition of 'rare diseases' as outlined in correspondence to GPs and Hospital Specialist.

596. By October 2020, as part of our response, I proposed the formal establishment of a Clinically Extremely Vulnerable Operational Cell [**MM2/330 INQ000408127** (DoH Ref; MMcB6010] within the Department to identify any emerging CEV group and cohorts in NI and to focus on their specific needs with a view to tailoring individual correspondence. This dedicated CEV cell, chaired at Deputy Chief Medical Officer level, was established to facilitate this and to formulate policy and guidance relating to the CEV population. In reviewing the advice, the CEV Cell took account of the latest evidence from the epidemiology; the status of the wider restrictions in place for the general population; and also took cognisance of the advice for CEV people that was in place elsewhere in the UK. My advice to the Health Minister and the Executive in regard to the CEV population was in turn informed by advice from the DCMO Cell Chair.

597. In October 2020 a risk prediction model called Qcovid® was released in England that estimated a person's combined risk of catching coronavirus and being admitted to hospital, as well as their combined risk of catching coronavirus and dying. This further informed the updating of the conditions such as the identification of the vulnerability in adults with Downs Syndrome and in people with stage 5 chronic kidney disease. This resulted in people in these groups being added to the CEV list in NI in November 2020. After evidence emerged on relative risk for either single or multiple conditions for some patients, some of whom were then prioritised for vaccine rollout. Importantly, Qcovid® also included a measure of socio-economic deprivation.

598. The policy on shielding to protect the most vulnerable also included the ongoing review of the appropriateness and proportionality of these measures given the significant negative impact in terms of loneliness, isolation and mental health.

During the pandemic, the letters that issued to people identified as Clinically Extremely Vulnerable provided a range of information including sources of advice and support with access to medicines and food deliveries, support for mental health and well-being and financial assistance and support when returning to the workplace. This information and guidance for people who were Clinically Extremely Vulnerable, and for those who were in the wider clinically vulnerable category, was also available on the NI Direct website. This website was the primary source of advice and guidance for the public over the course of the pandemic including those who were shielding. As described at paragraph 629, a Northern Ireland Covid-19 Community Helpline to support anyone feeling isolated or vulnerable including those who were shielding was established and provided support with a range of issues including access to food and medicines. The Department for Communities (DfC) played a central role in arrangements to support communities and people during the pandemic. The Department worked closely with the DfC from early May 2020 until 31 July 2020 to put arrangements in place for priority access to online grocery shopping slots for those who were Clinically Extremely Vulnerable. This included food box deliveries to those who were unable to access food through online shopping, family, friends or local support networks including those who were shielding. As with other UK nations, as CMO with the advice from the NI dedicated CEV Cell, I continued to review and advise the Health Minister on the recommendations in relation to "shielding and the CEV cohort" in NI which subsequently informed policy decisions and guidance.

599. In relation to and with consideration to issues about data availability to determine who might be clinically vulnerable or a greater risk, in the first wave of the pandemic there were some information and IT system challenges in NI in identifying those at significant increased risk including the CEV population. Unlike, I understand, elsewhere in the UK, it was not possible to carry out an automated clinical records search. The quality, breadth, and completeness of data available on those with clinical vulnerabilities impacted on the accuracy of the list, however, these initial problems did improve throughout the pandemic. For the future, more comprehensive data sets, alongside intelligence from GPs and those clinicians in Trusts providing specialist care to better inform lists and targeted advice to those who were clinically extremely vulnerable is required. While out with my particular

area of competence, in NI this will require further work on data access, read across of coding between datasets, record linkage and in particular alignment with the technical skills to analyse that data. The ongoing implementation of the NI Integrated Health and Care Record (the Encompass Programme) will significantly improve patient identification in the future.

600. Given the urgency of the requirement to identify this cohort, clinicians in primary and secondary care and their teams worked diligently and at pace to identify these individuals. Consequently, there was some duplication of correspondence. Again, this was an example of the collective working between the Department, the then HSCB (now SPPG), the secondary and tertiary care specialist services in hospitals, and primary care teams across NI. Throughout this time the Health Minister, myself and the Department regularly communicated with the CEV population, ensuring they were aware of the latest developments with shielding and the latest guidance which was also updated on the Government NI Direct website.

601. On 27 May 2020, and following discussions with her over the previous week I emailed [**MM2/396 INQ000346716**] the Chief Executive of the Patient and Client Council asking that the council undertake research to "inform the relaxation of some of the current restrictions around outdoor exercise and possible subsequently meeting family outdoors in small numbers with appropriate safeguards and precautions". The email indicates that the proposed research was supported by the Health Minister and by the FM and the dFM.

602. The Health Minister published a statement encouraging people who were Clinically Extremely Vulnerable, and those supporting them, to participate in the survey, the aim of which was to understand the impact shielding has had on individuals, to inform the steps and processes that must be considered now and in the future, and to ensure that the voice of those impacted by shielding was heard [**MM2/397 INQ000348703**].

603. In my letter to the CEV population which issued in early June 2020 to advise of a change in shielding advice, also advised recipients that I was leading a programme of rapid engagement with people who were shielding so that, in considering the future of shielding, there would be a clear understanding of the issues those who were shielding faced. The letter provided details on how to participate in the PCC survey online, by post and by telephone. The final PCC survey report [see Exhibit [**MM2/331 INQ000344088** (DoH Ref: PM0060)] was published in July 2020.

604. The findings of the survey [See Exhibit **MM2/331 INQ000344088** (DoH Ref: PM0060)] indicated that fear of Covid-19, and the risk it represented, was the dominant concern among those surveyed. In addition, shielding appeared to have had detrimental social and psychological effects on a significant group of respondents, although relatively very few of those surveyed mentioned a need for professional support or counselling. Those who were shielding prioritised being kept informed with clear advice and guidance, along with the scientific rationale for this advice. A considerable number of respondents felt that the shielding community was often 'forgotten' or 'ignored' as changes to guidance and restrictions for the wider population were announced. The need for advice to CEV people was kept under continuous review and took account of the research undertaken by PCC including the mental health impact of shielding. The subsequent advice which I provided to the Health Minister and the Executive was informed by this research alongside other factors such as the trajectory of the pandemic, the availability of therapeutics, progress with vaccination, community transmission levels and pressure on the health system.

605. Membership of the Department's dedicated CEV Cell included representation from the Patient and Client Council to ensure that the patient voice was heard in decisions around advice for CEV people. The PCC played a pivotal role in the development of a Distance Awareness Scheme which I had endorsed and was launched by the Health Minister on 24 February 2021. The scheme was modelled on a scheme which had been developed in Wales and was delivered by the PCC in partnership with community pharmacies, general practices (GPs), Health and Social Care Trusts, and in the voluntary and community sector through the Northern Ireland Council for Voluntary Action (NICVA). My endorsement of the

scheme and recommendation to the Health Minister was in part a response to the research which I had commissioned from the PCC in June 2020 which had highlighted the concerns of CEV people. The scheme ostensibly consisted of badges and signage which would remind members of the public of the importance of social distancing. As part of the launch the Health Minister stated "The badge can be worn by anyone to signify that they wish to maintain social distancing and it is not meant to be an identifier of someone who has been shielding or may have any specific health condition. This is an opportunity for members of the public to become more involved in promoting the social distancing message and to help our efforts to halt the spread of Covid-19. There is a very simple message behind the scheme – show your concern and respect for other people by maintaining social distancing."

606. Due to the decline in community transmission during the first wave, there were easements to shielding advice from 6 July 2020 to allow for meetings of up to 6 people outdoors and to form a support bubble with one other household. By 27 July 2020 there had been no recorded Covid-19 related deaths in NI for 14 days and, considering the small number of cases and absence of deaths it was decided that advice on shielding was no longer proportionate to the risks and associated adverse impact, and "shielding" could be replaced by advice to take extra precautions in following the public health advice. Shielding was therefore paused from 31 July 2020 with the situation kept under review. In an urgent written Statement on 23 October 2020 the Health Minister informed the Assembly that I had looked at the position again in light of the increased numbers of cases of Coronavirus in NI. In this statement the Health Minister outlined that, since shielding was first advised, a number of important changes had taken place in our approach to managing the pandemic and reducing the risk of transmission. This included a greater awareness of the importance of social distancing, the requirement to use face coverings, Covid-19 secure workplaces and greater adherence to respiratory and hand hygiene. After careful consideration, I advised the Health Minister that shielding should remain paused. The statement also noted that the position would be kept under review.

607. As indicated above the CEV list was kept under continuous review and on 26 November 2020, the Department announced that adults with Down's syndrome had been added to the Clinically Extremely Vulnerable list as recent evidence indicated that adults with Down's syndrome were in the high-risk category for severe disease. I wrote to adults with Down's syndrome to advise them that they had been included on the list and advised what this meant for them [see Exhibit **MM2/332 INQ000276298** (DoH Ref: PM2014)]. An easy read version of the advice was also available.

608. On 23 December 2020 the Department announced that it had updated the advice to Clinically Extremely Vulnerable people to help them keep safe through the Christmas period and beyond. Clinically Extremely Vulnerable people were reminded to consider very carefully any plans for a Christmas Bubble over the festive period, with the safest option being to not form a Christmas bubble, and to avoid attending shops, pharmacies, and hospitality settings unless absolutely necessary.

609. The advice in relation to Clinically Extremely Vulnerable people attending the workplace was also changed. From 26 December 2020, Clinically Extremely Vulnerable people who were working and unable to do so from home, were advised not to attend the workplace. This advice was provided by a subgroup of the CEV cell and was endorsed by cell members for consideration by myself and the Health Minister. It was in place for 6 weeks initially, with a review after 4 weeks, in line with the review of restrictions more generally.

610. In a further statement on 24 March 2021 the Department announced that, in recognition of the improving picture in terms of the activity of the virus in the community, a graduated easing of the advice for Clinically Extremely Vulnerable people was to commence on 12 April 2021. The first step involved the easing of the advice around going to the workplace. Future steps saw the gradual easing of other elements of advice for Clinically Extremely Vulnerable people, linked to easing of restrictions more generally. A letter was issued to people who were Clinically Extremely Vulnerable which could be used as evidence for employers [see Exhibit **MM2/333 INQ000276299** (DoH Ref: PM2015)].

611. From 30 April 2021, there was further easing of guidance for people who were Clinically Extremely Vulnerable across a range of settings, including socialising in gardens, overnight stays in self-contained accommodation, retail, gyms and indoor facilities and hospitality. The advice given to Clinically Extremely Vulnerable people was that they may participate in the gradual re-opening of society. However, they were advised that it was vitally important that they continued to exercise great care, for example going to places at quieter times, wearing face coverings and observing social distancing. During the pandemic, the NI Direct website provided information and advice for Clinically Extremely Vulnerable people, with information updated by the Department as guidance and advice changed and developed.

612. While it is difficult to assess the impact of shielding on either Covid-19 transmission, Covid-19 outcomes or wider impacts, because its early and universal application for relevant groups left no comparator groups and it would it have been unethical to do so. As discussed in the CMO Technical Report [**MM2/1 INQ000217254**] there were some important principles and learning for the future in respect of shielding. Importantly, the best way to protect the CEV and CV is to reduce community transmission with shielding only as an addition to, rather than an alternative to other wider NPIs. At the outset of a pandemic with a population with no prior exposure to the virus, no immunity and with high-risk comorbidities for a new disease, in discussions with UK CMO colleagues we believed it was essential to act on a precautionary basis swiftly and advise people on their potential risk based on the understanding of the disease at the time. This formed the basis of our advice to respective Ministers.

613. An iterative approach was needed in review and revalidation of the list of clinically vulnerable as experience of the disease was gained in populations with different health profiles and other underlying health conditions. Communication about clinical vulnerability was complex and experience from the PCC survey in NI confirmed this and also the long-term negative impacts of shielding. It was essential that communication about the shielding advice was clear as to who was vulnerable and why and particularly if this changed. It was also important that the

guidance was clear as to what people were being advised and why and the communications also needed to be accessible to different groups.

614. Some of the early messages on clinical risk and vulnerability proved difficult to reverse given that as the evidence base evolved, some groups that had previously been thought to be high risk would have had their overall risk profile reduced as a result of Covid-19 vaccination and/ or access to antiviral and neutralizing monoclonal antibody treatments. There were also a wider group of people who were not formally clinically extremely vulnerable but who were particularly concerned for their health or that of their vulnerable close contacts and the advice on shielding may have added to their concerns and some may consequently have followed the shielding advice. As a consequence, early interventions to protect the vulnerable, regardless of whether they are formally lifted, may effectively have to stay in place for many over a much longer period due to ongoing concerns about risks.

People and Service disproportionately affected by Covid-19 or control measures and work to mitigate.

615. The NPIs including the first lockdown were introduced as urgent measures to save lives, to prevent the health service being overwhelmed and to prevent avoidable deaths either due an uncontrolled pandemic wave and direct deaths from Covid-19 or indirect deaths as result of a collapse of the health service with people not being able to access care for other serious and potentially life-threatening conditions. These measures undoubtedly had a disproportionate impact across society in general with a greater impact on certain socioeconomic groups, the elderly, the young and those who required health care. The impacts were not felt equally by all and the some were significantly disadvantaged as a consequence.

616. In such an emergency there is limited opportunity identify in advance all those who may be at immediately be at increased risk from a new virus particularly when there remained significant uncertainty. A precautionary approach was therefore taken to protecting those likely to be most at risk including those clinically extremely vulnerable and those clinical vulnerable. Similarly, it was simply not possible in the circumstances to mitigate all the potential negative consequences, although there were recognised, considered and clear to decision makers. Measures and actions which can mitigate the impact of NPIs on vulnerable groups is an area which I hope can be a focus of research and such mitigating measures should be a feature of civil contingencies and emergency plans given the likelihood and possibility that such measures could and may be introduced in response to a non-health related emergency. The time to understand, develop and put in place such measures is not after a pandemic has begun, it should be part of our planning and preparation.

617. At different stages of the pandemic, steps taken were intended to offer support and protection to other vulnerable groups including the learning disabled, vulnerable children, victims of domestic violence, cancer patients and patients on waiting lists. The detail of this is covered more fully in the Department's Corporate Witness Statement. The focus on this wider range of vulnerable groups reflected the Department's full range of responsibilities.

618. I am cognisant of the fact that lockdowns increased and exacerbated the vulnerability of other vulnerable groups, particularly regarding domestic violence and child protection. Whilst I know that the Department and wider HSC system tried to address the needs of different vulnerable groups, the details of which will be discussed in other statements, I recognise that the action taken was unlikely to fully address the needs of all, or to mitigate the full impact on many of these vulnerable groups. One of the most difficult areas was to protect those most vulnerable in care homes who required close personal care while managing the adverse health consequences of isolation and loneliness due to separation from family and friends. Work was undertaken by the Care Home Providers, Trusts and the Department to facilitate the issue of isolation and loneliness particularly affecting those in care homes, as well as other groups such as the elderly, those in

receipt of domiciliary care who were often housebound, and individuals suffering with their mental health before and during the pandemic.

619. There were significant challenges, because of the direct and indirect impacts of the pandemic, in trying to maintain access to routine health and social care treatment and support services while providing care for people with Covid-19 infection which required hospital admission and respiratory support. This was further complicated by the need to protect patients and staff from transmission of infection in health care settings. Given the introduction of NPIs to control the pandemic and the infection prevention and control measures to reduce the risk of transmission in healthcare settings including outpatient and community-based services limited direct face to face contact. Those providing outpatient-based services either in the health service or in the community and voluntary sector continued to do so through adapting how these were provided. For example, some addiction and mental health support service were provided remotely. As CMO I was not directly involved in these new arrangements and the individual provider organisations such as the Health and Social Care Trusts and Community Sector providers would be better able to comment on their effectiveness.

620. These concerns also were relevant to the wider public health implications, which included consideration of the consequences of reduced screening, the impact on the mental health of the population and other concerns such as the impact on education, child protection and domestic violence. While these concerns were present throughout Waves 1 and 2, inevitably these weighed more heavily in the Departments, and in my and the CSAs considerations in Wave 3 in particular given the duration of the pandemic and the long period over which NPIs were in place.

Wider health, societal and economic impacts of the regulations

621. The regulations introduced to put NPIs on a statutory footing were subject to regular reviews by the Executive. Each review considered the public health implications, as is reflected in the relevant review of regulations papers subsequently submitted to the Executive. Any potential emerging equality issues,

which required amendments to the regulations were reflected in the reviews which I approved. From the second Review of the Health Protection (Coronavirus, Restrictions) (Northern Ireland) Regulations 2020 [**MM2/378 INQ000346705**] and thereafter throughout Wave 1 of the pandemic [**MM2/267 INQ000346706**, MMcB/6067 INQ000000, and MMcB/6068 INQ000000] and subsequent waves, the Executive papers considered, not only the impact of the pandemic itself, but also the measures put in place to control the spread of infection.

622. The wider health, societal and economic impacts of the regulations were integral to the Executive weighing up the continuing necessity and proportionality of the restrictions and were also part of the consideration of each individual new measure proposed. This information was supplemented by the Monitoring of 'Making Life Better' Indicators as described at paragraph 623 and supported by a number of pieces of work taken forward at the UK level by DHSC and PHE, including work to examine the apparent disproportionate impact of Covid-19 on the BAME population as well as marginalised groups such as the Roma community. The Health Intelligence Unit in the PHA developed an evidence overview on inequalities at the start of the pandemic [see Exhibit **MM2/334 INQ000325791** (DoH Ref: MMcB/6082)]. This was shared across the Department and used to inform policy as appropriate. In the circumstances of the pandemic response, it was, however, not possible to carry out an Equality Impact Assessment on those individuals or groups with protected characteristics.

623. During the first wave of the pandemic in 2020 the Department at my request commissioned the Institute of Public Health in Ireland (IPHI) to look at the range of indicators set out in Making Life Better, the overarching strategic framework for public health in NI, and provide evidence drawn from local, national or international sources on trends in these indicators during the pandemic. The IPHI reports looked at the range of indicators set out in Making Life Better, and provided evidence locally, nationally or internationally on trends in these indicators during the pandemic, or research reports on likely impacts on these indicators due the pandemic. These could come from government reports, academia, community/voluntary organisations, the WHO, etc. Indicators covered include:

- Poverty, employment and economic security;
- Educational attainment;
- Housing quality and social capital;
- Air quality and water quality;
- Smoking, alcohol, teenage births, obesity, physical activity, and sexual health;
- Drug use, homelessness, domestic violence;
- Home safety and road safety;
- Life expectancy, infant mortality, long term conditions, and hypertension;
- Mental health and suicide; and
- Loneliness and social isolation.

624. Each report only provided updates on new evidence or research in any of these areas since the last report was collated. The IPHI also looked for research reports on likely impacts of the pandemic on these indicators. Sources included government reports, academia, community/voluntary organisations, and international organisations such as the WHO. The first two reports were produced in May 2020 [**MM2/398INQ000276461**and **MM2/399 INQ000276462**] and the third report in July 2020 [**MM2/400 INQ000276463**]. Further reports were produced throughout 2020 and 2021.

625. In addition, the PHA undertook work on the impact of face-coverings and the consequences particularly in respect of existing health inequalities. The PHA also carried out some analysis on the detrimental impact of the self-isolation guidance. This demonstrated that children from lower socio-economic groups were disproportionately impacted. Consequently, the approach to the definition of close contacts in school aged children was changed to reduce the disproportionate impact on certain children. All these Reports were shared within the Department and were used to inform the development of Executive papers reviewing the coronavirus restrictions regulations and related public health guidance.

626. During the vaccination programme, extensive work was undertaken by the Department and PHA teams in analysing vaccine uptake at the super-output area for deprivation as well as other risk factors such as age and gender to enable targeting of public information campaigns and mobile vaccination clinics to improve uptake. This included work by the PHA to increase vaccine confidence by promoting vaccine uptake amongst those groups that were more hesitant about vaccination. This also included workplace-based vaccination programmes. I chaired the weekly Oversight Board which reviewed such data and agreed the plans for improvement.

627. The Department published the Coronavirus Related Health Inequalities Reports **[MM2/190 INQ000137375, MM2/190a INQ000137376, and MM2/190b INQ000183436]** in both June and December 2020. This report presents an analysis of Coronavirus (Covid-19) related health inequalities by assessing differences between the most and least deprived areas of NI (by super output area) and within Local Government District (LGD) areas for Covid-19 infection and admission rates.

Mental Health

628. Many people saw a deterioration in their mental health during the pandemic which was undoubtedly exacerbated by the NPIs including "lockdowns." The Department, professional and policy colleagues were aware of these risks from early in the pandemic and sought to establish a range of initiatives under the oversight of the mental health cell of the Strategic Cell to mitigate these effects, including public information campaigns highlighting for example the advice available on the Minding Your Head website. While I was, and remain, fully cognisant of the severe impact of the pandemic upon the mental health of many people, I myself did not lead on this issue, and it was primarily within the remit of relevant Departmental

policy colleagues, the PHA and the HSCB (now SSPG within the Department) and HSC Trusts. Therefore, I have not in this statement set out in detail all steps taken by the Department in this regard. I did, however, have a more specific role in dealing with the impact upon health care professionals and in the continued cross government and cross sectoral work on suicide prevention which despite other demands I continued to lead.

629. Information and guidance for people on sources of advice and support, including support for mental health and well-being, including the Minding Your Head website was also available on the NIDirect website. Information was also made available via the 'Covid-19 NI' mobile app, with an on-line version of the app also available. A Northern Ireland Covid-19 Community Helpline managed by AdviceNI was available 7 days a week to support anyone who was feeling isolated. The helpline also provided support with issues such as access to food and other essentials such as medicines and in the first wave of the pandemic arrangements were put in place to arrange the collection and delivery of medication to those who were isolating or shielding. The Community Helpline connected people to a range of practical and emotional support services, including local volunteer supported shopping and local or community food support organisations. A Covid-19 Virtual Wellbeing Hub was launched in mid-June 2020 providing access to self-help guides and tailored information from local mental health and well-being charities. These resources were designed to help maintain and promote positive mental health and well-being both during and after the Covid-19 pandemic.

630. As the pandemic progressed and in response to the impacts on mental health, on 10 May 2021 the Health Minister confirmed funding of £10m for a Mental Health Support Fund, administered and managed by Community Foundation NI and open to community and voluntary sector organisations offering services for people with mental ill health throughout NI [**MM2/335 INQ000348921** (DoH Ref: PM/3177)]. The following month the Health Minister launched a 10-year strategy for Mental Health 2021 – 2031. In an associated press release the Health Minister stated that "*The Strategy is built on a vision of a society which promotes emotional wellbeing and positive mental health for everyone, which supports recovery and seeks to reduce stigma and mental health inequalities. In the vision we set out the objective*

of a system that is consistent and provides equity of service. We also want to break down barriers so that individuals and their needs are right at the centre – a truly person centred care." [**MM2/336 INQ000348922** (DoH Ref: PM/3178)].

631. On 8 September 2021 the Health Minister appointed Professor Siobhan O'Neill as the Mental Health Champion for Northern Ireland. Professor O'Neill had until that date been acting as the interim mental health champion [**MM2/337 INQ000348923** (DoH Ref: PM/3179)]. On 29 October 2021 the Finance Minister announced that an additional £5m had been allocated to the Mental Health Support Fund which had been heavily oversubscribed. [**MM2/338 INQ000348925** (DoH Ref: PM/3181)].

632. During Wave 3 the Health Minister allocated funding to support Carers in NI. On 19 April 2021 he allocated £4.4m to a carers support fund. In the press release the Health Minister said, "*The new Carers Support Fund will provide support for charities working for and with carers. The debt the health service and wider society owes to unpaid carers cannot be overstated*," and stressed, "*Without care provided by family members and friends, many vulnerable people would have been plunged into a full scale crisis over the past 12 months. This Support Fund will provide practical support and acknowledgement to what is such an important sector.*" [**MM2/339 INQ000348924** (DoH Ref: PM/3180)].

633. The Protect Life 2 Strategy Steering Group for preventing suicide and self-harm continued to meet throughout the pandemic period. I continued to chair regular meetings of this Group throughout the pandemic response to ensure continued awareness raising of available supports, monitoring of data to signal early emergence of potential issues and to ensure clear information flows with both statutory and community and voluntary colleagues and partner organisations. Calls to the 24/7 Lifeline Helpline, Self-harm Intervention Programme referrals and Sudden Death notifications were closely monitored during this time given our concerns of the potential impact of the pandemic itself and the NPI measures that had been introduced.

634. The Self-Harm Intervention Programme, Lifeline and Bereavement Support Services were widely promoted via social media and professional communication channels. A wide range of mental health, emotional health and wellbeing and stress control training was delivered online. All services delivered under Protect Life 2 continued to be supported including training, awareness raising and public information campaigns, counselling provision, Community Response Plans, and the Flourish churches suicide prevention initiative.

635. The Mental Wellbeing Hub was launched. An HSC Framework was published 'Supporting the Well-being Needs of our Health and Social Care Staff during Covid-19: A Framework for Leaders and Managers'. This document ensured that all staff and volunteers have access to support needed during the Covid-19 response and incorporated the Take 5 steps to Wellbeing message (Connect, Keep learning, Be active, Take notice and Give).

636. The Executive Working Group on Mental Wellbeing, Resilience and Suicide Prevention comprising all Executive Ministers, which I attended, continued to meet and there was a specific focus on the mental health response to Covid-19 at several meetings. There was also substantial work progressed with the Department for Education in launching the Children and Young People's Emotional health and Wellbeing Framework on 26 February 2021. Inevitability this could only provide mitigation for some and not ameliorate the impact and consequences for all. The full outworking's of the mental health impact of the pandemic are, in all likelihood, yet to be fully realised.

Impact on those providing care

637. As CMO, I and professional and policy colleagues, in the Department were also acutely aware of the profound impact of the pandemic from regular engagement with senior leaders within health and social care. This included knowledge of published research of increased rates of anxiety, depression, psychological distress, post-traumatic stress symptoms and burnout in those providing health care. Throughout the pandemic response my UK CMO colleagues and I communicated on several occasions with the medical profession [**MM2/1**

INQ000217254]. Similarly other Chief Professionals including the 4 UK CNOs communicated their support to the nursing profession.

638. On 16 April 2020, the Department launched 'Covid-19: A Framework for Leaders and Managers' [see exhibits **MM2/340 INQ000120708** (DoH Ref: PM0078), **MM2/341 INQ000120709** (DoH Ref: PM0079)]. This set out a range of practical measures to protect the psychological health and wellbeing of HSC staff and volunteers during the pandemic. The Framework was based on evidence and best practice guidance and is informed by The British Psychological Society Guidance Paper [**MM2/401 INQ000390023**]. A Staff Wellbeing Working Group was established to oversee service delivery and to review the implementation of the Framework. The implementation of the Framework continued during the second wave, providing a range of initiatives across HSC organisations to enhance psychological wellbeing of staff. These initiatives included access to Psychological Support Helplines manned by psychologists. Care home and primary care teams also had access to the helplines in each HSC Trust area which signposted to a broad range of online resources and drop-in services in critical facilities.

639. The Health Minister, in Executive papers, reflected his concerns and those of the Department about the impact of the pandemic on health and social care staff. In an urgent written statement on 30 October 2020 [**MM2/402 INQ000304996**], the Health Minister reported to the Assembly that while he welcomed the plateauing of cases, due to recent NPI interventions, he also warned against complacency because of the potential adverse impact on the HSC system and its staff who remained under intense and unprecedented pressure. The welfare of patients, both Covid-19 and non-Covid-19, and of staff continued to be the overriding priority. The welfare of staff was at the forefront of the Health Minister's consideration as next steps for NPIs after 13 November 2020 were considered by the Executive. At this stage, many staff were physically and mentally exhausted. The peak of the combined HSC staff absence due to sickness, Covid-19 sickness and Covid-19 -related self-isolation during the first wave of the pandemic was in the April-June 2020 quarter when the percentage of hours lost was 11.33%. During the second wave, the percentage of hours lost rose to a peak of 9.36% in

the October to December 2020 quarter and was 8.61% hours lost in the January to March 2021 quarter.

640. Several actions were also taken to address the increased pressure on staff and staff levels. While not directly involved, these included relaunching the Workforce Appeal on 2 October 2020 [**MM2/342 INQ000371365** (DoH Ref: PM2054)] to boost HSC staff numbers to assist in the pandemic response; and the agreement by the Health Minister to introduce measures to ensure that staff were recognised within the resources made available to the Department, in recognition of the additional pressures arising from the pandemic. The initial Workforce Appeal in March 2020 resulted in 1,702 doctors, nurses and other ancillary staff being successful in their application to work for the health service. From April 2020, and throughout the second wave, the Workforce Appeal handled over 34,000 Expressions of Interest, and generated over 21,000 formal applications. This level of interest delivered a total of 2,471 new temporary appointments across the HSC of which over 1,500 were health and social care appointments in various disciplines. The Workforce Appeal also commenced work in recruiting for the vaccination programme with a total of over 1,700 applications generated leading to 271 healthcare professionals being appointed to the vaccination programme and available to cover shifts as and when required by the Public Health Agency.

641. The adverse impacts on those providing care in the wider health and social care system were significant and presented increasing concerns given that it had been operating at over 100% of its capacity for some time, and staff and volunteers faced an unparalleled level of risk to their health and wellbeing given the prolonged and intense response.

Domestic and Sexual Abuse

642. While I was not directly involved and other policy and professional colleagues within the Department will be better able to advise than I, I am aware that the Department participated in fortnightly PSNI-led teleconferences with other government departments and delivery partners in the voluntary and community

sector to share statistics and ensure a joined-up approach as part of recovery planning. These teleconferences included the Department, Department of Justice, Department for Communities, PSNI, Women's Aid, Men's Advisory Project, Nexus NI, Domestic and Sexual Abuse Helpline, Northern Ireland Housing Executive, Victim Support Service, Rainbow, NSPCC, Northern Ireland Courts and Tribunal Service.

643. Examples of this includes the following details of which have been covered in other statements to the Inquiry including my M3/CMONI/01 statement, at paragraph 155. On 30 April 2020 I understand that the Department shared a 'Safety Planning by Phone During Covid-19' Presentation created by the South-Eastern Health and Social Care Trust with members of the Domestic and Sexual Abuse Stakeholder Assurance Group for voluntary and community groups to adapt when working with victims. On 19 June 2020, the then Chief Social Worker wrote to the relevant Directors in the HSCB and HSCTs drawing attention to 'Guidance on Domestic Abuse', setting out the support services available for those at risk or suffering from domestic abuse. This Guidance, which was produced by the Department in partnership with the Department of Justice, was also aimed at those who may be concerned about someone else, such as a friend, family member or neighbour. On 1 July 2020, the Department and the Department of Justice published the 'Guidance on Domestic Abuse' for the general public. [**MM2/343 INQ000276440** (DoH Ref: PM2137)].

644. Again, on 19 June 2020, the Department, through the HSCB, over a three-month period provided funding of £60k to Women's Aid to provide an initial care package for families who were experiencing, or had been a victim of, domestic abuse. This package provided food parcels, home based resources and games for families, laptops for children currently without access and provision of mobile phones for mothers for the specific purpose of safety planning. In November 2020, during the 16 Days of Action campaign, the Health Minister took part in a video message from all of the Executive Ministers which was released on social media asking victims to come forward to seek help and support.

645. The 'Ask for ANI' pharmacy code word scheme, launched by the UK Government, was also introduced in NI in January 2021 [**MM2/344 INQ000276441** (DoH Ref: PM2138)]. This was a new way for victims of domestic abuse who may be isolated at home to access support services. The scheme allowed those at risk or suffering from abuse to discreetly signal that they need help and access to support. By asking for 'ANI', a trained pharmacy worker could then offer a private space where they an assessment could be made if the victim needed to speak to the police or would like help to access the 24 hour Domestic and Sexual Abuse Helpline. Participating pharmacies had promotional material on display in store to signal that they are taking part. Local support organisations such as Women's Aid, Men's Advisory Project and the Domestic and Sexual Abuse Helpline which was provided by Nexus were involved in quality assuring training materials and participating in a Home Office Steering Group to inform the scheme's development.

646. In April 2021 the Department facilitated the display of Domestic and Sexual Abuse Helpline posters in each of the Covid-19 vaccination centres. Posters were also sent to a Belfast Health and Social Care Trust site where asylum seekers were being vaccinated.

Vulnerable Children

647. Again, while I was not directly involved, and this work was the responsibly largely of policy and professional colleagues within SSPG in the Department, I am aware of the work that was undertaken by the Department. Again, others will be better placed than I to provide detail, not because this was not an important, but rather I was not leading on this directly. It was not possible to carry out equality impact assessments on all legislation enacted, prior to the making of the Children's Social Care (Coronavirus) (Temporary Modification of Children's Social Care) Regulations (Northern Ireland) 2020, departmental officials conducted equality

impact screening in accordance with guidance produced by the Equality Commission for Northern Ireland and in keeping with section 75 of the Northern Ireland Act 1998. A further equality screening exercise was conducted before the extension of the operational period of the Regulations for a further six months. In both cases, it was concluded that a full Equality Impact Assessment was not required. Rural needs impact screening was also conducted prior to both the making and the extension of the Regulations and no adverse impacts were identified.

648. I understand that in order to ensure the Regulations would achieve their intended effect of enabling essential children's social care services to continue to be delivered during the pandemic in a safe manner to protect vulnerable children, their families/carers and social workers, departmental officials liaised at key points prior to, and following, the making of the Regulations with:

- The Northern Ireland Commissioner for Children and Young People;
- The Children's Law Centre;
- The Voice of Young People in Care;
- The Northern Ireland Human Rights Commission;
- Fostering Network (Northern Ireland), and
- The British Association of Social Workers (Northern Ireland).

649. Discussions also took place with representatives of the Health and Social Care Board, the Health and Social Care Trusts, voluntary adoption agencies and the Northern Ireland Courts and Tribunals Service. Based on those discussions, amendments were made to the draft Regulations, including the removal of a provision granting the Department the power to extend the modifications contained in the Regulations by a further 3 months after the expiry of an initial period of 6 months. This clearly limited the period for which the Regulations would have effect and meant that the Department would have to bring new Regulations to the Assembly if it wished to make provision beyond the 6-month expiry date.

650. Officials also took on board a range of suggestions relating to the draft guidance, including amending some of the timescales set out in the guidance relating to undertaking reviews and representations/complaints procedures, and strengthening key messages on how the flexibility provided by the Regulations should be exercised.

651. Before extending the operational period of the regulations, officials again consulted the NI Commissioner for Children and Young People and notified other key stakeholders, including the Northern Ireland Human Rights Commission and Children's Law Centre. In written evidence provided to the Health Committee, the Commissioner and the Northern Ireland Human Rights Commission indicated that, overall, they were content for the Regulations to be extended.

652. It is my understanding that the Department also carried out equality screening on Covid-19 guidance for residential children's homes, foster care, supported accommodation for children aged 16+ and young adults, and adoption services. The screening exercises were completed between May 2020 and July 2020 and concluded that the guidance would have no impact, or minor positive impacts on looked after children and young people, including those children with a disability within the looked after child population. This conclusion was reached on the basis that a primary aim of the guidance was to facilitate the continued provision of safe care, and to protect the health and wellbeing of children, young people, their parents and carers.

653. As far as I am aware there was no specific piece of research investigating the impact of the pandemic on those living with disabilities. However early in the pandemic, as I have covered elsewhere in my M2C-CMO-01 statement, at paragraph 187, I asked the Patient and Client Council to undertake research into the experience of those who were shielding. There report was published in July 2020 and one of the things it did was explicitly highlight the limitations on carrying out research in a pandemic and that responses to the survey appeared to under-represent:

- Males who are shielding and those supporting them;
- People aged 80+ and those supporting them;
- People from non-white ethnic groups and those supporting them;
- People living with disabilities and those supporting them;
- People living in care homes / supported living environments and those supporting them; and
- People without internet access.

654. This reinforces for me the importance of research and planning for how we can engage with and hear the view of vulnerable groups during any future pandemic.

655. One of the features of the survey which took place over seven weeks between 2 June 2020 and 27 July 2020 is that the percentage of those shielding who were mainly concerned about the health risks of Covid-19 stayed consistently at around 45% whilst the percentage who were concerned about the impact of shielding on their quality of life stayed at around 10-12% and then doubled to 20-25% in the last two weeks of the survey as we approached the date (31 July 2020) when shielding was due to be paused.

Abortion Services

656. I have considered the availability of abortion services in NI during the pandemic and whether women still had to travel to other parts of the UK for abortion services during this period given in my professional view the then inadequacy in provision in NI. In considering these issues I have also outlined the relevant legal context regarding abortion provision in NI at that time.

657. [**MM2/191 INQ000068743**] contains internal Department of Health and Social Care (DHSC) briefing to the CMO for England (ahead of a meeting of UK CMOs on 8 April 2020) regarding plans to discuss with me certain difficulties that were being faced by English abortion providers in continuing to deliver a long-standing arrangement which had enabled NI women and girls to access their services free of charge. While I would not have been sighted on this DHSC briefing document prior to this Inquiry, I can confirm that a discussion took place with the CMO for England along the lines contained therein, regarding what might be feasible during the pandemic within my remit as CMO to support the local delivery of abortion services, which had very recently been made lawful in NI.

658. As outlined in the M02C-DOH-01 statement, at paragraph 602, and in my M3/CMONI/01statement, at paragraph 145, those arrangements with English (and Welsh) abortion providers had been deemed necessary and were funded by the UK Government since 2017 in the ongoing absence of any legal framework for the lawful provision of abortion services in NI (except in very limited circumstances).

659. The Abortion (Northern Ireland) (No.2) Regulations 2020 ("the 2020 Regulations") were introduced by the UK Government and came into force on 31 March 2020, providing the legal framework under which abortion services could now be provided. It was acknowledged that the normal process of commissioning and implementing the services permitted under this new statutory framework would take time, and that the prior existing arrangements were therefore to remain in place whereby women and girl's resident in NI could continue to be funded for travel to England or Wales for an abortion if they wished to do so until the service was commissioned locally.

660. However, the commissioning of any abortion services, even on a temporary basis, would require prior Executive agreement under the Ministerial Code on the basis that this was a significant or controversial matter and outside the scope of the agreed Programme for Government. Consequently, it was the Department's understanding that a Minister could risk breaching the Ministerial Code were they to act unilaterally to commission services without referring such matters to the Executive. This statutory requirement to refer such matters to the Executive was

subsequently removed – specifically in respect of abortion services – through further Regulations introduced by the UK Government in May 2022, which ultimately enabled the NI Secretary of State to issue an instruction during a further period of suspension of the Executive which in turn led to the commencement of commissioned abortion services from December 2022.

661. By early April 2020, while the new Covid-19 travel restrictions did not prohibit people leaving home or travelling for medical reasons, the Department recognised that they would make it difficult for women in NI to travel to England to continue to access abortion services. A telemedicine Early Medical Abortion (EMA) service was made available to women in England by DHSC, as a response to the potential impact of the pandemic on access to EMA services resulting from travel restrictions and social distancing measures in England. In the period leading up to the first wave of the pandemic the Northern Ireland Office were consulting on the draft regulations. To mitigate any potential adverse impact from preventing women in NI travelling to England for EMA services, due to the restrictions on domestic travel, the Department proposed to the Northern Ireland Office during March 2020 that it should consider an amendment to the draft regulations to enable women in NI to have access to the telemedicine service in England. The Northern Ireland Office declined this request, and the final legislation which came into effect in NI from 31 March 2020 therefore did not make automatic provision for a telemedicine service.

662. The Department, therefore mindful of the potential adverse impact on women in NI, submitted a paper to the Executive on 3 April 2020 seeking agreement in line with the requirements the Ministerial Code to commission a telemedicine Early Medical Abortion service in NI for the duration of the pandemic, similar to the service which was being provided in England. The Executive did not reach agreement on this proposal. In effect, this meant that any services being provided under the new legal framework were on a non-commissioned basis.

663. As the position was not resolved by the Executive, NI's five HSC Trusts began to introduce a non-commissioned, limited EMA service for women in NI from early April 2020. In the absence of formal commissioning and additional funding, this limited service (i.e. available only up to 10 weeks' gestation) was made possible

due to a downturn in Trust sexual health and family planning services linked to the pandemic response.

664. It was in this context that I discussed the issues referred to in [**MM2/191 INQ000068743**] with the CMO for England on 8 April 2020. The legal and political barriers to the commissioning of a temporary abortion service were acknowledged, and I outlined the details of the Departments plans to address and the correspondence I planned to issue to NI Trusts and medical professional bodies the following day concerning the position on abortion services.

665. I issued this correspondence as planned to NI Trusts and medical professional bodies on 9 April 2020 [**MM2/345 INQ000130384** (DoH Ref: PM0219), **MM2/346 INQ000137397** (DoH Ref: PM0220), **MM2/347 INQ000114876** (DoH Ref: PM0221), **MM2/348 INQ000114877 (**DoH Ref: PM0222), **MM2/349 INQ000114878 (**DoH Ref:PM0223) **MM2/350 INQ000114879** (DoH Ref:PM0224), **MM2/351 INQ000114880** (DoH Ref:PM0225), **MM2/352 INQ000114881** (DoH Ref:PM0226), **MM2/353 INQ000114882** (DoH Ref:PM0227)] which confirmed that registered medical professionals could now terminate pregnancies lawfully, and that such terminations, subject to the Regulations, were to be carried out on Health and Social Care premises, and that Trusts would have to provide facilities and staff for this purpose. I further advised that it is "for a medical practitioner to assess, on a case-by-case basis, using their professional judgement as to whether the individual woman's clinical circumstances meet the grounds for a termination of pregnancy in NI as provided for in the Regulations. This is particularly relevant during the period of the Covid-19 pandemic given the guidance on social distancing and the restrictions on travel, which women are encountering, currently curtailing them from travelling to avail of the interim services provided in England. The Department's position on the future commissioning of any services to replace the interim service will be confirmed as soon as possible."

666. It was clear that the non-commissioned Trust EMA services would not be a sustainable basis for the provision of abortion services in the long term, as Ministerial authorisation on would ultimately be required for the full range of services to be commissioned in line with both the legislative requirements and demand. Indeed, several Trusts experienced prolonged pauses in their EMA

provision over the course of the pandemic, due to a lack of resilience in the absence of normal commissioning (i.e. funding and monitoring) arrangements. During these periods, women requiring access to EMA services within a Trust area where services were paused were either seen at a neighbouring NI Trust (where cover was available within limited capacity) or referred to the British Pregnancy Advisory Service (BPAS) for services in England and Wales.

667. Given that only EMA services were being provided from April 2020 on a limited, non-commissioned basis, other elements of the services permitted under the 2020 Regulations were not able to be provided locally during the pandemic (other than in very limited circumstances, such as cases of immediate medical necessity). While this was a far from optimal arrangement for NI women and girls requiring access to services during periods of restricted travel, the UK Government agreed that it was necessary to continue enabling and funding access to these services in England and Wales until the commissioning issue could be resolved politically.

668. A central access point was established providing non-directed information and referral into the appropriate services available in NI and other parts of the UK. This was provided initially by Informing Choices NI, and later by BPAS.

669. Between April 2020 and the commencement of commissioned services from December 2022, a total of 4,568 abortion procedures were carried out across NI Trusts (a breakdown is not available, however the vast majority of these would be EMA procedures). The UK Government's published abortion statistics, [**MM2/192 INQ000425634** (DoH Ref: MMcB/0194)], show that there were 371 abortions carried out in England and Wales for women resident in NI in 2020. In 2021 the number was 161. Figures for 2022 have not yet been published.

670. My professional concerns at the historic lack of a comprehensive local abortion service and the consequential risk to women have been well highlighted prior to the 2020 change in law. In 2016, I chaired an interdepartmental working group [**MM2/193 INQ000425635** (DoH Ref: MMcB/0195)] which recommended to the then Ministers of Health and Justice a change in the law in relation to women who were diagnosed with a pregnancy with a fatal fetal abnormality, however with the

fall of the Executive between 2017 and 2020 no progress was made until legislation was brought forward by the UK Government in the form of the 2020 Regulations. In January 2019, I gave evidence to the House of Commons Women and Equalities Committee in which I further referenced the need for an examination and a change in the law in NI with regard to fatal fetal abnormality, advising that "there is a compelling clinical consideration here as to whether or not the current situation with the law in NI is having a disproportionate impact on the health and wellbeing of women in Northern Ireland" and that "I think there is a legitimate question to be asked as to whether it is equitable, proportionate, to put in place a disproportionate resource in facilitating the women travelling outside of Northern Ireland to have a termination of pregnancy, separated from their families and friends and support networks, when in actual fact the issue that we are trying to address is a fundamental one of the law as it exists in Northern Ireland pertaining to termination of pregnancy."

671. Regarding the current provision of abortion services in NI, as referred to above, these services began to be formally commissioned in NI from December 2022. This was enabled through an instruction issued to the Department by the NI Secretary of State, under powers conferred on him by The Abortion (Northern Ireland) Regulations 2022, which included a requirement for the Department to ringfence the necessary funds to ensure services are fully implemented in line with the 2020 Regulations. Implementation by Trusts is overseen and closely monitored by the Department, in line with a comprehensive service specification which had been developed by the Department between June 2021 and January 2022, and which was subsequently agreed by the UK Government following the collapse of the Executive in February 2022. Acknowledging the need for lead-in times to enable service development, procurement, recruitment and training, the implementation of these services is largely on course, and while further recruitment and training is required to increase service resilience, the vast majority of demand for abortion services in NI is now being met from within the NI HSC system. The requirement for women and girls to travel is England is limited to a very small number of medically necessary cases, and this should reduce further as the final phases of implementation are completed.

Data, testing and tracing capabilities in Northern Ireland (NI)

Contact tracing

672. Contact tracing is an integral part of the public health response to the outbreak of any infectious disease and is would normally be managed operationally by the PHA. It is the case however that we had never before undertaken community testing and contact tracing at this scale during a pandemic or indeed for this duration. While contact tracing was used during the H1N1 influenza pandemic in 2009 to inform the use of post exposure prophylaxis, this was only for a period of three months.

673. Early in the pandemic, during the first wave, we did not have the testing or contact tracing capacity to ensure that all individuals could access a test and that contact tracing would be completed in a timely manner so as to be effective in breaking chains of infection. Without timely access to tests, due to limitations on testing capacity, and efficient laboratory turnaround time for communicating results, infected people might not be rapidly identified, and contract tracing would not start sufficiently early to interrupt chains of infection. The high transmissibility of the virus also meant that there was a significant number of contacts that had to be reached for each case within a short timeframe if contact tracing was to identify sufficient contacts in time to stop the infection spreading further. In May 2020 SAGE estimated that at least 80% of the contacts for each case identified needed to be traced for the system to be effective.

674. There has been significant and important learning during this pandemic on the effective deployment of contact tracing over an extended period of time including the combined use of telephone and digital approaches and the use of apps for automated and anonymised contact tracing. The challenges and the approaches adopted are reflected in the UK CMO Technical report on the Covid-19 pandemic in the UK (Chapter 7, pages 212-232).

675. Test, Trace, Isolate, Protect Strategic Oversight Board [**MM2/194 – INQ000137363**]: I established and chaired this Board in May 2020. The Board's role was to provide oversight of both the contact tracing and testing programmes. This included the sharing of intelligence on clusters and outbreaks and providing advice in terms of policy implementation and its effectiveness. In April 2022 the Board's Terms of Reference were updated to oversee implementation of the Covid-19 Test, Trace and Protect Transition Plan into the PHA [see **MM2/194 – INQ000137364**].

676. In relation to contact tracing capacity, the CSA provided advice to the Public Health Agency on three occasions around the required size of the service. On 20 April 2020 he estimated a need for 300 – 600 contact tracing staff would be required in NI and was assured that over 500 were in training. Based on the European Centre for Disease Control (ECDC) estimates from April 2020, this would have been sufficient for a contact tracing service to handle over 1000 cases per day [**MM2/354 INQ000346697** (DoF Ref: PM0373)]. On 13 May 2020 CSA provided further advice to the Contact Tracing Steering Group meeting that in his view there would be up to 500 cases per day with a requirement to trace 5,000 people per day. On 17 September 2020 the CSA met with the Public Health Agency and again indicated that the contact tracing service needed to be able to manage 500 cases and 5000 contacts per day. The Public Health Agency indicated at the meeting on 17 September 2020 that their current business case for the contact tracing service was on the assumption of 50 cases per day. Following a period of ongoing discussion and correspondence with the Department, an updated draft business case was subsequently submitted by PHA to the Department for consideration on 3 November 2020 taking account of the CSA advice. The final business case as approved by the Department gave the PHA authority to flex the contact tracing service depending on the extent of virus transmission. Efforts by PHA to recruit additional contact tracing staff was ongoing in the interim pending development and approval of the business case.

677. Furthermore, on 3 October 2020, I commissioned a Rapid Review of the contact tracing service (CTS) and its delivery mode to reflect on the key issues influencing provision of the contact tracing service and to provide assurances on the capacity

of the contact tracing system as I was not then fully confident of the capacity and capabilities then in place given what I anticipated would be experienced in further waves of the pandemic. As I described in my M2C-CMO-01 statement, at paragraph 225, the Rapid Review was underpinned by a key assumption that there would be a significant escalation in Covid-19 infections over the weeks and months ahead (from Autumn 2020) and that in order for the service to be effective, positive cases had to be contacted within 24 hours and their close contacts within 48 hours of notification to the contact tracing system. The main purpose of the Rapid Review was to support the ongoing and future delivery of the contact tracing function by looking at the elements of the CTS that had worked well, and to consider what measures were required to effect improvements in the service with a focus on more efficient and effective contact tracing processes, supported by appropriate technology and the provision of high quality management information to support oversight of the service. The Rapid Review [**MM2/195 INQ000137388**] established a number of key findings and learning points which were subsequently taken forward by the PHA and the Department. Delivery of this work was supported through the appointment to the PHA of a Director with responsibility for the Covid-19 Contact Tracing Service in NI. This Director reported to the PHA CEO and also updated the Department through participation as a core member of the Test Trace and Protect Oversight Board.

678. To assist with contact tracing the Department considered the adoption of the NHS England app, which was scheduled to be launched on 18 May 2020 subject to testing on the Isle of Wight. Initially it thought that the NHS England app could have been deployed quickly in NI, with minimal development costs and delay. However, following more detailed review, I understand a series of technical difficulties were identified in adapting it. In addition, concerns were raised by human rights and civil liberties groups over the proposed use by the initial NHS England app system of a central, personal data repository. The originally proposed NHS app was not compatible with the app which was developed by the RoI which was an important consideration given the international land border.

679. The development and introduction of an NI specific app was led by the Digital Co-Ordination Cell, led by the Departmental Chief Digital Information Officer (CDIO).

The Department launched the StopCOVID NI Proximity App as part of the NI Test, Trace Protect Strategy [**MM2/355 INQ000120704** (DoH Ref: PM0053)]. The Strategy included a detailed explanation of how mobile phone-based Proximity Apps could assist with Contract Tracing. Detail on the Proximity App was provided in a paper to the Executive on the Options for Digital Contact Tracing [**MM2/356 INQ000120718** (DoH Ref: PM0124) & **MM2/357 INQ000130398** (DoH Ref: PM0287)]. The Health Minister notified the Executive of progress on developing an NI specific Proximity App on 11 June 2020. The Heath Minister subsequently informed the Executive of the planned launch of the Proximity App on 20 July 2020 and provided details of the features of the App and cases to illustrate its use. [**MM2/358 INQ000130399** (DoH Ref: PM0288) & **MM2/359 INQ000130400** (DoH Ref: PM0289)].

Covid-19 Testing

680. Within a few weeks of the virus being identified, because of the sharing of the genotype by scientists in China with other scientists, the Regional Virus Laboratory in Northern Ireland along with only a handful of centres across the UK had the ability to test for the virus. At my request an innovative partnership was established with both NI Universities, the Agri-Food Biosciences Institute and the ALMAC Group (through the NI Covid-19 Testing Scientific Advisory Consortium) to increase Pillar 1 testing capacity.

681. Prior to the Covid-19 pandemic each of the five HSC Trusts in NI had its own hospital laboratory including microbiology and serology capacity. There is also a Regional Virology Laboratory and regional services for genetic testing which includes pathogen testing for public health purposes based in Belfast HSC Trust. In addition to our own HSC capacity, NI has well established relationships with the Public Health Laboratory network in the UK for specialised testing which is not available locally.

682. There is scale up capacity in local laboratories in the event of a need for mass laboratory testing with additional capacity in Queen's University Belfast and the Veterinary Service Laboratory, both of which were used during Covid-19. In

addition, there is significant private sector capacity principally in Randox, a private company and leader in the in-vitro diagnostics industry which could be utilised to increase testing capacity in the event of public laboratory capacity being insufficient. Early in the pandemic response, at my request, the Department established an academic consortium called the Scientific Advisory Consortium. This involved Queen's University Belfast, University of Ulster, Western HSC Trust's Clinical Translational Research and Innovation Centre, the Agri-Food and Biosciences Institute (AFBI) laboratory and the Almac Group. This consortium examined the feasibility of making reagents locally, worked on validation of antibody testing kits and on driving scientific innovation in Covid-19 testing to scale up diagnostic testing and to increase our testing capacity.

683. These laboratory capabilities were used flexibly to maximise testing capacity at the outset of the pandemic although testing capacity was initially significantly constrained, and this meant that difficult choices were necessary about how testing should be used particularly in the first wave.

684. There was a period particularly in the Spring of 2020, when community cases in NI exceeded the supply of tests and existing systems were not capable of scaling at the pace needed to meet demand. In these circumstances, testing capacity needed to be prioritised and focused on: those needing clinical care; vulnerable settings such as hospitals; outbreaks in care homes; and key workers. These challenges and the approach adopted are reflected in the UK CMO Technical report on the Covid-19 pandemic (Chapter 6, pages 185-211) [see Exhibit **MM2/1 INQ000217254].** I have considered whether there were particular issues in NI in relation to testing capability with respect to the Roche/PHE Partnership for the UK [**MM2/196 INQ000068828**]. In NI there was a particular dependence in NI laboratories on the Roche testing platform and reagents. This was partially offset with the development of the academic consortium described earlier which allowed some diversification as it allowed access to the Seegene testing platform. However there remained a greater reliance on the Roche testing platform in NI as compared to other UK jurisdictions. In addition, throughout the pandemic the rates of community testing for Covid-19 in NI were frequently higher than all other parts of the UK. This meant that our pro-rata population share allocation was at times not

sufficient. In recognition of this we were supported with a greater share of Roche tests and in addition Pillar 2 capacity.

685. As described in my M2C-CMO-01 statement, at paragraph 115, an Expert Advisory Group on Testing (EAG-T) [**MM2/197 INQ000137354**] was established at my request as a Departmental Group led by an Associate Director within the PHA. The EAG-T was established to develop the NI approach to Covid-19 testing and to oversee/coordinate implementation of testing and updates to the Testing Strategy throughout the pandemic. A key function of the EAG-T was to advise on implementation of Covid-19 testing in NI and to provide expert advice to policy leads to inform advice to myself and the Health Minister. The group played a significant role in advising on and in delivering the expansion of testing capacity in hospital and community services as quickly as possible, exploring all available options including increasing laboratory testing capacity within the NI Health and Social Care laboratory network (known as Pillar 1); and advising as required regarding local operational delivery and implementation of the national testing programme, known as Pillar 2 testing, which was procured and contract managed nationally on behalf of UK nations by the Department of Health and Social Care (DHSC) London, and latterly by UKHSA. Colleagues in the PHA worked closely where required with DHSC on local operational delivery of Pillar 2 testing. This group also supported the further development of the NI Covid-19 Testing Scientific Advisory Consortium.

686. The Department's first Covid-19 "Test, Trace and Protect Strategy" [**MM2/198 INQ000183432**]. **MM2/355 INQ000120704** (DoH Ref: PM0053)] was published towards the end of the first lockdown on 27 May 2020. This was preceded by a number of interim Covid-19 testing protocols. The Strategy set out a programme of actions, recognising that testing and contact tracing had a key role in reducing the spread of the virus, and in doing so, preventing serious illness to reduce harm to individuals from Covid-19 and to support measures needed to protect the general population. The four key elements of the May 2020 Strategy were: early identification and isolation of possible cases, clusters, and outbreaks; rapid testing of possible cases; tracing of close contacts of cases; and early, effective and supported isolation of close contacts to prevent onward transmission of infection.

The Strategy acknowledged that these elements would become a part of everyday life in NI until an effective vaccine was developed and a vaccination programme for Covid-19 delivered to the NI population.

687. As described in my M2C-CMO-01 statement, at paragraph 115, I also established a Testing in Care Homes – Task and Finish Group [**MM2/199** INQ000137355]. This Departmental group was established on the 8 May 2020 to provide direction and guidance to support the development and implementation of Covid-19 testing arrangements within care homes. It also more generally provided advice on testing to social care policy leads within the Department and included active participation from the Public Health Agency and Regulation and Quality Improvement Authority (RQIA).

688. A UK National Testing Programme was established and managed on behalf of the four UK nations by DHSC and from October 2021 by UKHSA, and significantly expanded testing capacity. Operational delivery of the testing programme, including implementation of the National Testing Programme, was overseen by the Public Health Agency working closely with the Department's officials. Policy and guidance on tracing and testing was also specifically developed for a range of sectors, including university and higher education students, school children and prisons. The Department liaised with the UK Health Security Agency and prior to this DHSC on matters relating to the National Testing Programme and the evolving policy across Test and Trace was through its Covid-19 Response Directorate. The liaison covered a range of issues including, for example, operational delivery and testing capacity, procurement of tests, and emerging policy considerations to inform NI policy making. The Directorate also engaged with the Scottish and Welsh Governments on emerging policy considerations to inform local policy making.

689. During the pandemic, while tests for Covid-19 were developed rapidly, the time taken to scale up testing capacity was significant as a result of global supply chain challenges in relation to the availability of reagents and other consumables. This meant that there was a limit on the information that was available to guide the public health response in the early phases of the pandemic as is described at

paragraph 155. Additionally, the measures which could be taken in relation to the testing strategy were also limited. As with all tests, clarity on the best use of tests and accurate rapid reporting systems were as important as the tests themselves, and this also evolved and took time.

690. Later in the pandemic the development of mass population symptomatic and asymptomatic testing, along with the development of self-testing with lateral flow devices (LFDs) to enable people to manage the risks associated with day-to-day activities, was unprecedented. With the agreement of the Health Minister, I established a separate NI SMART programme to oversee all aspects of the introduction of community testing using Lateral Flow Devices ('LFD'). The operational expansion of asymptomatic LFD testing in NI required the Department to work in close partnership with a broad range of local partners including the Department for Communities, local government, other public sector agencies, and a range of business sectors. The Health Minister presented a paper the Executive on the expansion of asymptomatic testing on 10 February 2021.

Strategic Coordination of Testing and Contact Tracing

691. The testing programme and contact tracing were key strategic elements of the pandemic response in interrupting transmission and reducing community transmission. These interdependent programmes of Covid-19 testing and contact tracing required strategic coordination. Both programmes were complex and there were significant logistic and operational challenges which overlapped with policy dimensions in both. For example, testing for Covid-19 included managing significant and complex contractual and budgetary considerations with respect to Pillar 2 and the UK National Testing Programme and UKG central procurement to increase testing capacity alongside strategic policy decisions by the Department on advice of the EAG-T on the most effective approach to testing. As described at paragraph 675, recognising the strategic importance and interdependencies I established the "Test, Trace, Isolate, Protect Strategic Oversight Board" [**MM2/194 INQ000137363**] from May 2020, which I chaired. The Board's role was to provide oversight of both the contact tracing and testing programmes. This included the sharing of intelligence on clusters and outbreaks and providing advice in terms of

policy implementation and its effectiveness. Later in April 2022 the Board's Terms of Reference were updated to oversee implementation of the Covid-19 Test, Trace and Protect Transition Plan [**MM2/200 INQ000137364**]. Given the collaborative approach between the PHA and the Department the Board ensured an effective and efficient interface between policy and operational teams as the approaches to testing and contact tracing continued to evolve throughout the pandemic. The establishment of the Board also ensured that the Department was able to provide assurances and regular updates to the Health Minister and the Executive on the effectiveness of both the testing and contact tracing programmes.

692. Later in October 2020 with the agreement of the Department's Permanent Secretary and the support of Departmental colleagues who released resource, I established the Covid-19 Response Directorate which provided a dedicated resource to oversee policy in relation to Covid-19 testing and contact tracing. Its remit was to provide policy direction and oversight for: the Covid-19 testing policy for NI, including the interface with the National Testing Programme led by the Department of Health and Social Care; and, for the Test, Trace, Protect Strategy which detailed the approach to contact tracing in NI. To inform policy options, the Directorate worked extremely closely with and secured inputs from senior professional colleagues DCMOs the CSA, Departmental policy officials, and a range of other key stakeholders and partners including principally the Department's EAG-T and the Test Trace Protect (TTP) Strategic Oversight Board and public health professionals from the PHA.

693. While this scale up in contact tracing and test was unprecedented and a remarkable achievement by all concerned it did take time due to significant logistical and operational challenges.

Modelling

694. As indicated in my M2C-CMO-01 statement, at paragraphs 497 to 501, NI did not have established capacity in pandemic modelling at the outset of the pandemic. In the initial stages of the pandemic, NI initially relied on the output of UK modelling

groups which was presented to SAGE. The CSA on his return to work established an NI modelling group at the end of March 2020 and this group played an important role in informing NI policy as the pandemic progressed. While UK modelling did include modelling of the pandemic in NI by UK groups and was helpful, it generally lagged somewhat behind NI local modelling which used the most up-to-date data to inform my advice and that of the CSA to the Health Minister and NI the Executive. The NI Modelling Group [**MM2/51 INQ000137356**] chaired by the CSA, Professor Ian Young, was a Departmental group. I attended meetings of the Group from January 2021 when the CSA was unavailable for a period. During this time the meetings were chaired by the Deputy Chief Scientific Advisor. I continued to attend after the return of the CSA.

695. As described in my M2C-CMO-01 statement, at paragraph 142, the initial estimates of the potential impact of the pandemic in NI were based on the SAGE (SPI-M-O) consensus estimates of the March 2020 extrapolated for the NI population. On the 1 April 2020 the Department announced the consensus estimates of the NI modelling group based on the outputs from several different models. This informed further intensive hospital planning for the anticipated surge in Covid-19 cases. This modelling outlined a reasonable worst-case scenario, based on assumptions including social distancing measures producing a 66% reduction in contacts outside of the home and workplace. In addition, it was anticipated that 70% of symptomatic cases would adhere to self-isolation. The modelling group's best judgement at that time was that this would lead to a peak number of 180 Covid-19 patients requiring ventilation and critical care beds during the first wave of the pandemic. The modelling assessed that the peak number of Covid-19 hospital admissions would be 500 per week. Under this reasonable worst-case scenario, the projected number of cumulative Covid-19 deaths in NI over 20 weeks of the epidemic was calculated to be in or about 3,000. The modelling indicated that the peak of the first wave of the epidemic was expected to occur between 6th-20th April 2020.

696. As described in the M02C-DOH-01, Wave 1 statement, at paragraph 640, the scenarios and estimates provided by the Modelling Group following consideration of the potential effects of various interventions or none and informed discussions

and advice which I and the CSA provided to the Health Minister and the Executive. The modelling group outputs were at an NI population level, I understand these outputs were used to inform Trust specific modelling and planning which was carried out at HSB/PHA/Trust level. Modelling conducted by the Department's Modelling Group was NI level and considered immediate health outcomes such as case numbers, hospital pressures and potential for deaths.

697. As described above, the responsibility for individual Trust level modelling and surge modelling was taken by the HSCB and PHA, working with individual Trusts and with support from Strategic Investment Board (SIB) staff. This modelling did not consider or address the economic impacts of the pandemic, or action taken to respond to those impacts, which was provided by the Economy Minister to the Executive. General advice on non-Covid-19 related health outcomes as a consequence of the NPIs and other interventions taken to control the pandemic, for example in relation to physical health and mental health and wellbeing and cancer diagnoses, was provided by the Department in papers to the Executive, but the uncertainties and long-term nature of those outcomes was too great to allow more than qualitative advice to be provided. Similarly, the impact of Covid-19 in relation to equality issues, and the impact of interventions to respond with respect to poverty or social mobility was highlighted in qualitative terms but uncertainties were too great to allow quantitative modelling to be conducted.

698. The modelling considered many uncertainties, ranging from uncertainties about virus characteristics, transmissibility and immune escape of variants, the duration of immunity following vaccination or natural infection and behaviours at the individual and population level including adherence to NPIs. At times there was a strong desire for certainty and precision in relation to scientific evidence and modelling on the part of decision makers. Given the unavoidable uncertainty in these areas which myself and the CSA did our best to convey, this did create some tensions at times in requests from the Executive for more certainty than was possible.

699. The NI modelling group considered local NI modelling as well a range of other sources including outputs of UK modelling groups available through SPI-M and

results of the Office for National Statistics (ONS) Covid-19 survey. As the pandemic progressed, the core model used was a Susceptible Exposed Infectious Recovered (SEIR) model developed by the modelling group (**MM2/201 INQ000353613**). This was similar to the approach of the majority of UK academic modelling groups and also modellers in RoI. The outputs produced by SPI-M modellers were used to sense check the NI modelling, but tended to lag somewhat as previously described, particularly when the pandemic was growing rapidly. During the pandemic the group considered a number of other models including an SEIR model developed by Ulster University (UU) and an agent-based model developed by Queen's University Belfast (QUB).

700. The modelling group agreed weekly estimates of Rt (separately for cases and hospital admissions) which informed and were included in advice to core decision makers. Estimates took account of outputs from the various models available and the group's understanding of the likely uncertainties involved, were provided in the form of a range and were published weekly by the Department (**MM2/202 INQ000353615** as an example). On occasions SAGE modelling groups did not produce an estimate of Rt for NI as they considered that the case numbers were too low, however, given the more current data flows the NI modelling group was generally able to. In addition, the modelling group discussed and agreed assumptions for modelling purposes and discussed the outputs prepared for modelled scenarios which informed the advice to the Health Minister and the Executive.

701. Assumptions used for modelling, including the estimated impact of NPIs were largely the same as those used by SPI-M modelling groups and discussed at SAGE. This included virus characteristics and the extent of persistence of immunity in the population. Information about the NI population demographics was taken from the Northern Ireland Statistics and Research Agency (NISRA) estimates and data for the NI population. Estimates of Rt for various modelled scenarios were agreed by consensus of modelling group members taking into account real time estimates of Rt (based on case numbers or hospital admissions, depending on what was being modelled) and SAGE estimates of the impacts of various non-pharmaceutical interventions.

Data Flows

702. The initial phase of the pandemic in particular was highly complex and rapidly evolving and there was an urgent need to develop robust arrangements to ensure the timely sharing of accurate and up-to-date information. These challenges were the same across the UK as we sought to ensure robust and comparable data sets to track the pandemic. The PHA worked at pace with public health and policy colleagues across the UK to agree definitions and associated systems to capture information on cases, contacts, deaths, and numbers in hospital. The approach adopted by PHA was similar to that of other public health bodies in the UK. Throughout the pandemic the PHA continued to work closely with the Department and colleagues across the UK to both collect and report public health data on the progress of the pandemic.

703. Data updates were received by modellers daily throughout most of the pandemic, apart from occasional periods holiday periods when data was less frequent. The Data came directly from the PHA and via the Information Analysis Division (IAD) in the Department, with data flows being refined as the pandemic progressed. Hospital admissions and occupancy data came directly from the PHA including an estimate of hospital occupancy as a result of community acquired infection and of nosocomial infection acquired in hospital. Numbers tested, positive test results, along with Intensive Care Unit (ICU) data and deaths were provided via IAD daily. Positive test results in community settings, primary care, and hospital settings were not reported separately. NISRA reported deaths on a weekly basis. IAD liaised directly with PHA in relation to data flows and will be better able to advise on the details of any challenges.

704. Information about the transmission of Covid-19 in care homes, including deaths, was reported to and collated by the PHA and the Regional Quality Improvement Agency (RQIA). Information on deaths in care homes was circulated within the Department by SSPG and the Chief Social Worker to the Health Minister and senior officials. Individual outbreaks were investigated and advice on management was provided by the PHA. Information about numbers of outbreaks

in care homes and the extent of outbreaks formed part of PHA reporting to the Department and was published weekly and included in the Covid-19 Dashboard.

705. There were difficulties in NI in that routine data flows did not allow the identification of trends in the transmission of Covid-19 within some community groups, including those of different ethnic backgrounds. However, data did identify trends in geographical areas by council areas or post codes. The data flows did allow detailed analyses to consider trends and impact based on age, sex and socioeconomic deprivation. Due to poor coding of ethnicity in health care records it was not possible to look at trends in those from different ethnic backgrounds. In regard to the possibility of considering ethnicity trends in any future pandemics, the roll out of 'encompass' across the HSC Trusts may allow for more robust collection of patient ethnicity. However, it would remain the case that analysis may not be possible due to the very small number of some ethnic backgrounds.

706. Data flows were mostly accurate and timely, and the CSA liaised with PHA colleagues. Given the many issues I was managing I was not aware of the detail of any challenges around data access around the reporting of deaths other than general concerns by the PHA identified in the "Rapid, Focused Externally Review of Public Health Agency" which I proposed and commissioned [**MM2/203 INQ000001196**]. As I understand it there were general concerns raised during that review mainly around the difficulties of reporting small numbers and confidentiality which were addressed at the time. Particularly in the earlier stages of the pandemic and throughout wave 1 the number of confirmed cases significantly underestimated the true number due to limited testing capacity and the absence of widespread community testing. Recording of hospital admission numbers with Covid-19 was dependent on manual coding at a Trust level and there could be a delay of several days before all admissions on a given date were captured.

707. Outputs of modelling earlier in the pandemic included estimates of case numbers, hospital admissions, ICU numbers and deaths under a range of potential scenarios. As the pandemic progressed, the main focus became hospital admissions and numbers for future modelling scenarios. Modelling was generally presented to include reasonable best case, reasonable worst case and a central

case as the pandemic progressed. Outcomes generally fell within the wide range covered by future modelling over a four-to-six-week period, and modelling scenarios proved useful over this time period.

708. For example, data updates were received by modellers daily throughout most of the pandemic, with occasional periods during public holidays when these updates were less frequent. The Data came directly from the PHA and via the Information Analysis Division (IAD) in the Department, with data flows being refined as the pandemic progressed. Hospital admissions and occupancy data came directly from the PHA including an estimate of hospital occupancy because of community acquired infection and of nosocomial infection acquired in hospital. Numbers tested, positive test results, along with Intensive Care Unit (ICU) data and deaths were provided via IAD daily. Positive test results in community settings, primary care, and hospital settings were not reported separately.

Cooperation between Northern Ireland (NI) and the Republic of Ireland (RoI) and comparative analysis.

709. As described in paragraphs 120 and 415, prior to and during the pandemic there was ongoing cooperation between professional and policy teams in both Departments of Health in NI and the RoI. There were also established relationships and liaison between the PHA and their public health counterparts in the Health Service Executive (HSE).

710. Throughout the pandemic it was recognised by the CSA and I and outlined in advice and in public statements that it was likely that the island of Ireland would behave as a "single epidemiological unit" in terms of pandemic waves, given the freedom movement of people across the NI-RoI border which was greater than the movement between NI and the rest of the UK. From an epidemiological perspective there would in my view have been benefit from closer alignment on policy decisions in respective jurisdictions as highlighted in the Independent SAGE Report of the 12 May 2020. The constitutional and political reality is that the RoI and NI are separate administrations and NI is a devolved administration within the UK. While I am not able to advise on such matters, such an approach may also

have required discussion and agreement between the UKG and the Irish Government in addition to that of the Executive given that it related to reserved and non-reserved issues. The same considerations are however relevant when considering epidemiological alignment of approaches across the UK between England, Scotland, and Wales.

711. My view throughout was that the trajectory of the pandemic proceeded largely in a similar way across the island of Ireland, with at times higher transmission in NI and at times higher in the RoI. It is unsurprising that this was the case given the freedom of movement across the NI/ RoI border. At times the Department was concerned at the possibility of transmission from the RoI to NI given policy differences, and at times RoI officials indicated that they were concerned about the reverse case. This data was discussed at the weekly CMO meeting and joint action was agreed. For example, in response to high case numbers in the council areas of Donegal in the RoI and Derry and Strabane in NI, there was joint messaging by myself and my counterpart on the high levels of transmission in border counties. This was underpinned by joint work between the Health Service Executive (HSE) in RoI and PHA in NI.

712. A comparison to the effective treatment of the island of Ireland as a single epidemiological unit for the purposes of animal health and welfare is in my view overly simplistic, given that there is freedom of movement of people without restriction across the common travel areas which provides an additional level of complexity which is not a consideration to the same extent in the movement of animals. Without a policy decision to prevent movement of people between the island of Ireland and Great Britian, the epidemiology of the pandemic in NI and the RoI while separate, was closely linked to the epidemiology in Great Britain. The CTA and the interconnectedness through travel of the RoI and Europe meant that Ireland was not comparable to another island nation like New Zealand, which was much more isolated geographically and in respect to the movement of people across borders. While it would have been possible to make a decision to close the borders on the island of Ireland both in NI and in the RoI and in addition between NI and the RoI this would have been a political decision to take. To have any significant impact, such a decision would have been required very early in the

pandemic with significant wider implications in respect of supply chains and the economy in particular and the freedom of movement of people across the CTA and the very porous border 200-mile land border between NI and the RoI. While ultimately a matter for respective governments and Ministers, the potential implications of such a decision would have been wide ranging particularly as it was then unknown how long any such measures would have been required as there were then no medical countermeasures available although it was thought that it would take some considerable time to develop effect vaccines and drug treatments.

713. The advice and briefings the CSA and I provided to the Executive frequently referenced geographical factors with a particular focus on progress of the pandemic in counties of NI bordering RoI, and differences in the prevalence of the virus between NI and the rest of the UK. GB and NI. It was made clear from our advice that the movement of individuals from areas of higher prevalence into NI would increase transmission in NI and we provided public health advice recommending the self-testing of individuals coming from elsewhere in the CTA before travelling to NI.

714. Throughout the pandemic the CSA and I provided advice on the risks associated with travel within the CTA. By way of example, in May 2021 when the guidance to the public around intra-CTA travel was removed, we indicated that we recognised Ministers needed to weigh up societal and economic considerations around this when making policy decisions on any guidance or restrictions. In terms of epidemiology, I am not aware of what formal consideration was given by Ministers or TEO of the relative advantages NI might have had by reason of its geography or physical location, or whether NI might have had an 'island advantage' had its policies or approaches aligned more closely with the RoI or how practical this would have been.

715. A Memorandum of Understanding was agreed on 7 April 2020, early in the first wave and set out the main agreed areas for cooperation in response to the pandemic. It was in my view a statement of intent to facilitate greater policy cooperation short of a decision on policy alignment. As described in the M02C-

DOH-01, Wave 1 statement, at paragraph 237, the Memorandum, 'Covid-19 Response – Public Health Cooperation on an All-Ireland Basis' [**MM2/360 INQ000130355** (DoH Ref: PM0171)], focused primarily on the following key areas: modelling, public health and NPI measures; common public messages; behavioural change; research; and ethics. Following signing of the memorandum, the two Departments had weekly meetings throughout most of the pandemic, further details of which are provided at paragraph 717. The memorandum was not a substitute for or alternative to extant arrangements for engagement at official and Ministerial level between respective jurisdictions or between the UK Government and the Irish Government. Rather the MOU provided an additional framework underpinning these arrangements. The extant mechanisms for engagement between respective government remained in place during the pandemic and included the Health Ministers meeting, North South Ministerial Meetings, Quad Meetings which included UKG Ministers, the SoS for NI the NIO, Irish Government and the Executive.

716. It had been agreed in the MOU that both jurisdictions would work to undertake modelling across the island of Ireland to inform evidence-based policy decisions. In the first wave I held informal discussions with my counterpart in the RoI and respective teams on the issue of treating the island of Ireland geographically as a common epidemiological unit, for example in respect of all island modelling. This is reflected in my message to the UK CMO WhatsApp On 10 March [**MM2/204 INQ000282777**] and referred to the complexity of the position in NI and also to the possible benefit of UK / RoI science and modelling co-operation.

717. With the agreement of my counterpart in the RoI and I, this was explored by the CSA with colleagues in the RoI, however it was acknowledged at the weekly formal meetings between CMOs and respective teams that there were real practical difficulties in terms of different approaches to testing, the comparability of data, given differences in how this data was captured, recorded and data flows and this did not seem immediately feasible particularly in the midst of the response to the pandemic and the capacity constraints faced. It was concluded that as an

alternative the close sharing of approaches to modelling and modelling outputs would be shared in the weekly CMO meetings as a more pragmatic approach. The agenda of the joint CMO meetings was broad and information was also shared and discussed on key policy areas such as approaches to NPIs, testing, contact tracing, and later vaccine deployment. In addition, there was detailed consideration of outbreaks with cross border potential implications, wider public health measures and the outcomes of key research studies. There was also high-level discussion on the advice being provided to core decision makers from a medical and scientific perspective.

718. The capacity and capability to conduct all island respiratory surveillance and the development of future arrangements for all island modelling is currently under active consideration by both CMO teams and policy colleagues in NI and RoI. More recently, there has also been an all-island tabletop exercise to prepare and plan for any potential outbreak of highly pathogenic avian influenza (HPAI) involving colleagues from respective public health teams, and policy and professional colleagues in health and agriculture in NI and the RoI. I believe one of the legacies of the pandemic will be even greater professional and policy cooperation on all aspects of health protection and health improvement including pandemic preparedness. In my view it is important that this preparation and the wider Civil Contingencies arrangements also includes all the other UK nations given the interconnectedness within the CTA.

719. Given the demands of the pandemic response it was not possible to formally assess the effectiveness of the MOU. I am not aware of any similar agreements between the other nations of the UK or an assessment of the effectiveness of these arrangements which may provide comparative analysis. Following a request by the Health Minister and discussions between myself and my counterpart in the RoI, the Institute of Public Health Ireland was asked to prepare and coordinate a Rapid Review assessment of the effectiveness and contribution of the NI/ RoI MOU to the strategic and operational response to the Covid-19 pandemic. This work did not progress, as the draft terms of reference were not finalised and signed off by the Department of Health in the RoI. I am also not aware of any

assessment of the effectiveness of the extant official, Ministerial and cross government arrangements.

720. Even though there was no formal record or assessment of the outcomes of the MOU, there was very effective cooperation, regular engagement, and continued close working relationships at official level between the two jurisdictions throughout the pandemic as set out below. The professional collaboration historically and during the pandemic between the CMOs, their respective teams and public health agencies was effective and of significant benefit during the pandemic.

721. In terms of practical effect, the MOU provided a framework for regular meetings of respective professional and policy teams which were jointly chaired by the CMO of the RoI and I. Relevant data was shared on the pandemic trajectory and information concerning the policies covering international travel in relation to border health measures. As described in paragraph 711, a practical example of the outworking of the MOU was agreed joint action to address higher community transmission observed in some border counties which was a point of particular focus and discussion at the weekly CMO meeting. In response to high case numbers in the council areas of Donegal in the RoI and Derry and Strabane in NI, there was joint messaging by the myself and my counterpart in the RoI on the high levels of transmission in border counties. This was underpinned by joint work between the Health Service Executive (HSE) in RoI and PHA in NI and action involving local government in both jurisdictions and wider civic society.

722. Health is a devolved matter in the UK and therefore there are some differences in public health policy across the UK. Similarly, policy in the RoI is determined by Ministers and the Irish Government, however there are understandably some common priorities and approaches. Prior to the pandemic there were already highly effective relationships between CMOs, DCMOs and respective policy teams in NI and the RoI, which is evidenced by engagement and development of public health policy in respective jurisdictions in several areas such as: alcohol and drug policy and policy work on suicide prevention and self-harm. There have been ongoing comparative analyses of Health outcomes between NI and the RoI for many years.

723. A few examples of analytical work with RoI colleagues include:

- In 2015, the Department published the report Life expectancy Decomposition 2015 [**MM2/205 INQ000425636** (DoH Ref: MMcB/0196)] which presented an analysis of changes in life expectancy and life expectancy gaps by cause of death and age, between those living in the most and least deprived areas, between urban and rural areas, and between NI, other UK countries, and the RoI. This involved cooperation with the Central Statistics Office (CSO) in the RoI to gain access to registered deaths and populations data for RoI, and to share key findings. These findings which provided quantifiable evidence on the main causes of death that contributed to the gaps in life expectancy between NI and the RoI were also presented by Department's Statisticians at the All Island Knowledge 4 Health Conference, which aimed to explore innovative and pragmatic approaches to providing knowledge support to the island's two public health frameworks; 'Healthy Ireland: A Framework for Improved Health & Wellbeing 2013-2025' in the Republic of Ireland, and 'Making Life Better – A Whole System Strategic Framework for Public Health 2013–2023' in Northern Ireland. The event was attended by stakeholders working to improve public health and wellbeing and reduce inequalities, including government departments and agencies, health and social service agencies, academia, the voluntary & community sector, or industry. The analysis was repeated by the Department in 2017 [**MM2/189 INQ000425637** (DoH Ref: MMcB/0197)].

- Public Health Information & Research Branch in the Department is responsible for a number of departmental surveys and as part of this work has liaised with colleagues in RoI; for example, the Health Survey Northern Ireland is a departmental survey that covers a range of public health topics. It is similar to health surveys that run in other regions and has common topics and questions. The Healthy Ireland survey would be the equivalent survey and we have liaised with colleagues in RoI, sharing methodology details and questionnaire content.

- We have worked with colleagues in Food Standards Agency and "*Safefood*[7]" on a Food Poverty Indicator sub-group regarding collection of survey information relating to food poverty and have included questions in the Health Survey Northern Ireland that allows for comparisons with data collected for RoI via the EU-SILC study.

- For a number of years there was an All-Ireland Drug prevalence Survey which was last conducted in 2014/15 and which is jointly commissioned however the current resource position does not allow for a repeat of this survey at this time.

- More generally, we have regular correspondence with the Institute of Public Health Ireland (IPH) on a range of topics, providing information and statistical analysis as required. The Institute of Public Health Ireland (IPH) was set up prior to the signing of the Good Friday / Belfast Agreement in 1998 to provide support on public health policy to the respective Departments of Health and Chief Medical Officers in both jurisdictions. There is long list of publications over the years – some recent – some from the early years of IPH which are included by way of example to assist the Inquiry, and which are referenced below.

724. There are several projects and studies that take an "island of Ireland" approach however there is no overarching framework for this type of work in public health and existing data collected is not directly comparable.

725. By way of example only, the reports below all either contain directly comparative data across the island of Ireland, or analyse available data across the island if not directly comparable:

[7] Safefood is an all-island body set up under the British-Irish Agreement Act 1999 to promote awareness and knowledge of food safety and nutrition on the island of Ireland

- https://publichealth.ie/reports/ageing-and-public-health-overview-key-statistics-ireland-and-northern-ireland – [**MM2/206 INQ000425638** (DoH Ref: MMcB/0198)]
- https://publichealth.ie/reports/breastfeeding-island-ireland – [**MM2/208 INQ000425639** (DoH Ref: MMcB/0199)]
- https://publichealth.ie/reports/health-protection-inequalities-island-ireland-introductory-paper – [**MM2/209 INQ000425640** (DoH Ref: MMcB/0200)]
- https://publichealth.ie/reports/mortality-cawt-region-comparison-rest-island-1989-1998 – [**MM2/210 INQ000425641** (DoH Ref: MMcB/0201)]
- https://publichealth.ie/reports/tobacco-free-future-all-island-report-tobacco-inequalities-and-childhood – [**MM2/211 INQ000425642** (DoH Ref: MMcB/0202)]
- https://publichealth.ie/reports/fuel-poverty-older-people-and-cold-weather-all-island-analysis – [**MM2/212 INQ000425643** (DoH Ref: MMcB/0203)]
- https://publichealth.ie/reports/one-island-one-lifestyle-health-and-lifestyles-republic-ireland-and-northern-ireland- [**MM2/213 INQ000425644** (DoH Ref: MMcB/0204)]
- https://publichealth.ie/reports/making-diabetes-count-systematic-approach-estimating-population-prevalence-island-ireland – [**MM2/214 INQ000425645** (DoH Ref: MMcB/0205)]
- https://publichealth.ie/reports/one-island-two-systems-comparison-health-status-and-health-and-social-service-use-community – [**MM2/215 INQ000425646** (DoH Ref: MMcB/0206)]
- https://publichealth.ie/reports/2022-ireland-north-and-south-report-card-physical-activity-children-and-adolescents-summary – [**MM2/216 INQ000425647** (DoH Ref: MMcB/0207)]
- https://publichealth.ie/reports/ageing-and-public-health-overview-key-statistics-ireland-and-northern-ireland – [**MM2/206 INQ000425638** (DoH Ref: MMcB/0208)]

726. Included below is the list of the IPH reports between 1999 – 2023 – Reports | Institute of Public Health:

- The first IPH data report was back in 1998 – Inequalities in Mortality.pdf [**MM2/217 INQ000425649** (DoH Ref: MMcB/0209)]

- and then in 1999 One Island 2 Systems D3 [see Exhibit **MM2/215 INQ000425646** (DoH Ref: MMcB/0206)]

727. In the period 2007 – 2015 the Centre for Ageing Research and Development in Ireland funded 32 pieces of comparative research [**MM2/218 INQ000425650** (DoH Ref: MMcB/0210)].

728. Relating to the comments from some external commentors made in the paper I referred to in my M2C-CMO-01 statement *"Obstacles to Public Health that even pandemics cannot Overcome: the Politics of Covid-19 on the Island of Ireland"* [**MM2/219 INQ000137387**] which highlighted the absence of comparable data to facilitate cross-border comparison specifically in relation to the Covid-19 pandemic, in my view direct comparison of rates of infection between NI and RoI are difficult due to differences in testing volumes, access to testing and behaviours during the pandemic. The ONS survey gave an objective indication of prevalence across the UK including in NI but there is no comparable data in this survey for RoI, although I did discuss the survey and highlight its value to RoI colleagues at a number of CMO meetings and I understand from my enquiries with the ONS that they would have been amenable the participation of RoI in this survey. Significant differences also existed in how deaths were reported in NI and RoI during the pandemic, with a significant delay in reporting deaths in RoI compared with NI. This makes direct comparison of deaths including excess deaths difficult, and at least in part explains higher deaths reported in NI as compared to the RoI particularly in the early stages of the pandemic.

729. Of note, excess deaths in RoI have been significantly higher than those in NI in the post-pandemic period and again some of this may be due to reporting differences. However again direct comparison is problematic. In addition to data comparability,

comparisons between NI and the RoI also need to take account of factors such as demographics, rurality and population density all of which need to be considered in addition to timing of policy decisions.

730. Comparative analysis between countries with respect to the consequences of the pandemic is difficult given different testing approaches and the recording of deaths. In regard to whether or not the RoI had better outcomes from Covid-19 than NI in terms of rates of infection or deaths from Covid-19, there were differences in testing regimens and how death data was captured between NI and RoI which make the interpretation of direct comparison difficult. In addition, there are differences in terms of demographics, social deprivation, population density and the mechanisms by which health services are funded and provided. My best estimate in general terms is that outcomes related to Covid-19 are likely to have been broadly similar across the island of Ireland. Direct comparison of data between NI and the rest of the UK is likely to be more reliable as data collection and flows were similar. Comparative data across the UK demonstrated that deaths with Covid-19 on the Medical Certificate of Cause of Death (MCCD) or death certificate were significantly lower in NI than in England, Scotland or Wales (coronavirus.data.gov.uk, accessed 20/09/23). However, multiple factors including those mentioned above also need to be considered in relation to this comparison.

731. With respect to the peak of the first wave in London, community transmission in most parts of the UK including NI was behind, although difficult to quantify, I believe that was lag was measured in days. Following the first wave and the UK wide lockdown in my view for the most part the Executive made decisions for the population of NI informed by the trajectory of the pandemic in NI, informed by the advice from the CSA and myself, rather than in my view seeking to align with any other jurisdiction. I believe this is reflected in comments in the NIO SitRep dated 30 April 2020 where it is reported that *"Minister Swann said that the Executive would be developing its own plan in response to how the pandemic develops specifically in NI, highlighting that NI was 7-10 days behind the London curve as an example of why it had to be different"* [**MM2/220 INQ000083129**, page 4]. There were occasions when some Ministers expressed a view that policy decisions in NI should more closely be aligned with either those in the rest of the UK or the RoI

and this did present some challenges in Executive decision making. An example of this during the first wave was the Executive's consideration of the timing of the closure of schools in NI as described in paragraphs 296 and 784. While policy decision remained a matter for respective Ministers and governments, in general, I believe there was more in common in alignment of policy across the island of Ireland and the UK than differences. Where those differences existed, they were largely in relation to timing and or the extent of restrictions. In reaching these decisions Ministers in all jurisdictions took into consideration factors other than the health advice.

732. I have considered the effectiveness of COBR and Ministerial Implementation Group (MIG) meetings and whether these were an effective mechanism for discussion and debate and ensuring the involvement of DAs in decisions affecting them. While Ministers will be best placed to advise, I would observe that: sometimes the meetings were called at short notice: had a large number of participants; communication with those invited to attend was not immediately clear to me; and papers were at times circulated late, although this may have reflected local NI arrangements for sharing. In large part I believe many of these issues may have reflected the fast pace of events and the need for an agile response which was not always conducive to effective engagement. I believe that more time for DA participants would have been welcomed by respective jurisdictions. Despite this, there was, in my view, effective regular engagement with the DAs in a range of other such as meetings chaired by the Chancellor of the Duchy of Lancaster (CDL) with FMs FM and dFM, and UK Health Ministers regular engagement.

733. I do not know of any direct evidence in relation to whether a greater policy of harmonisation or co-operation with the RoI might have produced better outcomes in NI, or better outcomes in the RoI, and there has been no modelling that I am aware of that has considered this. Any such modelling would require extensive assumptions and would be easily susceptible to a range of biases. It is possible that some short term outcomes purely in terms of Covid-19 might have been improved, but I do not believe that significant improvements could have been obtained without significant restrictions on movement within the common travel

area which would have led to significant challenges to the economy and society, along with the possibility of social unrest, or a broader harmonisation or co-operation between the UK as a whole and the RoI. I do not seek to comment on the issue of UK-RoI co-operation and alignment, as this would be a matter for Ministers and respective governments. However, I believe that this would merit further consideration from a scientific and public health perspective analogous to the question of cooperation between the Executive and the Irish Government. This is, I feel, of importance particularly in any future pandemic in order that consideration is given to what I described in my M1 oral evidence as a "5 Country two Nation approach."

Controlling NI Borders

734. As indicated in the M02C-DOH-01, Wave 2 statement, to which I provided significant input, restrictions on international travel made an important contribution to the public health response particularly as new variants emerged globally during the second wave. These measures were aimed at delaying and slowing the introduction of these into the UK. The measures became increasingly complex during the second wave as international travel recommenced. As noted in the NIO's statement to Module 2C of the Inquiry [**MM2/5 INQ000148325**], while international travel is a reserved matter, the public health measures including passenger locator form and pre-departure testing, quarantine and testing are not. I have further considered to what extent NI could control its border and or impose restrictions on those arriving either from the Common Travel Area (CTA) or internationally. Given the existence of the CTA and that most international travel into NI was via major UK airports and/or the RoI there were limitations in the Executive's ability to unilaterally control travel into NI. The Department's policy response is set out in the relevant paragraphs of the M02C-DOH-01 statement, however to assist the Inquiry I have summarised some key elements and some examples of actions taken by the Department and the Executive to control the introduction of infection and new variants into NI. For context, the relative contribution of travel is outlined in the advice we as 4 UK CMOs agreed and provided early in the pandemic.

735. The Department's policy in relation to border health measures, was underpinned by the International Travel Regulations and informed by assessment of the risks associated with international travel provided by the analysis of the Joint Biosecurity Centre at a UK level, and more limited information from RoI Passenger Locator Form data on international travellers entering the RoI before transiting to NI. There was ongoing liaison with the Home Office and Border Force on the compliance of carriers and operators such as airlines and cruise operators on those travelling to NI. Following the introduction of the 'Travel Corridors' in July 2020 subsequent amendments to the 'list of exempt countries' followed from 12 July 2020 to 16 January 2021, based on the scientific evidence from JBC and public health risk assessments of this by the UK CMOs, and the advice that I and the CSA provided to the Health Minister and Executive based on this analysis. Throughout this time, policy officials, the CSA and I advised the Executive on measures to address travel from higher prevalence countries, those with low levels of genomic surveillance, impact of potential variants; travel within the island of Ireland; self-isolation; and the UK Government's 'International Travel Issues – Global Travel Taskforce Report'.

Measures to Address new Variants and Variants of Concern

736. On 6 November 2020 the Health Protection (Coronavirus, International Travel) (Amendment No. 18) Regulations (Northern Ireland) 2020 [SR 2020 No. 241] were made to remove Denmark from the list of 'exempted countries', in the Travel Corridor as JBC advised that health authorities in Denmark had reported widespread outbreaks of Covid-19 in mink farms, with a variant of the virus spreading to local communities. I subsequently wrote to my counterpart in the RoI [**MM2/361 INQ000276596** (DoH Ref: PM2272)] and discussed concerns in relation to a mink farm in Donegal. The Health Protection (Coronavirus, International Travel) (Amendment No. 19) Regulations (Northern Ireland) 2020 [SR 2020 No. 243] took effect from 7 November 2020, and enhanced the measures for arrivals from Denmark to NI. Those regulations removed the exemption from the requirement to self-isolate for arrivals from Denmark, to include those who had arrived in NI from elsewhere but had been in or transited through Denmark in the 14 days preceding their arrival. Further regulations also came into operation which

required people residing at the same address as Denmark arrivals to self-isolate. These measures were relaxed on 28 November 2020.

737. On 21 December 2020 the Health Minister in an oral statement to the Assembly Ad Hoc Committee informed the Assembly of the emerging situation of a variant which had been detected in the Southeast of England [PM2270 INQ000276594 which had had been identified following proactive and enhanced epidemiological analysis in response to the recent increase in cases seen in Kent and London. This was later known as the Alpha variant. In a paper to the Executive on 21 December 2020 [**MM2/300 INQ000276561** (DoH Ref: PM2241)], the Health Minister set out advice concerning this variant, provided by the CSA and myself, that while the absolute risk of travellers from the rest of UK having Covid-19 was low, and even lower for the new variant, there would be merit in limiting or temporarily banning travel if the variant was not present in NI. While at that time the new variant had not been confirmed there were strong indications that it was present in NI and the CSA and I advised a precautionary approach was appropriate, including consideration of limiting travel from the RoI given the current disease trajectory there which was of concerns given the then low level of genotype sequencing in the RoI. This was at a time of increased travel between the UK and NI, the UK, and the RoI and between NI and the RoI in the pre-Christmas period. The Health Minister recommended that the Executive should immediately issue guidance advising against all but essential travel between NI and Great Britain/Republic of Ireland, with immediate effect, including asking all new arrivals to self-isolate for 10 days following entry to NI with the aim of delaying the introduction of any new variant while assessing its potential significance.

738. On 23 December 2020, the Department confirmed a positive test for the new variant of the virus in NI, which had been detected in increasing numbers in the southeast of England [**MM2/286 INQ000276594** (DoH Ref: PM2370)]. While genome analysis had only been conducted on a small number of suspected NI cases with only one positive result, given the known transmissibility of the new variant and technical considerations in respect of sequencing, it was believed that the variant was likely to have been present in NI for a time. It was also a concern

of the CSA and I that the variant was also present in RoI and in part explained their increase in community transmission which we raised at one of our regular meetings. As indicated in earlier paragraphs 430 to 431 the confirmation of this variant being identified in NI informed Executive decisions over the Christmas period and consequently advice to the public over the Christmas period was changed.

739. To delay its introduction into NI having considered advice from the CSA and myself on 8 January 2021 in a written Ministerial statement anyone arriving in NI from within the CTA and who planned to remain in NI for at least 24 hours was advised to self-isolate upon arrival for 10 days in the same way as international arrivals. The background to this decision and the Executive's agreement is provided in the following exhibits [**MM2/300 INQ000276561** (DoH Ref: PM2241), **MM2/362 INQ000276597** (DoH Ref: PM2273), **MM2/303 INQ000276564** (DoH Ref: PM2244), **MM2/363 INQ000276599** (DoH Ref: PM2275),

740. At the Executive meeting on 23 July 2020, the dFM advised that she and the First Minister had agreed to request an urgent dedicated British Irish Council meeting to resolve issues relating to the Common Travel Area [**MM2/221 INQ000048482**] and the dFM statement to Module 1 states: "*...the FM and I asked for a meeting of the British Irish Council (BIC) to be convened to address concerns around travel and to get a more coordinated approach across Britain and Ireland...I do not recall any adequate explanation being given as to why it did not take place.*" [**MM2/222 INQ000183409**, paragraphs 20 to 22]. To my knowledge there was a North South Ministerial meeting were this was discussed and subsequent 4 nation discussion where the matter was again raised with CDL and the UKG. I have further considered whether, from an epidemiological perspective, enough was done in relation to NI's border and whether more could or should more have been done to control movement into NI. From a public health perspective there was ongoing and effective cooperation at a professional level and between respective public health bodies across the UK and Ireland. It is my view that greater policy alignment would have been advantageous recognising this is a matter for respective Ministers.

741. The policies of respective jurisdictions and policy alignment across the UK and Ireland was a matter for Ministers and in particular the UKG and the Irish Government. In my view this was one of the more challenging areas during the pandemic, and more effective policy alignment and communication would have been beneficial. As described in paragraph 712, the decisions to close borders by their very nature had to be political policy decisions given the wider economic, trade and legal implications. An example highlighting this with particular relevance to NI was the work and preparation in the lead up to EU Exit, given the concerns about the potential impact on free movement of essential goods such as food and medicines and the critical dependency of the UK on the continued movement of such goods into the UK and NI to ensure the continuity of supply chains. In this context, it is also important to remember that the evidence now available from genetic testing has shown that the majority of the initial seeding of infection which led to the first wave in the UK and Ireland was from Europe, and in particular from France, Italy and Spain, as a consequence of travel in mid-February as opposed to travel directly from China and Asia. To have any meaningful impact in terms of delaying the first wave would therefore have required a decision to close borders with Europe, which would have had major implications for the population with regard to the supply of food and medicines and as a result significant public health implications. Any decision to introduce such wide-ranging border measures, given the implications, was ultimately a policy matter for Ministers as opposed to solely a public health matter. To be effective once introduced, such measures would have had to be maintained until effective medical countermeasures were available, however long this would take, with significant potential public health harms to which NI was particularly vulnerable.

742. The public health considerations and principles which we had outlined and provided collectively as UK CMOs on Borders to Ministers on the 9 May 2020 as described in paragraph 168 were therefore only part of the complex decision-making process by Ministers, particularly given the existences of the common travel area and the absence of hard borders between the four UK nations and the RoI. The broad scientific opinion was and remains that while border closures can play a useful role in delaying virus spread, they cannot prevent pandemics and, in

my view, once Covid-19 had spread beyond China it was, inevitably, eventually going to reach the UK and Ireland.

743. An example of where the deployment of border measures was effective was following the emergence of the Covid-19 outbreak in mink in Denmark. Active steps were taken within the affected region in Denmark and by the UK and Ireland to prevent cases being introduced by travellers as described in paragraph 736. The same approach with border controls to delaying the introduction of variants of concern was taken throughout the pandemic to allow more time to understand the potential implications.

744. SAGE reviewed the evidence around border closures several times with the same conclusion that such measures would only delay the arrival of cases by some weeks (3 February 2020 **MM2/223 INQ000203939**) at best once it had spread beyond China. The WHO advice was also that border closures were not an effective tool against Covid-19.

745. On 3 February 2020, SAGE considered travel restrictions and stated the following:

"1. On the expected impact of travel restrictions, SAGE estimates - with limited data - that if the UK reduces imported infections by 50%, this would maybe delay the onset of any epidemic in the UK by about 5 days: 75% would maybe buy 10 additional days, 90% maybe buys 15 additional days; 95%+ maybe buys a month.

17. Gaining 5 to 10 days of extra time for the NHS and wider HMG to prepare for a WN-CoV epidemic would be of limited value.

*20. Ongoing transmission of WN-CoV in other countries would negate the effectiveness of travel restrictions on passengers coming directly from China - as might other international travel restrictions which force travellers from China to use alternative means or routes to travel" (***MM2/223** ***INQ000203939**).*

746. On 3 February 2020, a SPI-M-O paper to SAGE estimated that based on current information from China, the average delay expected to result from a 90% reduction of travel from China might be up to two weeks (**MM2/224 INQ000051882**). Travel

restrictions served only to modify the estimated epidemic onset dates, rather than prevent the importation of cases. By 23 March 2020, once there was widespread domestic transmission within the UK, SAGE concluded that the numbers of cases arriving from other countries were estimated to be insignificant in comparison with domestic cases, comprising approximately 0.5% of the total (**MM2/225 INQ000129072**).

Behavioural Factors and Enforcement

747. Between January and March 2020 there was growing and widespread public concern about the risks associated with the pandemic. There was extensive media coverage of the rapidly deteriorating situation in China and the measures introduced there and the regional lockdown in the Lombardia and later other regions of Italy in early February and concerns about the health service there being overwhelmed. Given the concerning and distressing media coverage at that time there was in my view relatively little concern amongst members of the public about the consequences of NPIs, as I don't believe it was fully appreciated how long they might be required for before the development of medical countermeasures or a full awareness of the harm they would cause. If the measures were required for a protracted time, then my concern was that behavioural fatigue would become a factor.

748. At least in the initial phase of the response my view was that the people of NI would accept and adhere to the restrictions on their freedoms if it seemed likely to be for a few weeks, recognising that for a small minority, restrictions of any nature were likely to be unacceptable irrespective of the rationale. Behavioural fatigue is a well-recognised phenomenon and understandably did become a significant factor as the pandemic progressed. At the outset of the response to the pandemic while the adherence of the population to advice and the measures introduced was considered as central, although dependent on the duration of any restrictions, there were no major concerns with respect to the response of the population and the primary focus of all was very much on saving lives, avoiding severe illness, and avoiding the health service being overwhelmed.

749. When public adherence is highest all NPIs are most effective, and concerns about behavioural fatigue for whatever reason were therefore important considerations. These issues were considered by the Executive with the health advice in reaching policy decisions. Behavioural considerations were addressed along with enforcement through the cross-government Adherence Group established by TEO in response to communication from the Health Minister.

750. During the pandemic there were a number of sources of evidence on public adherence to NPIs including survey results and analysis of open-source mobility data via Google. On 20 April 2020 a new Coronavirus (Covid-19) Opinion Survey was launched NISRA to measure how the Covid-19 pandemic was impacting on people's lives and behaviour in NI. Approximately 22,000 people participated in the survey, providing data on a wide range of relevant topics. The reports focused on behaviours such as Hygiene Behaviours, Social Distancing, Face Coverings and Slowing the Spread of Coronavirus (Covid-19). The Department also commissioned Queen's University Belfast (QUB) to conduct a contact matrix survey and TEO commissioned Ipsos Mori to also conducted surveys. Adherence was reasonably good on the part of most of the public.

751. There was significant mixed messaging through social media and some media coverage about the effectiveness and appropriateness of NPIs, including misinformation. At a UK level there were well publicised occasions where high profile individuals did not adhere to public health advice, and at times in NI there was also mixed messaging from public figures and political representatives. More consistent messaging and behaviours might have helped to increase adherence, although I cannot provide any objective assessment.

752. In relation to the WhatsApp message [**MM2/226 INQ000308457**, page 23]) on 14 May 2020 between Chris Stewart and Sir David Sterling on PSNI concerns regarding enforcement, I wasn't previously aware of this communication nor was I present at the meeting with PSNI, so I am unable to provide any informed comment.

753. I have reviewed and considered comments by the Health Minister, the First Minister and I on 20 August 2020, [**MM2/144 INQ000065790**] and comments by the CSA on 1 July 2021 [**MM2/227 INQ000048536**] on enforcement and adherence to existing regulations and restrictions, and whether lack of enforcement of the Covid-19 Regulations and the then fines were a concern for the CSA and I. In my view during the pandemic enforcement was a last resort and only when there was not voluntary adherence in the public good. During the pandemic I was fully supportive of the PSNI approach to the regulations through the '4 Es' approach which involved PSNI officers engaging with members of the public, explaining the coronavirus laws and regulations, encouraging them to comply and enforcing the rules only as a last resort by issuing fines.

754. Adherence to, and enforcement of, the Regulations was not straightforward, responsibility for which was outside the Department. While most people were following the advice and restrictions, along with the FM and the Health Minister I noted on 20 August 2020 the need for a consideration of enforcement of the Covid-19 Regulations and the levels of fines as a deterrent. While concerns were discussed at the Executive, as I recall no Department believed it had 'ownership' of enforcement of the Regulations and the Department of Justice did not have operational control over the PSNI and the Justice Minister did not feel that it was a function of her department [**MM2/228 INQ000065769**, page 15]. These concerns were also raised by the CSA on 1 July 2021 when he advised that poor enforcement and adherence to the existing regulations and restrictions were a cause for concern. [**MM2/227 INQ000048536**]

755. At a meeting of the Executive on 10 September 2020, it was then noted that "a working group on compliance and enforcement of the regulations [will] be established" [**MM2/145 INQ000048488**]. This group was led by the Junior Ministers within TEO; however, while beneficial regarding engagement and encouragement and the CSA, and I supported these meetings and the associated sectoral engagement providing professional scientific and medical advice, I have no objective evidence of the effectiveness of this group or of the engagement. The Health Minister continued to raise with the FM and dFM his concerns with respect to the enforcement of regulations [**MM2/229** **INQ000303894** (DoH Ref:

MMcB/0211)] and [**MM2/230** **INQ000303893** DoH Ref: MMcB/0212)]. There was consideration given by the Executive to local councils deploying Covid-19 Marshals to support engagement and encourage adherence to the Regulations and to support the PSNI. In addition, local government and respective CEOs and their teams played a significant role in local community engagement and encouraging adherence. I had direct contact with an Assistant Chief Constable in the PSNI in relation to enforcement and other relevant issues and occasionally these meetings also included the CSA. I believe this engagement was positive, helpful, and constructive.

756. There were however challenges with enforcement of the Covid-19 Regulations and the CSA and I provided advice to the Executive on the importance of adherence and enforcement **MM2/231** - **INQ000353616** & **MM2/232** - **INQ000353617**] as well as sharing relevant SAGE papers. The Health Minister raised issues with the FM and dFM [**MM2/233 INQ000425653** (DoH Ref: MMcB/0213)] and [**MM2/234 INQ000425654** (DoH Ref: MMcB/0214)] and I also raised issues with the Chair of the TEO Adherence Group and stressed the need for a consistent approach to engagement and enforcement on the ground [**MM2/235 INQ000353619**].

757. My sense was that the levels of adherence were improved through stronger messaging at press conferences regarding the number of cases and pressure on the health service.

Care Homes

758. There was an awareness of the risk posed to those living in Care Homes from Covid-19 at an early stage although as knowledge on transmission emerged the risks became better understood. As such the arrangements to protect those living and working in Care Homes was frequently discussed at Executive meetings. This included consideration of the testing programme in care homes, details of the number of outbreaks and supply of PPE wear. The Executive Committee meeting on 8 April 2020 shows that Ministers were aware of testing in Care Homes and the need to prioritise it and [**MM2/236 INQ000065725**] again further Executive discussion on 15 April 2020 [**MM2/237 INQ000065735**]. Again, on 20 April 2020

the Executive discussed PPE and testing in care homes [**MM2/238 INQ000065691**]. Care Homes were also discussed on 27 April 2020 and 11 May 2020.

759. While normally the provision of care and infection prevention and control (IPC) are primarily operational matters for the Care Home Sector as providers, HSC Trusts as commissioners of that care with support from the PHA and HSCB, given the vulnerability of people in care homes the Department took a significant role in a range of issues such as: the provision of guidance; supply of PPE; enhanced training for staff in the IPC; visiting in care homes; and subsequently outreach clinical support which others in the Department, PHA and HSCB will be better able to provide information on. I have provided further details on those aspects on which I led and coordinated with policy colleagues and the PHA, with respect to the roll out of testing and later in more detail in my M4/CMONI/01 statement on vaccination. I am also conscious that Care Homes will be considered in detail in module 6 of the Inquiry.

760. The PHA had been capturing data on Covid-19 outbreaks notified to the PHA from when the disease was first reported in mid-March. A detailed briefing paper was prepared by the Department for the Executive meeting of 6 August titled "2020 E (20) 187 (C) Executive COVID-19 Action Plan: Quantitative Information on the Actions Taken within Care Homes to reduce Infection and their Effect". This identified the actions that had been taken in relation to Care Homes [**MM2/239 INQ000208770**] and provides a useful summary. The paper highlights my role as CMOG with the establishment of the Departmental Covid-19 Testing in Care Homes – Task and Finish Group [**MM2/199 INQ000137355**]. I established this group with the agreement of the Health Minister, and it was subsequently chaired by the DCMO, to provide direction and guidance to support the development and implementation of Covid-19 testing arrangements within Care Homes. It also more generally provided advice on testing to social care policy leads within the Department and included key participation from the Department and its EAG-T, the PHA and the Regulation and Quality Improvement Authority. The Task and Finish Group met for the first time on 8 May 2020, with regular meetings scheduled thereafter.

761. Given the risks to those living in care homes and the risks to staff, NI moved as I recall, before other parts of the UK to increase Covid-19 testing across its Care Homes [**MM2/240 INQ000425655** (DoH Ref: MMcB/0215)]. The expansion of testing progressed in a phased way during the first wave of the pandemic and beyond, from initial Covid-19 testing of Care Home residents and staff displaying symptoms, to Covid-19 testing made available to all residents and staff. Testing capacity was a significant constraint during the first wave of the pandemic, and I believe all of us providing advice to the Health Minister would have preferred to be able to expand testing in Care Homes earlier and more rapidly. The expansion of testing in Care Homes was a key priority for the Health Minister.

762. As has been covered in my input to the M02C-DOH-01, Wave 1 statement, at paragraph 429, the initial approach to Covid-19 testing in individual Care Homes was informed by the approach previously taken in the context of influenza outbreaks. However, the testing approach was actively and continually reviewed, with decisions relating to expanding and implementing Covid-19 testing informed by SAGE and its subgroups, the emerging scientific evidence, and advice from the Department's EAG-T although initially testing capacity was a significant constraint.

763. The Health Minister, informed by advice from myself and CMOG colleagues, announced on 27 April 2020 [**MM2/364 INQ000103694** (DoH Ref: PM0118)] that testing would be carried out on all staff and all residents in Care Homes when a home was identified to the Health Protection team in the PHA as having a potential outbreak or cluster of infections. This replaced the previous approach of only testing staff and residents when they had been displaying symptoms. In a further statement on 13 May 2020 [**MM2/365 INQ000103693** (DoH Ref: PM0117)] the Health Minister announced a significant expansion of testing for Care Home residents and staff to be informed by advice being prepared for Government and the NHS by the Scientific Advisory Group for Emergencies and the Department's Strategic Intelligence Group (SIG). The detail and scope of this expanded testing was announced by the Health Minister in a press release on 18 May 2020 [**MM2/241 INQ000425656** (DoH Ref: MMcB/0216)].

764. At my request the Northern Ireland Ambulance Service (NIAS) began providing a mobile testing service for Care Homes during the week commencing 11 May 2020. I had contacted the CEO of NIAS over the preceding weekend to ask for assistance and had received confirmation that NIAS would provide mobile testing capability into care homes in NI compromising up to 4 mobile testing teams commencing Tuesday 12 May to assist care home staff and HSC Trust teams who were already supporting care homes [**MM2/242 INQ000425657** (DoH Ref: MMcB/0217)], [**MM2/243 INQ000425658** (DoH Ref: MMcB/0218)], [**MM2/199 INQ000137355** (DoH Ref: MMcB/0219)] and [**MM2/244 INQ000425660** (DoH Ref: MMcB/0220)]. This service was integrated into the HSC Trusts and PHA/HSCB teams who were working with and providing support to Care Homes. In addition, up to 40 nurses from the HSC were deployed to support testing in Care Homes.

765. On 18 May 2020 [see Exhibit **MM2/263 INQ000103704** (DoH Ref: PM0143)], the Health Minister announced that Covid-19 testing would be made available to all Care Home residents and staff across NI; this included Care Homes which did not and had not previously experienced a Covid-19 outbreak. The Health Minister said it was intended to complete the roll-out of testing to all residents in June 2020.

766. This extended programme of Covid-19 testing in Care Homes was delivered through two distinct pathways: testing in Care Homes with suspected or confirmed Covid-19 outbreaks, and testing in 'green' Care Homes, that is those homes which did not have a Covid-19 outbreak. HSC Trusts were responsible for administering the testing programme for Care Homes which had or were in outbreak. The National Testing Programme supported the independent sector and the HSC Trusts to test all residents and staff in the 'green' Care Homes.

767. By 30 June 2020, staff and residents in all Care Homes across NI had been offered Covid-19 testing. In view of the logistical challenges associated with undertaking such an extensive programme of testing, across a significant number of facilities in a relatively short period of time, this was a positive outcome. The successful completion of this phase of the care home testing programme was made possible through a collaborative and robust multi agency working

partnership between the Department, the PHA, the HSC Trusts, the NIAS and importantly, the Care Homes themselves.

768. On 28 July 2020, the Health Minister announced the next phase of testing in Care Homes [**MM2/264 INQ000103705** (DoH Ref: PM0144)]. A rolling programme of regular Polymerase Chain Reaction (PCR) testing, started on 3 August 2020, for all residents and staff in 'green' Care Homes which did not have a confirmed outbreak of the virus, with the aim of helping to keep these homes free of Covid-19. At that point, it was recommended that asymptomatic staff should be tested on a fortnightly basis and asymptomatic residents tested monthly. The Health Minister also referred to the start of the rolling programme in his statement to the NI Assembly on 28 July 2020 [**MM2/366 INQ000103706** (DoH Ref: PM0145)]. In addition to the rolling programme of asymptomatic care home testing, an enhanced testing protocol was in place for Care Homes with a suspected or confirmed Covid-19 outbreak.

769. I was not principally directly involved in PPE operational supply other than the augmentation of this through the management and release of the PPE stockpile, but details on PPE Care Home supply is covered in the M02C-DOH-01, Wave 1 statement, at paragraphs 417 to 425.

Personal Protective Equipment

770. I have considered the briefing for the Healthcare Implementation Group (MIG) on the 24 March 2020 [**MM2/245 INQ000091319**], which I had not previously seen. I believe PPE supply challenges were not unique to NI. Communication lines within NI are shorter with ongoing direct engagement with service providers. As such any then, perceived or potentially future difficulties would result in the Department being aware relatively early. The same document [**MM2/245 INQ000091319** page 2] outlines some of the local action being taken with respect to local distribution and supply of PPE. The detail of arrangements of the distribution and supply of PPE are outlined in detail in the M02C-DOH-01, Wave 1 statement, to which I provided input. I have not repeated that detail here and I understand these matters will be considered more fully in a later Module of the Inquiry.

771. In NI the Business Services Organisation's Procurement and Logistics Service (BSO PaLS) is responsible for equipment supply chain and procurement activity on behalf of HSC Trusts. As part of the UK Pandemic Influenza Preparedness Programme (PIPP), the Department's Emergency Planning Branch (EPB) holds and manages PIPP stockpiles for use in an emergency, which acts as a buffer to the HSC normal supply chain. These stockpiles include medicines such as antivirals and antibiotics as well as clinical consumables and PPE including gloves, aprons, gowns, facemasks, visors, and eye protection. During the initial response to the pandemic, the four UK countries worked closely together regarding management of PIPP stock, with Public Health England leading on 'Just in Time' contract negotiations. My role as CMO with respect to PPE was to Chair the Strategic Cell during the first wave and, with the support and advice of the DCMO and Director of Population Health, to consider request for the release of PPE from the PIPP stockpile to augment normal supplies. I have summarised the work that was undertaken by others which I was aware of at the time.

772. For context there was a significant and intense demand for PPE across all HSC settings at a time when the global supply chain was experiencing extreme pressure due to the huge uncertainties associated with a ban on the export of PPE by China, a leading global provider. Given the critical need for PPE, a decision was taken on 23 March 2020 to establish a distinct PPE Strategic Supply Cell. The aim of the PPE Strategic Supply Cell was to prioritise the supply and distribution of PPE for the HSC and improve the robustness of the decision-making at the appropriate level. The Emergency Planning Branch retained overall responsibility for management of the Pandemic Influenza Preparedness Programme (PIPP) stocks throughout the pandemic.

773. At that time issues were being escalated to the Department about the supply and availability of PPE, both within HSC Trusts, but also within parts of the HSC which would normally not use PPE daily, for example, Community Pharmacies or those who would normally source their own supplies, such as GP practices and dentists and the Independent Sector including Care Homes. The approach taken by the Department particularly around supply was to explore every viable channel locally

and internationally to procure PPE, which is covered more fully in the M02C-DOH-01, Wave 1 statement. I was not directly involved in this work.

774. Data on Care Homes was collated by RQIA as they maintained contact details and had ongoing engagement with the sector. This information data was shared with others for example local Trusts who could provide support as required. The data from RQIA was used to prepare a weekly dashboard for the Health Minister which provided a high-level summary of Care Home self-assessed ratings for PPE, Workforce and Cleaning. The dashboard also provided a summary of Trust Surge status based on an analysis of Care Home reported information on the four indicators in the HSCB/PHA Care Home Surge Decision Support Framework which included: Covid-19 Outbreak; Workforce; PPE & Equipment required for management of Covid-19 and Residents in acute decline.

775. The BSO as the HSC procurement lead ultimately had responsibility for procuring PPE. BSO were supported by the PPE Strategic Supply Cell and the Construction and Procurement Delivery Division of the Department of Finance which was responsible for leading on the procurement of PPE for the non-health sector with near daily engagement to ensure efforts were co-ordinated and that opportunities were explored to source PPE locally and internationally. Given the significant volume of approaches by potential manufacturers to supply PPE, arrangements were established in early April 2020 where all offers were channeled through the Department of Finance, which undertook a first level triage before directing suitable offers to the Business Services Organisation or elsewhere as appropriate.

776. There was in my view very effective engagement with the other jurisdictions through a range of UK meetings. The Department worked on all aspects of the development of UK-wide PPE Action Plan which was published on 10 April 2020 [**MM2/367 INQ000145665** (DoH Ref: PM0082)]. This was set around three strands; guidance, distribution and future supply, with the aim of ensuring that all got the PPE they needed. This engagement allowed for a collaborative working arrangement which included the application of mutual aid, whilst enabling each nation to continue with its own procurement plans.

777. In addition to work on supply chains I am aware that work was also directed on processes to maintain confidence in supply at an early stage. This included support and work to support and enable: the management of demand in HSC Trusts to ensure a more even distribution of stock across all HSC sites [**MM2/368 INQ000120711** (DoH Ref: PM0083)]; enable provision of PPE to the Independent Sector by their local HSC Trust; and assess the level of immediate and forecasted demand.

778. To inform the projected demand for PPE, initial modelling was undertaken by the HSCB in late March 2020. The modelling looked at PPE demand across hospital, community and primary care settings at extreme surge / worst case scenario. [**MM2/369 INQ000130316** (DoH Ref: PM0084), **MM2/370 INQ000120794** (DoH Ref: PM0248), **MM2/371 INQ000120795** (DoH Ref: PM0249), **MM2/372 INQ000120796** ((DoH Ref: PM0250)].

779. Whilst the Business Services Organisation used this information along with revised guidance on PPE requirements published in April 2020, to develop demand planning based on projected use, it was recognised there was a need for a more dynamic approach. Led by the PHA, work was progressed on the development of a Health Resource Demand Model, which was aimed at predicting and managing key resources, including the production of regional PPE demand estimates which were then used to inform Business Services Organisation's procurement strategy. [**MM2/373 INQ000130319** (DoH Ref: PM0085), **MM2/374** **INQ000130320** (DoH Ref: PM0251), **MM2/375 INQ000120798** (DoH Ref: PM0252), **MM2/377** **INQ000130322** (DoH Ref: PM0253), **MM2/376 INQ000120799** (DoH Ref: PM0254), **MM2/379 INQ000120800** (DoH Ref: PM0255), **MM2/380 INQ000120801** (DoH Ref: PM0256), **MM2/381 INQ000120802** (DoH Ref: PM0257), **MM2/382 INQ000120803** (DoH Ref: PM0258), **MM2/383 INQ000120804** (DoH Ref: PM0260), **MM2/384 INQ000120805** (DoH Ref: PM0261), **MM2/385 INQ000120806** (DoH Ref: PM0262), **MM2/386 INQ000120807** (DoH Ref: PM0263), **MM2/387 INQ000120808** (DoH Ref: PM0264), **MM2/388 INQ000120809** (DoH Ref: PM0265), **MM2/389 INQ000120810** (DoH Ref: PM0266), **MM2/390 INQ000120811** (DoH Ref: PM0267), **MM2/391 INQ000120812** (DoH Ref: PM0268)]

780. At my recommendation, on 15 April 2020 the Health Minister commissioned [**MM2/392 INQ000120712** (DoH Ref: PM0086), **MM2/391 INQ000120813** (DoH Ref: PM0269), **MM2/393** INQ**000120814** (DoH Ref: PM0270)] a rapid review of PPE by the Department Internal Audit to focus on the appropriate receipt, storage, distribution, and use of PPE across the HSC system. The terms of reference for the Rapid Review included an assessment of readiness and response during the pandemic wave at that time and in preparation for a second wave of Covid-19. I met with the then lead of the audit to outline the aspects which I believed needed to be considered as part of the review and subsequently met again to consider the recommendations.

Executive Decision Making and Implementation

781. With regard to WhatsApp messages and comments attributed to others as they reflect on Executive leadership and decision making, I don't feel able professionally nor in my view it is appropriate for me to interpret further the content of other's communications and what they said and why. Furthermore, it is outside my professional expertise to comment on the functioning of the Executive. Prior to the pandemic I had not previously attended Executive meetings. During the pandemic from the period 2 March 2020 to February 2022 I attended around 100 Executive meetings. On most occasions from late March 2020, I was accompanied by the CSA and or DCSA. My role as CMO throughout the pandemic along with the CSA and DCSA was to provide professional technical medical and scientific advice to the Department and the Health Minister, and through the Health Minister to other Departments and Ministers as requested, to assist in policy decisions by individual Ministers and their Departments. Specific operational decisions were largely made at departmental level by the relevant Minister.

782. With regard to Sir David Sterling's WhatsApp message on 16 March 2020 to me that said: "*The Executive meeting yesterday evening was excruciating. No leadership on display at all. But we'll all get through this as we always do.*" (Sir David Sterling to CMO; 17/03/2020 08:01:46 [**MM2/246 INQ000308444**, page 1]), and my response that said: "*David confident we will. We always do.*" (CMO to Sir David Sterling; 17/03/2020 08:01:46 [**MM2/246 INQ000308444**, page 1]). I do not

feel able to comment on other people's observations and comments in informal messages which in my view, are more akin to thinking out loud and ventilating, as opposed to offering a resolved considered opinion. I believed the message was also one of professional support and encouragement and my response I believe is consistent with that interpretation.

783. While I don't recall the full circumstances at that time there was a high level of uncertainty and much new information which Ministers were trying to come to terms with particularly as the Executive had only reformed weeks earlier and in my view it was these circumstances primarily as opposed to a lack of leadership. As I have said previously Executive Ministers were faced with an unprecedented situation and it is also possible that some of them may still have been coming to terms with how what may have appeared to them initially to be a health-related issue was having such a huge impact on NI as a whole and their respective Ministerial responsibilities.

784. As I recall there was a lengthy discussion and debate around a proposal to close schools in NI. This was a few days after the decision to close schools in RoI. This was the main area of discussion at that meeting and the implications for children and young people were very profound. I understood at the time and still can understand why it would have generated disagreement. On reflection I think it would have been concerning if Ministers had not put forward their views. If discussion of such a significant decision, the evidence for which was not clear cut, had not been contested it would have been in my view more concerning.

785. The final minutes of this meeting do not suggest that there were any other issues in terms of the response to the pandemic. I have already set out my position in regard to the impression which can be given by these informal exchanges which at times reflected a level of frustration but nevertheless did not negatively impact on decision making. Despite this Ministers and officials across Departments were getting on and working collaboratively on a wide range of matters including for example the significant contribution of the Department for Communities in respect of supports for vulnerable groups and liaison with Local Government through SOLACE, the Department of Justice in respect; of excess deaths; TEO in respect

of NI input to COBR (M) and COBR (O); and a number of Departments including Education and Economy for example, in respect of the development of guidance and engagement with different sectors. Any issues which Sir David Sterling may have been alluding to did not inhibit this work being progressed and at the time I was also focused on getting things done and logistical, workforce, planning and other issues which needed addressed for a health perspective. I would not myself say that there was a general lack of leadership at this point although as indicated previously I can only provide an informed view on those who I directly manage.

786. On 17 March 2023 in a WhatsApp message Sir David Sterling observed that it should never be underestimated how difficult it was *"to get the simplest things agreed here."* He also observed: *"Even in a crisis they seem keener on scoring points off each other than helping the citizen."* [**MM2/247 INQ000308439**, page 2]. I have considered whether this comment reflected the reality of NI government decision making at this point.

787. It is my view that this comment needs to be considered in context: it is incontrovertible that this was an extremely challenging and stressful time for Ministers and officials. The Executive had only reformed a number of weeks previously and was facing extremely difficult decisions, a high level of uncertainty with no easy answers. There were just difficult choices and a series of least worst options. There were, to my recollection, clear differences of views, and at times, protracted discussions given the enormity of the decisions faced and the challenging time frame in which those decisions were required to be made. These months, and the next many months, were the most challenging times of my professional career and I have no doubt that Ministers and officials in all Departments also found this to be the case. I believe that it is potentially problematic and unrepresentative to attribute too much significance to the informal venting of individuals, myself included, in such circumstances. There were frustrations and at times, given the pressures experienced, these were expressed. I do not regard that as unexpected or unusual.

788. I have also reviewed, reflected and considered an informal WhatsApp message of 24 March 2020 [**MM2/246 INQ000308444**, page 3], sent by myself to David

Sterling and Richard Pengelly where I expressed concern in relation to the demands of the Executive impacting on health preparation and refer to a *"cross-examination."* My comment in full was as follows: *"David, Richard, I understand the Executive lost the run of themselves this at 10 am this morning & it turned into a cross examination. They are now frankly getting in the way of an coordinated effective respond and making demands on my time and our the team in health that we simply can't facilitate. They are asking for certainty where there is none."*

789. This message referred to the questioning of a DCMO who attended the Executive meeting on my behalf. The individual had not attended the Executive previously and in retrospect it was not appropriate for me to request that she did so on this occasion. She found this a challenging experience and she spoke to me about this. The Executive, not unreasonably from the perspective of Ministers, wanted to have definitive advice and absolute certainty what was going to happen, what impact their decisions would have, and when they would see results. This was in circumstances where officials and advisers could offer no such certainty and were in fact highlighting the level of uncertainty. I take responsibility for my request for her to deputise, and with hindsight at this time my request was ill-judged despite other demands on me. My WhatsApp message reflects my sense of responsibility and regret for that decision and some annoyance at myself for not having better briefed and prepared her for the meeting.

790. As civil servants we are ultimately accountable to Ministers, and it was entirely reasonable for Ministers to seek answers to their questions to ensure that all the right preparation and actions required were being undertaken. At times it did not appear to me that there was a full appreciation of the pressures, complexity, and degree of uncertainty, particularly early in the pandemic. We were and remain a very small team of professional advisors in the Department, as was CMOG more generally, and we were faced with multiple demands in supporting the Health Minister at meetings and briefing, including preparation for Executive meetings and in coordinating the wider health response. At this time, we were also trying to manage a noticeable increase in the number of Assembly Questions for Written answer. This was having a significant impact on Departmental officials and in particular CMOG as we sought to address these along with progressing urgent

policy, legislation and the wider public health response to Covid-19. At that time, given the finite capacity available it was extremely difficult to meet what were multiple and concurrent urgent demands, despite excessive working hours and patterns, and my concern was for the Department and my team's ability to balance and meet all these demands.

791. While in due course I, and the Department, did identify additional staff including former and retired colleagues in a number of key areas, the demands on staff during the first wave particularly were at times relentless and excessive. Given the relentless pressures and the enormity of the potential consequences for the population, my professional observations were that there were high levels of stress exhibited by many throughout this period and in some sadly this resulted in periods of ill health. At times this stress was manifest in the interaction within and between teams, and between officials and Ministers, and between Departments and Ministers. There were some understandably tensions which arose between Ministers and Departments given the need to balance the health, economic, educational and wider societal consequences.

792. As I indicated previously, the NICS neither had the ability or agility to appropriately move staff to support teams that were clearly under huge pressure. I personally and professionally feel that at times I failed in my duty of care to adequately support my own team and too much was asked of too few consequently. These were concerns also raised by the then Permanent Secretary (PS) and the Health Minister, and by myself with the PS, and in due course directly with the Head of the NI Civil Service (HOCS).

793. In WhatsApp messages of 30 March 2020, Mr Peter May observed to Sir David Sterling that "*today was an all time low"* and that *"It sounds dire."* Sir David Sterling noted it to be *"beyond grim"* [**MM2/247 INQ000308439**, page 7].

794. I have considered whether these messages demonstrate concerns held by civil servants as to the standard of decision making or an understanding of the

significance of the circumstances and potential implications by Ministers. However, I do not feel I can interpret informal messages between others or consequently assess their significance. Looking back, my sense was of a newly formed Executive coming to terms with a significant volume of new information in a rapidly evolving situation that required significant and rapid policy decisions, and notwithstanding the uncertainties at this time decision were being made as I have described in paragraphs 783 and 785. Over a long period during the pandemic and particularly so in the early weeks and months, policy decisions were having to be made in circumstances where there was often an incomplete evidence base, and it was a case of having to act on the best available information in a rapidly changing and very complex environment. The exchange between Mr Peter May and Sir David Sterling happened on 30 March 2020, and I can see no evidence from the Executive minutes from that day of any specific contention or issues connected to the response to the pandemic. From the minutes it is not possible to assert what particular aspect of the Executive meeting that day, and which issue or issues, may have prompted these comments. Throughout this period my focus was by necessity also on a wide range of other immediate matters. From memory and my diary on Sunday 29 March 2020 I was dealing with the following topics:

a. Discussion around modelling and terms of Reference for a modelling group.
b. Discussions around surge planning
c. Various media interviews
d. A PHA Briefing on Covid-19 Testing for Health Care Workers
e. A workforce appeal press release
f. Development of data surveillance reports
g. Data to assist DFC support to people who were shielding
h. Rapid review of Gold/Silver [The "Inflight Review"]
i. Draft Mitigation Plan for the Psychological aftermath of the pandemic
j. ICU Capacity
k. Correspondence from the Health Minister to FM/dFM re strategic planning
l. Critical Care field hospital
m. Emergency response Strategy – pausing of population screening
n. UK registration of additional doctors on a temporary register

o. Work to expand capacity for Covid-19 testing
p. PPE and Ventillators

795. As CMO, some of these matters would require my approval, response or a decision. Some would have been matters that I would advise the Health Minister on as well as ensuring my team and colleagues were advised when the communication was directed to me from outside the Department. Some of these topics were part of ongoing work which as Chair of the strategic cell I had oversight of or additional requests to me for advice. Some resulted in me commissioning others to prepare briefing or take specific actions. For any one item that I was dealing with, my team and colleagues could be dealing with and actioning dozens of specific issues. In addition to supporting the Minister, the FM and the dFM, attending meeting of the Executive and other relevant meetings, my focus was appropriately directed on these matters and in the coordination of the preparation of the health service and the public health response to the pandemic.

796. For many colleagues and me, the pressures as I have indicated were unrelenting, the hours worked extremely punishing and as previously described this was undoubtedly the most challenging period of my professional career. From my experience at the time, I believe that this was also the same situation in other Departments led by other Ministers including TEO.

797. From the Department's perspective and from my perspective as CMO, at its meeting on 30 March 2020, the Executive took the necessary decision by agreeing regulations prepared by the Department which included new powers necessary to underpin lockdown. Whatever frustrations may have been expressed in comments or communications at the time is not in my view material and risks becoming a distraction in the scheme of the enormity of the consequences of the decisions made by the Executive and the consequences for the population of NI and the burden of that responsibility weighed heavily on all.

798. I have reflected and considered in so far as I can Executive decision making during the pandemic and whether the fact that the Executive was a "Mandatory Coalition" had any potential impact. While this is outside my area of professional and

technical expertise, I believe the policy decisions required during the pandemic would have difficult irrespective of the nature or structure of government given their wide ranging consequences and I would imagine decision making in other jurisdictions was also challenging. As I have described in paragraph 802 the arrangements and processes of government in NI did have some unique features such as the cross-community vote procedure which was used at times when it was most difficult to achieve consensus.

799. In reviewing and considering the notes of the Executive meeting on 30 March 2020 the dFM is noted to have said that "DoH see Exec as thorn in side" [**MM2/248 INQ000065748**]. As I have described in paragraph 791 this was a time of considerable stress and relentless pressures and undoubtedly it is the case that frustrations and tensions arose between Ministers and between Ministers and officials. In my view such were the pressures this was unsurprising. As is referred to in my WhatsApp message 24 March 2020 [**MM2/246 INQ000308444**, page 3] in paragraph 788 and described in paragraph 790, some of my own frustrations and wider frustrations within the Department were that we had to divert some considerable time and extremely limited resources into developing material aimed at providing other Ministers in other Departments with assurance about was being done in health to prepare for the pandemic, in addition to providing considerable advice and support to other departments and I believe it is perhaps in this context that some comments may have been made. As I have indicated at paragraph 790 it was entirely reasonable and appropriate for Ministers to seek these assurances.

800. Throughout the entire period of the pandemic the bottom line from my perspective is whether or not decisions were made (whatever they may have been) and for the most part there was ultimately a consensus decision made by Executive Ministers, with very few instances of Ministers registering in Executive meeting minutes that they were discontent with Executive decisions. As I recall discussions at the Executive at this time in March 2020 were also complicated by what appeared to me to be political debate regarding aligning policy decisions with those in the RoI or UK, particularly with respect to the closure of schools, as opposed to Executive policy decisions from a NI perspective informed by the advice and recommendations of SAGE and public health and scientific advice from myself as

CMO. The latter approach may at times have been interpreted and presented as a policy decision to align with the UK.

801. Given the range of considerations and the balance that Ministers were trying to maintain, Executive decisions did not always align with professional medical and scientific advice from a health perspective, especially in terms of the timing of decision making in relation to the reintroduction or relation of NPIs. On some occasions the CSA and I requested that Ministers should reconsider their decision, for example to reopen non-food serving pubs and bars in NI on Monday, 10 August 2020 [**MM2/249 INQ000353624**] given our concerns about the course of the pandemic at that time. At other times, for example in the period May to July 2021 we proposed that Ministers postpone announcing indicative dates for relaxation of restrictions and reopening of sectors until the impact of the previous relaxations in restrictions could be assessed. On most occasions this advice was accepted and factored into the Executive's decisions.

802. There were some occasions when achieving a consensus position and Executive decision proved more difficult and a few occasions when individual Ministers expressed contrary views to decisions that had been reached. On occasion, for example in November 2020, reaching a consensus position took longer than desirable and this played out very publicly. To my recollection, on only a very small number of occasions during the pandemic, when it was most difficult to achieve consensus, was the cross-community vote procedure at the Executive used. In the example of the circuit breaker proposed in November 2020 it did provide a mechanism for Ministers to reach a consensus position. While I have considered, I am not able to definitively provide an informed view as to whether the fact the Executive was a five-party coalition materially impacted on decision making. I would anticipate the challenges to collective decision making would exist irrespective of the arrangements for government.

803. While others may express different views, as someone who was closely involved at the centre of the Executive during this period, overall my observation is that I thought that collective decision making worked relatively well in immensely difficult circumstances.

804. There were differences in views at times and preferred approaches by different Ministers at the Executive and the relative consideration and importance placed on scientific evidence and health advice and other important considerations such as to the likely benefits and wider health consequence, the impact of family life and wider society, the educational consequences and economic impact of NPIs and how best to achieve a balance. These were legitimate concerns which I shared professionally and expressed at meetings of the Executive. Ministers also had fundamental concerns about restrictions on personal freedom and choice. In all of this, there were just a series of less bad options and every policy decision had profound consequences and risks. In my experience, Ministers from a single party generally tended to adopt or support the same position, although this was not always the case. As such, this approach did ensure that diverse views were discussed and considered at Executive meetings. This was not unhelpful as it reflected wider debate and public discourse in the media and within the scientific community. In general, my observation was that Ministers exhibited collective responsibility and despite the unprecedented challenges, sought to act in the best interests of the population of NI. I believe they worked to achieve this and were for the most part able to set aside narrower political and constitutional positions and act independently of their own political interests in the public interest of all those who they served. It is not that challenges of this nature did not arise, which they did, and at times as a consequence securing the Executive's agreement, as in November 2020 with the proposal for a time limited circuit breaker as described in paragraphs 443 to 446, was not straightforward.

805. My overall observations are that Executive decision making in NI during the pandemic functioned reasonably well in circumstances where Ministers were dealing with a high degree of uncertainty, and decisions potentially had critical consequences not least for human life in a tense and difficult environment. The Executive had formed only weeks earlier in a five-party coalition government and the presence of Ministers from different parties with significantly differing views on a range of issues meant that a wide range of perspectives were expressed at Executive meetings which in some respects was a strength and therefore reflected the debate in wider society. On occasions groups of Ministers, sometimes on a

party basis, appeared to take a collective position which resulted in delays to making decisions which were in my opinion at times critical, however almost invariably, such decisions were eventually made anyway after a delay. One example of this would be the delay in determining what level of restrictions to impose during the period of autumn 2020, when Executive meetings were held over several days before a decision was finally agreed. Some other Executive decisions were also considered over more than one meeting and sometimes public communications by Ministers were not completely consistent.

806. At times Executive meetings were challenging from my professional perspective. Ministers posed difficult questions to both myself and the CSA. At times decisions were contested between Ministers and discussions could be robust. My observation however is that, given the difficult and at times momentous decisions the Executive was dealing with, I would not have expected that it would have been otherwise and as I have indicated already, whilst conversations could be difficult at times, I would have been concerned if it had been any other way given the implications of the decision required. My final observation is that these were complex matters with profound consequences, and while there were differences in emphasis and the weigh attached to the health and wider consequences, I believe individual Ministers and the Executive were genuinely committed to trying to achieve a balance and wanted to do what was best for the people of NI.

Advice to Executive Ministers to inform decision making.

807. I worked closely with the Health Minister throughout the pandemic, and developed I believe a good professional relationship with him. As indicated in my M2C-CMO-01 statement, paragraph 37, my area of professional experience and competence was in providing technical medical and scientific advice agreed with the CSA which focused on health considerations. The advice we provided to the Executive was with the agreement of the Health Minister, although in effect this advice was provided directly to the Executive. Where I did refer to other areas such as education, the wider societal and or the economy, this related to the wider public health implication in terms of health and wellbeing and health inequalities. At all my times my advice was to inform discussions and decision making by Ministers.

808. In my experience my advice and that of the CSA was carefully considered by Executive Ministers and was an important element in informing the Executive's decision making. To be best of my recollection there were no specific examples of key decisions made in by the Executive where my advice from a health perspective had not been sought. Decisions by Ministers did however consider a wide range of factors in addition to the health advice. This included economic advice and financial considerations, the impact on education and family life, and societal and cultural considerations.

809. While the Health Minister's requests were in my view always reasonable, at times expectations and those of other Executive Ministers were not possible to be fully met in as timely a way as I would have wished due to logistical challenges, for example around limited testing capacity or the wider resources available to the Department and in particular CMOG. For example, with respect to the preparation and drafting of regulations this meant that at times the changes to the regulations as decided by the Executive could not be made within the timeframe the Executive had initially decided. This undoubtedly at times did create challenges, and frustrations experienced in delivering on Executive decisions. Understandably these frustrations were sometimes reflected in comments made by all concerned Ministers, officials and myself included.

810. The Health Minister in his questions, demonstrated a high level of understanding of the relevant science and wider health considerations. There was in my view, in general, effective work across Departments. An example of this was the health advice and support provided to the Department of Education by the Department and PHA to which I contributed. In my experience this worked reasonably well, though on occasions, for example in relation to the application of NPIs in schools, or advice for students returning to or from university, these was a lack of clarity on which Department had ownership and leadership, with the expectation that the Department would take the lead. I am not sure that there was always a clear understanding of the role and responsibilities of the lead government department (LGD) and that the Department led on the health consequences of the pandemic and that other departments maintained responsibility for their respective policy

areas and stakeholders. In addition, my advice and that of the CSA informed the policy decisions of the wider Executive but not exclusively so as officials within respective Departments also provided advice to inform their Minister of other considerations and factors apart from health considerations.

811. In general, my role along with the CSA was to support the Health Minister and to provide advice at the request of the Health Minister and to speak to updates and papers submitted by the Department or to elaborate on advice provided by myself and the CSA. At most meetings the CSA and I provided a verbal update on progression of the pandemic, including any significant scientific developments, or material changes in public health advice. Both I and the CSA responded to questions from Ministers on this update and any presentation which was usually provided by the CSA or DCSA or on occasions solely by myself. I and colleagues responded to any points made in subsequent discussions when asked to do so by Ministers. Occasionally both the CSA and I were asked to speak to provide clarification to assist in further understanding of the significance of particular points or the evidence that was presented.

812. Only exceptionally did I see Executive minutes and I was not asked to approve or agree Executive minutes to ensure that my verbal advice was accurately recorded. On one occasion when I did have sight of the minutes following the Executive meeting, I asked that the Health Minister request that the minutes were amended to fully and accurately reflect the advice that the CSA and I had provided. [**MM2/250 INQ000425661** (DoH Ref: MMcB/0221)] Having now had the opportunity to consider some examples of the minutes and individuals personal notes of Executive meetings as a result of disclosures to this Inquiry and in the specific questions put to me, I would observe that the minutes are very brief and do not fully reflect the range of views expressed in discussion, the detail or important context or nuances and caveats in the advice that I and the CSA provided.

Briefing of Ministers

813. My impressions were that the initial arrangements to ensure Executive Ministers were fully and comprehensively briefed by the Executive Office could have been better, and that this may have assisted the Department, given the multiple and many demands faced and aided Executive decision making. Early meetings of the Executive on the pandemic occurred in so far as I was aware with no pre-brief to FM or dFM or for other Ministers with respect to professional and technical advice. As such, Ministers were being presented with a significant volume of new and detailed information with little time to consider. In my view, preparation for initial Executive meetings could have possibly been better and I believe this would have been of assistance to Ministers, although they will be better placed to advise on this. This was particularly the case given the complexity of considerations and the pace of decision making required. None of this is a criticism of officials, rather a reflection of the pace and complexity of information and events as they were then rapidly unfolding with multiple and competing demands all of which made such preparation extremely challenging. At some time after March 2020 as I recall, I proposed pre-Executive briefing meetings to allow the Health Minister, supported by the CSA and myself, to brief the FM and dFM in advance of Executive meetings. This later developed into meetings which were extended to include small groups of Ministers.

814. In these regular meetings with the FM and the dFM, the CSA and I supported the Health Minister, and the meetings often included the Junior Ministers, senior officials in TEO and Special Advisor to the FM and the dFM and other officials. At all times I felt that both the FM and dFM carefully considered and gave due regard to the health and scientific advice, even when the advice was challenging, and this advice was appropriately reflected in later Executive discussions and was appropriately considered in subsequent decisions made by the Executive. As described in paragraphs 72, 109 and 445, I and the CSA met less regularly with other Ministers on an individual basis, or in the case of the Ministers for Justice and Infrastructure sometimes jointly. Occasional meetings were held where several Ministers from one of the two largest parties were present together and these provided an opportunity for Ministers to ask more detailed questions and again my experience was that these meetings were helpful in allowing more detailed discussions. These meetings in my view were always conducted

positively and while Ministers will again be better placed to advise, I believe helped inform wider discussions and decisions at the Executive.

815. At that time there were also meetings with individual Ministers at their request or the request of the Health Minister. Most commonly this was with more than one Minister from the same party or with the Minsters of Infrastructure and Justice jointly as they were the only Ministers from their respective political parties. While Ministers will be best placed to comment, I believe these pre-Executive meetings and briefing sessions were helpful to Ministers and in my view allowed more efficient Executive meetings and ensured more informed Executive meetings and discussion which in my view helped with policy decision making.

816. Whether the earlier formal activation of the NICCMA arrangements would have facilitated this or merely placed further demands on the Department and in other Departments to provide information for onward sharing and briefing of Ministers is debatable, given the work already being progressed and coordinated by TEO particularly in regard to CCG (NI). The Department did not ask for the NICCMA arrangements to be established during February partly because it appeared that the CCG arrangements were being progressed and were effective. The establishment of the regular pre-Executive briefing for the FM and dFM attended by Junior Ministers and officials in my view were very effective in ensuring that the FM and the dFM were fully and comprehensively briefed and greatly assisted Executive discussion and decision making.

817. While undoubtedly much action was already underway, looking back in my view earlier and greater initial central coordination by TEO across government and support to the Health Minister and the Department may possibly have been beneficial. While the Health Minister will be better placed to comment, from discussions which I attended to support him, such a more coordinated approach was supported by the FM and the dFM and is reflected, I believe in their comments at the Executive meeting of the 10 March 2020 with respect to the comments on the Civil Contingency arrangements and the cross-government response. The FM remarked "Civil contingencies – have we got plans to handle – advice…". The dFM is recorded as saying "Exec approach needs to kick in – all need to

contribute.". I am very conscious however that that the demands on TEO were considerable and the resources available to them were also finite. I believe the wider and underlying issue and learning point is a need for greater flexibility and agility in the NICS ability to scale up when faced with such an eventuality, and to deploy individuals with the requisite skills and experience, and earlier central coordination to ensure an appropriate cross government response.

818. I would suggest that further consideration also needs to be given as to how effective the lead government department concept is in large-scale cross cutting emergencies such as pandemic requiring the activation of civil contingencies arrangements across all of government and action by all respective Departments.

819. In the Health Minister's letter of 29 March 2020 [**MM2/251 INQ000023229**] to the First and deputy First Minister he notes, *".....That said, I do feel that we - as a system - have largely been in reactive mode. That is not meant as a criticism, but rather a recognition of the inherent speed and uncertainty with which events have been unfolding…'.*

820. The letter from Minster Swann [**MM2/251 INQ000023229**] was on the subject of strategic planning. The second sentence of the letter provides some context where the Health Minister said "*I wanted to record that, despite the pace at which this issue has evolved, I feel our overall response thus far has been effective – and I want to recognise the way colleagues across all departments have worked together on that.*" Even now, I am not convinced that we could ever have developed a plan which would have fully prepared us for the Covid-19 pandemic. For future preparation what is important from a strategic and operational planning perspective is the development of flexible capabilities that have the agility to be rapidly scaled up.

821. The Health Minister in his letter was referring, I believe, to the speed with which the UKG and DAs had to act in the period 16 March 2020 to 23 March 2020. To my knowledge a substantial amount of work was being progressed by individual Departments and by Departments working together around guidance; monitoring;

setting up funding schemes; putting in place infrastructure to support clinically extremely vulnerable and addressing a myriad of issues. Much of this work was initiated before lockdown but some of the work was as a consequence of lockdown and had to be completed at breakneck speed in the aftermath of the announcement on 23 March. That so much was progressed across Departments over such a short period of time was in my view commendable.

822. By this date we had been in lockdown for one week and this represented one of the earliest opportunities for a stocktake by the Executive on where we were and what happened next. My understanding is that the letter was intended as a timely reminder that the focus at the Executive Meeting should not exclusively be on the health response but on contribution being delivered by all Departments. Similarly the comments of the Justice Minister on 16 March that "Exec always seems to be reacting not leading" [**MM2/120 INQ000065689**, page 10] reflected the pace at which things were moving during this period and the need to respond to advice from SAGE and events but there was in advance of 16 March significant work being already being undertaken to plan for a surge in Covid-19 cases and the possible introduction of further NPIs.

Public Health Communications and Maintaining Public Confidence.

823. While I did work with the Executive Office and the Executive Information Service (EIS) in the development of public health messages this was specifically to ensure that the messages accurately reflected the prevalent public health advice and context to reduce the risk of infection and community transmission. I believe these arrangements worked very well. With regards to [**MM2/252 INQ000091366**] and [**MM2/253 INQ000022453**] and whether a lack of consistency with other parts of the UK was problematic in NI, it is my view that tailoring the messaging to NI was entirely appropriate. In my view there was broad consistency of public health messaging across the UK and the RoI throughout the pandemic. I do not believe there was a material difference in public health messaging across the UK other than perhaps in the extent and timings of some of the NPIs which was inevitable given policy decisions.

824. My expertise as CMO does not extend to assessing the effectiveness or otherwise of Executive messaging or action which may or may not have impacted upon that. I cannot point to objective evidence as to whether any public reports of alleged breaches of rules by senior political figures or civil servants either in NI or elsewhere risked undermining public messaging. While in general terms media reporting of an alleged breach of guidance and rules may not been helpful, might cause understandable anger and had the potential to undermine public confidence, my view at the time was that most people would continue to consider the public health advice and make decisions about their own behaviour on what was best to protect themselves and others. What concerned me was any sense of unfairness that the rules did not apply to everyone. When asked in media interviews at the time my general response, while not alluding to any particular incident, was that the rules where there for everyone.

825. In NI on occasion individual Ministers either in terms of reported behaviours or comments were perceived and or appeared to diverge from the collective Executive position or public health advice. Examples of this included some Ministers reported attendance at a prominent funeral earlier in 2021 and other Ministers reported comments on the Covid-19 certification scheme around 18 November 2021. In general, any reported departure by Ministers or senior officials or others in a prominent public position are likely to have been unhelpful in terms of encouraging the wider population's adherence to public health advice.

826. An important learning point from the pandemic was that securing the understanding, support, confidence and trust of the population and maintaining that was essential in reducing transmission. It is important to ensure that this is something which is carried forward both in relation to future emergency situations and other policy areas requiring population level interventions to improve health and wellbeing.

Following the Science

827. Ministers in my view in general carefully considered the scientific and medical advice provided, in addition to other factors such as the impact on family life,

society more generally, education and the economy. This is reflected in several papers agreed by the Executive and documents subsequently published as the agreed Executive approach to restrictions and their easement.

828. Recorded comments in notes of the Executive meeting on 16 March 2020 show the Executive discussed the concept of "following the science" or following the "CMO's advice" (for example, [**MM2/120 INQ000065689**, pages 12 and 30]). These discussions related to the policy decision on potentially closing schools in NI and alignment with the policy decision in the RoI. The detail of my advice on this is provided elsewhere in the statement. Only Ministers can make policy decisions, and, in my view, there was a risk that "following the science" or following the "CMO advice" might be interpreted that only scientific and public health advice and considerations informed policy decisions by Ministers and overstated the relative certainty at the time. As such, the concept that policy decisions were `following the science' was in my view a misunderstanding, and potentially misleading. The scientific and medical evidence on which the CSA and I based our advice was that which was available at any point in time and there were significant uncertainties particularly early in the pandemic. In my view Ministers decisions were correctly informed by other wider considerations.

829. That said in the public messaging at the time which I and others did to the best of our ability despite the challenging timescales, it was my impression that the public did understand the uncertainty which we faced, the many factors that had to be weighed up in decision making and the media in NI did convey this in my view effectively. The extraordinary adherence to public health guidance by far and away most people showed that the messages and communication was effective. During the pandemic central scientific concepts such as the importance of R were communicated effectively by the CSA and DCSA and were largely understood by the public. In addition, we had in my view highly effective and informed engagement with the local media in NI.

PHA Capacity and Capability

830. The PHA and all other public health bodies across the UK and internationally faced significant and sustained challenges in responding to the pandemic particularly given the intensity and duration of the response. The Department and the PHA by comparison had, by some way, significantly less resource available as compared to other UK jurisdictions as compared with similar policy and legislative responsibilities. Given the complexity and many interrelated key dependencies a collective and integrated approach was taken to aspects of the policy and strategic operational response. Examples of this include the approach to contact tracing, testing and the vaccination programme.

831. At the onset of the pandemic the PHA had a number of staff vacancies and interim appointments in key roles. Recruitment challenges and planned staff retirements were also reflected in vacancies in key roles in the Department at the onset of the pandemic and the professional capacity within CMOG was also small in relative terms as in paragraph 790 above. At all times, of necessity we had to adopt a flexible and adaptive approach to the strategic coordination of our response to the pandemic. We had finite capacity and therefore had to make most effective use of extant skills and experience across the system, which was augmented by the input and support of previously retired colleagues. Ultimately, my team and I, as well as colleagues across the Department, sought to ensure decisions were as informed as they could be and that all aspects of the response were managed and coordinated, and we worked very closely with the PHA.

832. From the Department's perspective, the arrangements we established ensured appropriate leadership, alignment with policy, and provided necessary oversight and governance for key element of the pandemic response. The PHA leadership team, CMOG including myself worked together to ensure the most effective arrangements to address emerging issues and challenges and the many demands faced. This collaboration and collective endeavour was facilitated by the establishment of a number of oversight boards which I Chaired.

833. A number of the more operational and expert public health advisory groups such as the Expert Advisory Group on Testing (EAG-T) were led at Director level within the PHA acting on behalf of the Department. This later group was established at

my request and considered and developed recommendations to the Department on all aspects of Covid-19 testing, including the testing of healthcare workers and community testing. The advice on testing in all settings was kept under continuous review and was incorporated into revisions and updates to the Department's Interim Protocol for Testing (IPT) for Covid-19 which was an operational tool providing information on eligibility for testing and advice on how to access testing. A similar approach was taken in respect of the Test Trace Protect contact tracing programme and the vaccination programme.

834. In Autumn 2020, as the pandemic progressed, I proposed and agreed with the CEO of the PHA that, Dr Ruth Hussey, former Chief Medical Officer (CMO) for Wales, was jointly commissioned by the Department and the Public Health Agency (PHA) to carry out a rapid, focused external review of the PHA's requirements to respond to the Covid-19 pandemic over the subsequent 18-24 months. This rapid review was conducted between mid-November and mid-December 2020 and the final report was delivered to the PHA and the Department in December 2020. The report contained four main, high-level recommendations, which through their implementation would constitute a major change programme for the PHA, leading to a new model for operational delivery of the core public and population health function in NI. The recommendations were to:

- Strengthen the public health system in Northern Ireland;
- Strengthen health protection capability within the PHA;
- Develop science and intelligence capability [in the PHA]; and
- Build a modern, effective and accountable organisation [viz., the PHA].

835. As the public health response to the pandemic was evolving over the course of 2020, and became increasingly challenging, it became clear that the complexity and demands on the health protection service provided by PHA would only increase further placing an even greater focus on high quality, easily accessible public health intelligence and data on the epidemiology of the pandemic in NI, and also on the capacity and expertise of PHA's specialist public health workforce to lead and support all aspects of the pandemic response locally.

836. The PHA and Department accepted the findings of the Hussey Review, and a "Reshape and Refresh" Programme Board was established, which I jointly chaired with the CEO of the PHA, to implement the recommendations and to ensure that it could not only effectively deal with the pandemic and would be better equipped to deal with future pandemic challenges. The Programme also considered how the PHA could maximise the strategic and operational benefits from the establishment of UK Health Security Agency (UKHSA) including pandemic preparedness and capabilities and how they might alignment and complement with capacity and capability requirements in the PHA and Department.

837. The refresh and reshape Programme commenced in March 2022 and is now at an advanced stage of implementation across the PHA.

Lessons Learned

838. Given the significant responsibility I feel professionally to learning for future pandemics I have considered and reflected on whether there are further matters to add in addition to those set out in my M2C-CMO-01 statement. At paragraph 223 of this statement, I referenced the UK CMO Technical Report published on the 1 December 2022 to which I contributed, the steps I took to identify immediate learning in anticipation of future waves at paragraphs 224 and 225 of that statement, with respect to the review of the of the Emergency Response Plan (ERP) in the "in flight" review, the audit of PPE and the rapid review of the contact tracing service. At paragraphs 230 to 249 of that statement, I identified wider strategic learning which I grouped into five main thematic areas: 1. Agility, maximum flexibility and innovation; 2. Government policy and public trust; 3. Research and rapid translation into clinical care; 4 working across government and governments; 5 resilience in government and public health bodies. These mainly relate to the ability to rapidly adapt, scale up and sustain a pandemic response whether in relation to testing, contact tracing or health and social care capacity and capabilities and how those services were provided and learning for the future. To this I would now add a sixth learning point as reflected at paragraph 250 of that statement. It is unquestionably the case that the trust, altruism and sacrifices of

the entire population in their efforts and response were of central importance to the pandemic response and will be so again in future pandemics. In my view notwithstanding statutory or legislative requirements this is the most fundamental lesson from the pandemic: public engagement, altruism and ultimately trust are vital. For those in public office, and in particular those with significant public profile, this should be evidenced in not what we say is required but what we say and demonstrate in all our behaviours and actions as this is the basis of trust.

839. In any future pandemic this same level of wider societal support will be required for the effective implementation of social measures and NPIs before medical countermeasures are developed. It cannot be assumed that we will see the development of effective vaccines and new drug treatments as quickly in any future such scenario. While in the Covid-19 pandemic the development of these measures allowed a change in the balance and the reliance on NPIs to a greater role for effective vaccines and treatments in reducing severe disease, Long Covid and deaths with less reliance on NPIs, this may not be the case as quickly in future pandemics. How we best achieve and maintain the publics support for the necessary NPIs requires careful consideration in the preparation and planning for future pandemics as does how to better mitigate the adverse consequences on those who may be disproportionately impacted by these measures.

Informal Communications and using electronic devices.

840. Given the pace and rapidly evolving situation it was at times extremely challenging to provide more formal written updates and submissions and papers to decision makers in real time. This was particularly challenging in the first three months of the pandemic compounded by the associated level of uncertainty and rapidly developing information and multiple meetings which required the Departments and my attendance, and the outputs collated, assimilated and disseminated. By way of example, such was the volume of emails being sent and received by me that the management and prioritisation of these alone required additional support within my team. In the early weeks and months in particular there were the associated challenges of reassigned staff across the Department for which I am grateful to colleagues, the formation of new teams and remote working and access which

also required rapid adaptation to less traditional mechanisms of engagement and information sharing.

841. To my recollection and to my personal knowledge no policy decisions were taken during the pandemic by WhatsApp or other social media platforms that I participated in. A list of these I have previously provided to the Inquiry along with copies of the messages in these groups. These groups involved use of my mobile NI government issued device which I retain and did not involve the use of any personal devices. The messages which I have shared with the Inquiry related in the main to the sharing of relevant emerging information for which in my view they were an effective vehicle, not as a substitute for formal meetings or recorded minutes, rather as an additional enabling mechanism to assist with communications. As indicated the use of WhatsApp also in my view provided a valuable opportunity to ventilate and decompress in what was the most stressful of circumstances and the value of this is important and should not be overlooked.

842. In my view allowances need to be made for and consideration given to the rapid adoption of effective communication mechanisms in future pandemic preparation and planning to ensure the benefits of such information sharing is maintained and a full record of these is appropriately retained. To the best of my knowledge, I have retained all relevant messages on my work mobile phone from that period which remains in my possession and at no time did I use or deploy an "auto delete" function. I did not use or keep any personal diaries, notebooks, daybooks or planners either physically or electronically during or subsequent to the specified period.

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: 6 March 2024