

- Page 2, para 11: *“It is vital to understand numbers of cases regionally relative to NHS capacity, to know where local more stringent interventions might need to be introduced.”*
- Page 2, para 12: *“With sufficient interventions (assuming they are implemented and adopted effectively for a sufficient period of time), modelling indicates it may be possible to keep cases below the NHS's critical and respiratory care capacity.”*
- Page 2, para 16: *“SAGE cannot be certain that the measures being considered by HMG will be sufficient to push demand for critical care below NHS capacity but they may get very close under the RWC scenario.”*
- Page 2, para 17: *“While SAGE's view remains that school closures constitutes one of the less effective single measures to reduce the epidemic peak, it may nevertheless become necessary to introduce school closures in order to push demand for critical care below NHS capacity. However school closures could increase the risks of transmission at smaller gatherings and for more vulnerable groups as well as impacting on key workers including NHS staff. As such it was agreed that further analysis and modelling of potential school closures was required (demand/supply, and effects on spread).”*
- Page 2, para 18: *“SAGE agreed that its advice on interventions should be based on what the NHS needs and what modelling of those interventions suggests, not on the (limited) evidence on whether the public will comply with the interventions in sufficient numbers and over time.”*

**16 March 2020: COBR meeting [INQ000056210]**

- Page 4, para 1: *“On the basis of the NHS capacity model, further action should be taken. There are now 35 confirmed deaths and a further 20 unannounced. There were 55 cases in Intensive Care Units.”*

**18 March 2020: Covid-19 Strategy Ministerial Group meeting [INQ000056261]**

- Page 4: *“THE CHIEF EXECUTIVE OF NHS ENGLAND said that NHS resilience work had begun, including on assertive discharge from hospitals into the community, with an estimated 16,000 people to be released in 21 days. The plan also included deferring non-urgent surgery, repurposing theatres and retraining anaesthetists to use ventilators.”*

**18 March 2020: SAGE meeting [INQ000061525]**

- Page 3, para 2: *"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."*
- Page 3, para 4: *"Reliable data on the health impacts of existing interventions will only be available in 2 to 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 to 3 weeks. It may be possible to collect intermediate data, and this should be a priority."*
- Page 3, para 13: *"Modelling suggests that, without mitigation, London could reach COVID-19-related intensive care capacity by early April."*

**18 March 2020: Paper from the CMO to the Prime Minister and SoS titled 'Protecting London'**  
[INQ000048120](#)

- Page 1, para 2: *"Based on current trends, assuming no effect from current mitigations London's normal ICU capacity will be full in 15 days. This is based on numbers doubling every 5-6 days. As the capital has 800 ICU beds and 100+ are currently occupied, in 15 days capacity will be breached assuming all ICU beds can be allocated to COVID-19 patients."*
- Page 2, para 9: *"This is an uncertain and moving picture. SAGE advise they will have a better understanding what the impact of the current measures on infection rates in two to three weeks. Unmitigated ICU capacity will decrease significantly in London over that time and normal capacity may be exceeded."*
- Page 2, para 17: *"The CMO advises that we do not yet have the data to make a fully informed decision on the likely effect of existing measures. Specifically we do not yet know the behavioural impact of and adherence to the measures announced on Monday, in particular on social distancing. Whilst it will not be possible to wait for epidemiological data based on the short timeframes before ICU capacity is exceeded, data on adherence to current measures on which modelling assumptions are based can be determined more quickly."*

**18 March 2020: COBR meeting [INQ000056211]**

- Page 5, para 2: *"....The GCSA said that without further interventions they expected London was approximately 2-3 weeks away from Intensive Care Units (ICUs) being full with COVID-19 patients."*

- Page 5, para 3: *"...The GCSA said that even if social distancing measures were increased London remained at risk of exceeding its ICU capacity. Modelling suggested that school closures would play an important role in helping to ensure that ICU demand was not exceeded. The Scientific Group for Emergencies (SAGE) estimated that school closures could potentially reduce COVID-19 cases by 10-15 per cent - and below the threshold for breaching ICU capacity. SAGE modelling had been offset by an expected increase in use of grandparents for childcare - more likely to be used by single parent families. Modelling assumed that schools should be kept partially open to ensure that key workers could continue to contribute to the national effort. For example an estimated 15 percent of the NHS's workforce would be impacted by school closures. SAGE modelling suggested that if school attendance was limited to 10-20 per cent the social distancing effect would be equivalent to 60-70 percent of a total shutdown."*

#### **19 March 2020: No.10 officials meeting [\[INQ000232070\]](#)**

- Page 1: *"CMO was strong on the fact that measures already introduced + school closures should – with 75%+ levels of compliance – reduce the levels of transmission so that  $r$  falls below 1 and that we won't be able to assess that for 2-3 weeks. He was also clear that there's no world in which London ICU capacity isn't comfortably exceeded, and so we shouldn't be messaging that that is a possibility. And that stringent London-specific measures risked sending the wrong message to the rest of the country."*

#### **20 March 2020: Covid-19 Strategy Ministerial Group meeting [\[INQ000056265\]](#)**

- Page 4: *"Patients were being moved from busy hospitals into hospitals which were less busy to spread the burden or cases. This was being misreported in the press as hospitals being overloaded, and should be corrected."*

#### **20 March 2020: COBR meeting [\[INQ000056212\]](#)**

- Page 4, para 1: *"...The CMO said that given the scale of the outbreak, infections were likely to double every four to five days and that the timescale for ascertaining evidence of the effectiveness of intervention measures was approximately two to three weeks. This two to three week timescale was also the timescale expected for effects from the current outbreak to be significantly felt in Intensive Care Units (ICUs). This applied across the UK."*
- Page 4, para 2: *"The CHAIR turned to the Cabinet Secretariat to introduce the paper setting out the recommendations for further social distancing measures. The DIRECTOR GENERAL AT THE CABINET SECRETARIAT said that the objectives of the measures in the paper were to*



*reduce the demand on ICUs and that they were created within the context of the previously announced measures and that the measures were aimed to address the gap between the current situation and the required 75 per cent reduction in non-essential social mixing."*

- Page 5, para 5: *"On ICU mutual aid, this happened normally and so far ICUs were not collectively facing unexpected pressures, though this was expected to change in the near future, as ICUs were put under greater strain."*

#### **20 March 2020: C-19 Health Ministerial Implementation Group meeting [INQ000055934]**

- Page 6: *"In discussion the following points were made: - The NHS would work with the private sector to increase capacity by 8,000 beds. - Alternative accommodation, such as university halls could be used to provide extra care capacity. - There would be a high need for respiratory support skills and options to increase capacity could include providing specific training to health trainees and deploying combat medical technicians into domestic service; - Work was progressing with organisations in the voluntary sector to deploy volunteers; - The Embassy in Beijing has identified suppliers of PPE to help with stock shortages; - The Group should discuss the role of volunteers and private healthcare at future meetings."*

#### **21 March 2020: Covid-19 Strategy Ministerial Group meeting [INQ000056263]**

- Pages 2-3: *"The CHIEF MEDICAL OFFICER said that there had been 872 new cases identified the previous day. The critical question was how many cases were in the Intensive Treatment Unit (ITU); this number was 335, of which 193 cases were in London. This was up from 143 the day before. Under normal circumstances there were 700 ITU beds in London, which could be expanded. London was not yet at that pressure point. Prohibitions on social activity had been discussed at length by the Committee the previous day. There was some risk of ITUs being overtopped if the Government did not do more, but there were also risks associated with further action. The ITU data being presented alone was not a reason for the Government to decide that day to change decisions made the previous day."*
- *"The GOVERNMENT CHIEF SCIENTIFIC ADVISOR said that the view from the modelling group was that the doubling rate was slightly under five days. In the discussion the following points were made:*
  - *The data in the pack was not correct, and this was not the rate at which deaths and ITU cases were doubling. The numbers needed to be right so that the Government could get a grip on the situation. The figure of 780 ITU beds in London was given a few weeks ago;*

the Committee needed to know whether capacity had been increased since then and if not, why not;

- If cases continued to increase there would be 1200 in five to six days, then 2600, then 5000 two to three days later;
  - There was nothing that could be done about the number of cases already in the system. This was 177,000 cases without accounting for any further cases;
  - There may be drugs available to stop people getting pneumonia and dying, and other interventions to reduce stress on ICUs overall.”
- “Responding, the CHIEF EXECUTIVE OF THE NHS said that the NHS was aiming for 500 new beds in the coming week to ten days, and 400 new beds per week after that. The private sector would also provide more beds from the following week. To increase capacity, the first thing to do was empty critical care beds. There had been a conference call of all ITU specialists the previous evening, and they estimated that they would be able to free up between a third to a half of all critical care beds as the situation worsened. The current critical care occupancy was 79 percent and emptying out. Northwick Park hospital had been filling up the previous night and had spread the load across London. The NHS was aiming for 2,800 ventilated beds and 300 in the independent sector in London, using both critical care capacity and ventilator capacity in operating rooms. He said that they were looking at staffing as part of their twelve week plan.”
  - Responding, the GOVERNMENT CHIEF SCIENTIFIC ADVISOR said that the data had been worked out in terms of doubling times. The supply of beds would become critical at about 3.5 doubling times on current projections. The North East and Yorkshire were at seven doubling times, which showed the importance of work to increase the doubling time. The worst case scenario was that ITU capacity in London would be overwhelmed in nine days’ time, but the projection was that this would happen in 15 days’ time. The data only took account of some of the measures to increase capacity. The measures being taken should push this from between five and seven days to 21 days, and if it was 21 days then the NHS would cap out below the surge capacity. This was the aim. Responding, the HEALTH SECRETARY said that the data on ITU capacity should form part of the ‘battle plan’ update to this meeting the following week and a plan on bed capacity would be presented at this meeting the following day. The ‘battle plan’ would include testing and the launch of an app, which the top coders in the world were working on and would be ready in a couple of weeks.

**21 March 2020: Report from the CMO titled ‘Coronavirus: summary of strategic and tactical approach to the epidemic’ [INQ000203890]**

**22 March 2020: C-19 Health Ministerial Implementation Group meeting [INQ000055942]**



- Page 3: “ - to support NHS capacity, elective operations will stop on the 15th April, with individual Trusts tapering to that date at the rate they see fit. Community healthcare providers now have the responsibility for the discharge of medically fit patients, moving the system to a ‘pull’ model. Individual acute Trusts should also be expanding their ICU capacity. Work across the Ministry of Defence & NHS has created a plan for an additional 2,000 beds housed at the ExCel London centre, which will be needed to support London ICU bed capacity within a week at the current rate of demand. ICU supply and demand data will be broken down by region by the end of the next week (commencing Monday 23 March); - to support capacity in community care advice to care homes should be updated - current guidance suggests they should accept patients who are asymptomatic even if they have not received a COVID test. The CMO should opine on this to reassure care homes, but a potential option should care homes refuse to accept could be step-down care in hotels. Non-NHS bed procurement should be tracked as part of overall capacity (e.g. hotel beds). Further work is required on Social Care metrics to allow a better understanding of system resilience and capacity available (in beds and care packages) to support discharges;”

**22 March 2020: Covid-19 Strategy Ministerial Group meeting [INQ000056266]**

- Page 4: “The current number of deaths implied the best estimate from the data was 230,000 patients (using basic 5% figure), with 11,000 in hospital and 3500 of which needed ICU beds. This implied the NHS would not be able to cope as we are now.”
- Page 5: “THE CHIEF EXECUTIVE OFFICER OF THE NHS responded that over the last couple of weeks there had been a major drive to free up capacity in hospitals. That had freed up to approx 20,000 acute hospital beds, he noted occupancy was now at the lowest in more than 3 decades. In terms of critical care he noted we were discussing further and the London team would be discussing the London critical care plan tomorrow.”

**23 March 2020: Covid-19 Strategy Ministerial Group meeting [INQ000056264]**

- Page 4: “The CHIEF EXECUTIVE OFFICER OF THE NHS said that care ratios in intensive care would usually be 1:1, but that in London they were being stretched to 1:8. In the short term the NHS would be able to shift staff from all of their specialist work and theatres onto overnight recovery and long term ventilation facilities. A longer term plan would be needed.
- Continuing, the CHIEF EXECUTIVE OFFICER OF THE NHS said that clear planning was in place to ramp up the number of ventilators. Staffing would be managed less by bringing new people into the NHS, and more by moving existing personnel onto new tasks with some refresher training. Surgeons would need to be trained as many do not use ventilators. Anaesthetists, who

*use ventilators frequently, would be moved early, then acute physicians. Staff moves would then work through groups who are most used to working with critically ill patients. There had been fantastic cooperation from the Army in support of these efforts."*

- Pages 4-5: *"(b) it was important not to be falsely reassured by the fact that hospitals were coping at the time. The NHS was doing well, but the numbers of those needing critical care would follow an exponential path. It was likely that the NHS would be overburdened."*
- Page 5: *"(c) it was important to understand how long the NHS would be able to continue in this mode; (d) it was important to understand whether patients could be treated in areas outside London to relieve pressure."*

#### **23 March 2020: COBR meeting [INQ000056213]**

- Page 4, para 1: *"...The GCSA said that the current rate of infection by a single person was 2.6 - 2.8 and this doubled in Intensive Care Units. The rate was doubling every three to five days which was similar to Italy, Germany and Spain."*

#### **24 March 2020: Cabinet meeting [INQ000056136]**

- Page 4: *"Continuing, THE PRIME MINISTER said that he was optimistic that there were signs that the virus may not be spreading exponentially in the UK, but he was not complacent. The risks were immensely stark. Pressure in London was building up. More intensive care beds were needed."*
- Page 4: *"THE GOVERNMENT'S CHIEF MEDICAL ADVISER said that there would be four possible ways that coronavirus could result in an increase in deaths. First, direct deaths from the virus. Second, indirect death from those with otherwise treatable conditions as a result of the pressure that the virus put on the NHS's ability to deal with normal business. Third, death from conditions for which a procedure had been delayed as a result of the NHS needing to reprioritise; the longer the epidemic went on, the more of these there may be."*
- Page 5: *"THE SECRETARY OF STATE FOR HEALTH AND SOCIAL CARE said that there was a clear battle plan to defeat coronavirus through the lens of the NHS and social care system, working with other government departments. The first part was to ensure the resilience of the NHS and social care system: upgrading those parts of the system which were tackling coronavirus whilst deprioritising non-life-threatening operations such as hip and knee*

*replacements. A new hospital was being built in London with the help of the military; more may be built in due course. The biggest problem was making sure NHS staff could get to work."*