On the Backfoot
: How the UK's fight against COVID-19 began

Keith Cooper
Senior staff writer, The Doctor magazine
KCooper@bma.org.uk

Arthy Hartwell
Head of international and immigration, British Medical Association
AHartwell@bma.org.uk

While all countries' response to COVID -19 will share similarities, each one is also unique, cut to the cloth of their context of history, culture, and health system, among other factors.

This article examines the UK's management of the pandemic by examining some of the issues it has in common with other countries and pinpointing its own particular challenges. It will cover: a brief history of the pandemic in the UK; how prepared it was for the pandemic; access to PPE (personal protective equipment); its capacity to test, track, and trace outbreaks, including the use of technology; its approach to institutionalised living arrangements, such as care homes for older people; and its role within the global health security framework.

While our primary focus is on England's response, we will reference differences with

the other three nations, Northern Ireland, Scotland, and Wales. Responsibility for healthcare is devolved from the UK Government to these three nations.

We identify multiple foreseeable flaws in the UK's response, leaving it on the backfoot as it entered the global fight against the pandemic. Its public health system, particularly in England, was shrunken by austerity measures. Its health and social care services had been weakened by years of financial strain. It lacked the experience of tackling a significant outbreak of other coronaviruses, such as SARS and MERS-CoV, and it had not learned the lessons from those countries which had, including Singapore and South Korea.

We conclude that the UK's experience underlines the need for: a strong national public health system, not one only brought up to strength in a crisis; the flexibility to learn from other nations; and a strengthened infrastructure for global health security, not a weaker one as is threatened.

The impact of the COVID-19 pandemic on the UK, its public services, and the Government's response to it are without precedent in the UK's history. Its NHS (national health service) and social care services had to re-organise at pace.

The UK's first two cases of COVID-19 arrived from abroad and were confirmed by England's chief medical officer, Professor Chris Whitty, on 31st January 2020. This was a day after the WHO (World Health Organization) declared the novel coronavirus outbreak a Public Health Emergency of International Concern. The NHS at that time was 'extremely well-prepared', Prof Whitty said in a statement. A further 38cases were recorded by the end of February, included cases where transmission had occurred with in England.

The UK continued its attempt to contain COVID-19 until 12th March, when it shifted to the 'delay' phase. This shift came the day after the WHO reported more than 188,000 confirmed cases in 114 countries, declared the outbreak a pandemic, and called for 'urgent and aggressive action'.

Back in the UK, hospitals were instructed to postpone admissions, discharge all patients fit to leave, and 'bulk buy' bed space from private firms, a letter from NHS England, a Government agency, said on 17th March.

The four governments of the UK began developing their own track and trace applications for mobile phones. The NHS started boosting daily testing capacity from 1,500 to an initial target of 10,000.

Efforts to track and trace cases in the community had now stopped for want of capacity, amid predictions the caseload could hit 1 million, Professor John Newton, director of health improvement at Public

Health England told the UK Parliament's Science and Technology Committee on 22nd May. England's limited testing capacity was to be focused on hospitals instead.

Following increasing restrictions through March, including the closure of schools, entertainment, hospitality, and indoor leisure facilities, a full lockdown was announced on the 23rd. From then on, people could leave home for limited purposes: for one daily exercise, essential shopping, and medical care. Travel to work was permitted only when absolutely necessary. Libraries, playgrounds, places of worship, and shop selling non-essential items were told to close. The armed forced were drafted in to help distribute PPE to hospitals, amid growing concern over supply problems. Globally, other countries began their own versions of 'lockdown' to contain transmission. Some, such as Sweden and Taiwan, took a different approach, using limited containment measures instead.

By 12th April, beds for COVID-19 patients had increased from 12,600 to 53,700. Temporary hospitals were established in major towns and cities to alleviate pressure on permanent ones. The most notable of these was the NHS Nightingale hospital, in London. This opened on 3rd April with space for 4,000 intensive care beds but was effectively closed a month a later. It is now officially on 'standby', according to Barts Health, the NHS trusts which runs it.

Daily cases continued to rise to a peak of 6,201 on 1st May. Days later, a 'roadmap' for a phased easing of the lockdown was published in England. Each of the other four UK nations had their own versions. England's plan set provisional dates for increasing social contact and opening shops, school, leisure facilities, and outdoor spaces.

Under this plan, restrictions could be re-imposed as 'local lockdowns' for any outbreaks. To date, local downs have been imposed in several towns and cities across the UK, including Manchester and Leicester in England, Aberdeen and Glasgow in Scotland, parts of Belfast in Northern Ireland, and Rhondda Cynon Taf in Wales.

Following a further rise in cases through August and September, further national restrictions were introduced on 14th September, prohibiting social gatherings of more than six people.

Hospital and care workers' access to PPE was a major problem across the UK during the early months of the pandemic, despite Government assurances that supply chains would improve. England's CMO Prof Whitty admitted to the UK Parliament's HSCC (Health and Social Care Committee) in July that there had been 'considerable problems with the supply of PPE through a large period of the early part of the pandemic'.

Multiple surveys by medical and other healthcare bodies revealed significant concern about access to PPE from frontline staff.

Doctors reported having to buy their own masks and respirators from hardware stores or borrow them from schools. A survey of 6,000 doctors by the BMA (British Medical Association) in April found that half of respondents who worked in high risk areas reported shortages or no supply of long-sleeved gowns and goggles. That same month, a similar proportion of nurses (32 percent) reported shortages of surgical masks during their shifts in a survey with 13,605 respondents by the Royal College of Nursing, a union.

The lack of access to PPE became a significant source of anxiety for doctors, compounded by changes in Government guidance on the use of protective equipment in April and reports of rationing by their employers when supplies ran short.

This lack has also been linked in some media reports to the deaths of healthcare and social care staff. More than 300 staff deaths were reported to involve COVID-19, according to the UK Government in May. The Scottish Government reports regularly on deaths of health and social care staff involving the virus. No further figures have yet been released for England.

After pressure from medical bodies, including the BMA, the NHS introduced measures to protect NHS doctors with BAME (black, Asian, and minority ethnic) heritage, following emerging evidence of disproportionate deaths and illness among the population in this group. Similar trends in this community have been reported in the United States and Australia.

While PPE shortages were a problem worldwide, concerns have been raised about the UK's stockpile and how it managed its supply chains once the pandemic was upon it.

Questions have also been raised about the Government's early reluctance to make the use of EU (European Union) procurement processes, which may have improved supply. The UK's cabinet office minister Penny Mordaunt indicated on 24th March that the Government would not use these supply sources. 'We have chosen other routes,' she told the UK Parliament.

The adequacy of England's central stockpile of PPE was examined by its National Audit Office in its June report, Readying the NHS and adult social care in England for COVID-19. This found that the stockpile had been designed for a flu pandemic and that it lacked essential items such as visors despite being advised in 2019 to include them by the New and Emerging Respiratory Virus Threats Advisory Group, an expert committee. According to modelling in this report, England's central stockpile could supply only

20 per cent of the required gowns and 33 per cent of the required eye protectors for a reasonable worst-case scenario.

England's preparedness for COVID-19 has also been hampered by longstanding financial pressures on its health and social care services, and a failure to learn lessons from other countries' experience of coronaviruses.

England's response in particular has been hobbled by a decade of disinvestment in its public health system and financial pressures on its NHS and local government, which commissions much of its social services. These pressures were flagged in the NAO's June report. This points also to the English administration's dependence on short-term financial fixes for health and social care rather than efforts to address their 'long-term sustainability'.

Since 2013, responsibility for public health in England has been shared between two central agencies, NHS England and PHE (Public Health England), and a network of local councils. Local authorities have in particular suffered a significant reduction in funding – a drop of £850m in real-terms between 2015/16 and 2019/20, according to the Health Foundation and the King's Fund, two respected research bodies in England.

England's CMO Prof Whitty told the July HSCC that the country had 'underinvested in public health over a period of time' and that 'there is an investment question on the public health side'. Investment in public health tended to follow a 'crisis', he added.

The Government has admitted and begun responding to shortfalls in its public health response by restructuring its central agencies, replacing PHE with a new UK-wide institute for health protection – the National Institute for Health Protection. This will combine roles already held by its forerunner with those of two other agencies, NHS Test and Trace and its Biosecurity Centre. England's secretary of state for health and social care Matt Hancock admitted in a speech, announcing this change in August, that the country 'did not go into this crisis with the capacity for a response to a once-in-a-century scale event'.

Unlike other countries such as Germany, the UK was unable to call quickly upon laboratories in the private sector to boost its testing capacity. The UK could have examined its capacity to respond to a coronavirus beforehand by learning from countries which had. In May, prime minister Boris Johnson admitted to Parliament's Liaison Committee the 'brutal reality' that the UK had not learned from SARS or MERS-CoV and 'did not have a test operation ready to go on a scale that we needed'.

The UK could have learned from Singapore and South Korea, for example, both of which boosted their capacity to respond, following

their respective experiences with coronavirus.

Singapore established a national centre for infectious disease, a network of 'public health preparedness clinics', and a factory to make N95 masks, as well as training more infectious disease and public health specialists, and increasing its supply of PCR testing machines. Singapore had 'come a long way' since SARS in 2003, Wong Chiang Yin, public health consultant and past president of the Singapore Medical Association told The Doctor magazine, a publication of the BMA in August.

In South Korea, the regulations it introduced for small and medium-sized pharmaceutical companies helped it to ramp up quickly its testing capacity to 120,000 a day, as the UK struggled to hit its initial target of 10,000.

England had 'incredibly limited testing capacity' during its contain phase in February and early March and so lacked the capacity to find, test and isolate cases, Professor Whitty told the HSCC July meeting. Testing capacity took time to increase from this 'standing start', he added. This limited capacity forced a focus on hospitals as there was a 'big risk' the NHS was missing cases in them, Prof Whitty told the same meeting. Testing capacity remained a constraint in September, amid reports people were being asked to drive hundreds of miles to test centres.

Like some other countries, the English government has struggled with the development of a mobile phone application for track and trace. The one it began developing in March was abandoned in June after a trial on the Isle of Wight, an island off the south coast of England. A new one was due for launch in England on 24th September. The Northern Ireland Executive, its government body, launched its application in July. The Scottish Government launched its one in mid-September.

Singapore's Dr Wong says it too struggled with its track and trace APP. South Korea's capacity to contact its citizens has of course been eased significantly by its widely used disaster alert app.

England's limited tested capacity, as its number of cases peaked, has had a significant impact on care homes for older people.

In the five weeks following the March NHS edict - that patients fit enough should be urgently discharged from hospital - some 25,000 older people were discharged into care homes, according to the June NAO report. No record was taken of how many had been tested for COVID-19, it added. There followed a peak in the number of cases in care homes. Between 9 March and 17 May, almost four in 10 (38 per cent) of care homes across England reported an outbreak. There have been 14,177 deaths in care homes, involving COVID-19, up until 21st August, 2020,

according to the Office for National Statistics.

Regular testing of residents and staff in care homes was rolled out in July, the Government has said. Testing capacity has however been reported to hamper this routine.

Another concern about the UK's public health system is its relationship with the (ECDC) European Centre for Disease Prevention and Control, following its exit from the EU in January this year.

The ECDC is a key co-ordinating body of health security across Europe and integral to the complex of interlocking components of the global health security system. It operates the European Surveillance System, the Epidemic Intelligence Information System, and the European Union Early Warning and Response System (EWR).

In 2018, the BMA warned that tackling global outbreaks such as COVID-19 could be made more difficult if the UK loses access to the ECDC's early warning system for cross-border threats. 'Health protection and security in the UK has been fundamentally shaped by our membership of the EU,' the association said in its briefing paper, Health protection and health security: maintaining an effective working relationship between the UK and the EU. Similar concerns have since been raised by The Brexit Health Alliance, a group of health, research, and public health bodies.

The UK's future relationship with the ECDC remains unclear as the end of the 'transition' period, which followed its exit from the EU, and is due to end in December.

So how well has the UK Government managed COVID-19 overall?

As we have shown, its officials and ministers have already admitted to several shortfalls in its response, especially in those vital early months when cases and deaths were spiking.

They had failed to learn the lessons from SARS and MERS-CoV. Testing capacity in the vital early months of the pandemic, they admit, was extremely limited and was still limiting its response in September. It had not prepared an adequate plan to accelerate testing for an epidemic, as other countries, such as South Korea and Singapore had, following their outbreaks of other coronaviruses.

Without that experience and without having learned lessons from those that had, the UK entered the pandemic with a response system weakened by a decade of disinvestment. It entered the pandemic with an NHS, a social care, and local government system under financial strain, without the stockpile of PPE which its expert advisers had recommended.

Its NHS ordered the hospital discharge of tens of thousands of patients back into the community over several weeks without testing them routinely for the infection. Months were lost in the development of a failed mobile

phone application for track and trace.

The doubts and concerns which were raised about the UK's role in global health security remain, as its exit from the EU, and its centre for disease and prevention control, looms. The impact of a major upheaval in its own central public health agency mid-pandemic remains to be seen.

Prime minister Johnson has admitted that there are lessons to be learned. He's pledged to ensure the country is better prepared for the future. He agreed in Parliament in July to an 'independent inquiry' into the handling of the crisis - when he considers the time to be right. 'COVID has told me that we move too slowly sometimes,' he told the BBC the same month. 'We need to go faster.'

The UK's response to the COVID-19 pandemic, we've shown, has suffered from several foreseeable shortfalls. In this sense, it is unlikely to be unique among the countries of the world.

How the UK fares with this pandemic or any other public health crisis of a similar scale will, however, depend not only on the lessons it learns from its own experience. It will depend also on its willingness to learn from and co-operate with other countries battling COVID-19 and the global health security architecture of which they're a part.

The COVID-19 pandemic and the UK's experience offers yet another grave reminder that viruses, alongside other emerging and re-emerging infectious diseases, do not respect national borders. It's a reminder that our vulnerability to them is shared.

Our response must therefore not only be swifter, it must also be collaborative and in this the World Health Organization plays a vital role. Threats to weaken this role, such as through funding reductions, may pose a threat to all countries by leaving us all, the UK included, more vulnerable to the next public health emergency before this one has passed.