

this week

CONTAGION page 213 • VACCINE SAFETY page 214 • COVID VARIANTS Q&A page 216



DAVID CLIFF/NURPHOTO/PA

NHS shake-up to reverse Lansley reforms

Key elements of the Health and Social Care Act 2012 are to be reversed in the biggest legislative shake-up of the English health service in a decade.

A draft white paper, leaked to the website Health Policy Insight, outlines proposals to reverse major parts of former health secretary Andrew Lansley's controversial reorganisation, including formally abolishing requirements to do with competition and competitive tendering in the NHS, and shifting control and decision making power back to Whitehall.

As *The BMJ* reported in December, clinical commissioning groups, created in 2012, will be replaced by larger statutory "integrated care systems" that will manage local health systems. But the government also intends to shift substantial power from NHS England to the secretary of state for health and social care, who will be given direct control over local integrated care systems, NHS England, and NHS foundation trusts, which will lose their independence. Ministers will also be able to intervene "at any point" of a reconfiguration process and be given powers over arm's length bodies to stipulate their functions and abolish them.

The document does not include a specific plan to tackle workforce shortages but says

the health secretary will have a new duty to publish a report every parliament that "will support greater clarity around workforce planning responsibilities."

The Care Quality Commission will be given direction to assess local authorities' delivery of adult social care, and the health secretary will be able to intervene if there is a risk these duties will not be met. But there are no details for social care changes.

The Medicines and Healthcare Products Regulatory Agency will be able to set up new national medicines registries and work with the NHS to maintain them "where there is a clear patient safety or other important clinical interest," the draft paper adds.

Danny Mortimer, NHS Confederation chief executive, said, "There is often anxiety about 'another NHS reorganisation,' but the NHS and the partners we work with have been on this journey now for several years. This is the logical next step."

However, he added, "There is concern that in an overly centralised system the reforms need to better empower local NHS and care leaders to lead—they are best placed to run services for their communities."

• [bmj.com](https://www.bmj.com) See Andy Cowper *BMJ* 2021;372:n384

Gareth Iacobucci, *The BMJ*

Cite this as: *BMJ* 2021;372:n377

Matt Hancock, the health secretary for England, will oversee a major reorganisation of the health services in the country

LATEST ONLINE

- Increase in medical school applicants will not equal more doctors, says BMA
- NHS agrees to pay £13m for boy who was left brain damaged from lack of nutrition after birth
- McKinsey agrees to pay \$574m to US states to settle opioid claims

McKinsey & Company

SEVEN DAYS IN

BMA welcomes decision to enable doctors to make deferred choice on pensions



The BMA has backed the government's decision to allow doctors to make a deferred choice on their pension contributions, in response to a Court of Appeal ruling that changes made in 2015 unlawfully discriminated against younger members of public service pension schemes.

The changes meant that only older members—those within 10 years of retirement in April 2012—were allowed to remain in the older and more favourable final salary scheme.

After consulting on two options, the government said it had decided to proceed with the deferred choice rather than the immediate choice option.

"This means that members will make their decision between scheme benefits shortly before benefits are paid from the scheme," it said. "In the meantime, members will be deemed to have accrued benefits in their legacy schemes, rather than reformed schemes, for the remedy period, until they make that choice."

Most respondents to the consultation backed the deferred choice option, as it would give greater certainty on benefit entitlements at the point at which they made a decision, while the immediate choice would have forced them to make a decision now, on the basis of assumptions about factors such as future earnings.

Vishal Sharma (left), chair of the BMA pensions committee, said the government had listened to "common sense."

Gareth Iacobucci, *The BMJ* Cite this as: *BMJ* 2021;372:n362

Covid-19

No classic symptoms in 40% with past infections

Around a quarter of people with evidence of past covid-19 infection were completely asymptomatic, a UK study found, while 40% did not have any of the three typical symptoms—fever, persistent dry cough, or loss of taste or smell. The UK Biobank SARS-CoV-2 Serology study analysed monthly blood samples of nearly 19 000 people from 27 May to 4 December. Some 99% of participants who tested positive for previous infection retained antibodies for three months after being infected, and 88% did so for at least six months.

Past infection may mean only single mRNA dose

People who have already had confirmed covid-19 may need only a single dose of an mRNA vaccine, two small studies indicated. The first, from Mount Sinai in New York and Paris and published as a preprint, found that seropositive people had a rapid antibody response after one dose of either the Pfizer-BioNTech or the Moderna vaccine. It also found that people who had had

covid reported side effects more frequently after the first dose. A second small study from the University of Maryland, also published as a preprint, reported similar findings.

Data for Oxford vaccine support 12 week dose gap



The UK's approach of leaving a three month interval between doses of the Oxford-AstraZeneca vaccine was backed by new data, and Oxford University researchers said the vaccine "may have a substantial impact on transmission." The paper, a preprint under review by the *Lancet*, is an analysis of additional data from trials involving 17 177 participants in the UK, Brazil, and South Africa. A single standard dose of vaccine provided 76% protection overall against covid-19 symptoms in the first 90 days after vaccination, and protection did not wane in that time frame.

International news

South Africa pauses use of Oxford vaccine

Rollout of the Oxford-AstraZeneca covid-19 vaccine in South Africa was paused after a study in 2000 healthy and young volunteers reported that it did not protect against mild and moderate disease caused by the new variant (501Y.V2) that emerged there. The unpublished study, seen by the *Financial Times*, examined the efficacy of the vaccine against the 501Y.V2 variant—which accounts for around 90% of cases in South Africa—in HIV negative people. No data have been made available to the public.

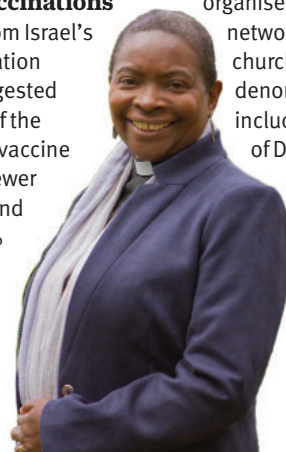
New infections in Israel drop after vaccinations

Early findings from Israel's covid-19 vaccination programme suggested that the rollout of the Pfizer-BioNTech vaccine was leading to fewer new infections and was at least 50% effective 13 to 24 days after the first dose. Israeli Ministry

of Health figures, reported by the BBC, found that only 531 of almost 750 000 fully vaccinated people aged over 60 tested positive for SARS-CoV-2 (0.07%). Of these, just 38 were admitted to hospital with moderate, severe, or critical disease.

Vaccine hesitancy Bishops and church leaders tackle misinformation

The NHS joined forces with cross denominational leaders of the Christian faith to launch a campaign aimed at tackling misinformation that has caused distrust about the covid-19 vaccine, particularly in black majority communities and churches. Supporters of the Give Hope campaign organised by YourNeighbour, a network of more than 1000 churches from over 40 denominations in the UK, include Paul Butler, bishop of Durham; Agu Irukwu of the Jesus House; Rose Hudson-Wilkin (left), bishop of Dover; Anthony Cotterill of the Salvation Army; and other senior church leaders.



MEDICINE

Research

Russian vaccine efficacy is 91.6%, results show

The covid vaccine developed by the Gamaleya Research Institute, part of the Russian Ministry of Health, has an efficacy of 91.6%, interim results from a phase III trial showed. Findings published in the *Lancet* showed the two dose regimen of the viral vector vaccine was generally well tolerated, with no associated serious adverse events and similar efficacy in people aged over and under 60. The Gam-COVID-Vac, also known as Sputnik V, was given to 15 000 volunteers (of whom 1611 were over 60), and 4902 received a placebo.

Climate change

"Millions" face potential health risks in UK



Almost a third of people report experiencing post-traumatic stress disorder after their house flooded, highlighting the potential health risks from climate change for millions of UK residents, warned a report by the Climate Coalition and the Priestley International Centre for Climate. Experts estimated that more than 12 million people in the UK were vulnerable to adverse health because of events made more likely by climate change, such as heatwaves and flooding.

Progress on air quality is "painfully slow"

The government is failing to deliver on its 2011 pledge to improve the natural environment "within a generation" and must do more to tackle critical issues such as air and water quality, an inquiry by the Public Accounts Committee concluded. Complexity "is not



The viral vector "Sputnik V" vaccine

a good enough excuse" for "painfully slow" progress, MPs argued. The committee chair, Meg Hillier, said, "Government must move on from aspirational words and start taking the hard decisions required to deliver real results—time is running out."

Alcohol

Numbers of deaths hit record high in 2020

Deaths from alcohol reached record numbers in England and Wales in the first nine months of 2020, showed provisional data from the Office for National Statistics. Some 5460 deaths related to alcohol specific causes were registered from January to September—a 16.4% increase on the same nine month period in 2019 (4689 deaths). A peak rate of 12.8 deaths in 100 000 people was reached in the first three months of 2020—the highest since records started in 2001.

Staff wellbeing

Call to support doctors and drop "hero narrative"

The mental health charity Mind launched guidance for NHS leaders on creating cultures where mental health and wellbeing are prioritised and talked about openly. The guidance, funded by the BMA, aims to help tackle the stigma that has been compounded by the pandemic's "ongoing hero narrative."

● OPINION, p238

Cite this as: *BMJ* 2021;372:n374

CYBER CRIME

NHS staff in England received a total of 137 476

malicious emails last year, official figures from NHS Digital showed

[FOI request from the Parliament Street think tank]



WOW! IS HANCOCK AFTER A PART IN CONTAGION 2?

Well, Soderbergh has revealed that he is working on what he described as a "philosophical sequel" to *Contagion* but set in a different context. If that context requires an enthusiastic go getting individual with a love of apps, then maybe Hancock could be the new Damon.

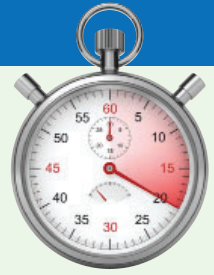
DOES HE HAVE ANY ACTING EXPERIENCE?

Based on a recent TV clip in which he cried at the news of the first covid-19 vaccine being delivered, a mid-career transition from the green benches to the silver screen might not be out of the question.

Gareth Iacobucci, *The BMJ*

Cite this as: *BMJ* 2021;372:n350

SIXTY SECONDS ON... CONTAGION



AS IN, WHEN A DISEASE IS SPREAD BY TOUCHING SOMEONE OR SOMETHING? Well, yes. But the term contagion can also refer to situations in which ideas spread from one place to another. Which brings us neatly on to Matt Hancock.

HAS HE BEEN SPREADING THE GOSPEL ABOUT TECHNOLOGY AGAIN?

No, not this time. England's health secretary has in fact revealed that the UK's swift response to rolling out a vaccine for covid-19 was influenced by *Contagion*, the 2011 Steven Soderbergh film starring Gwyneth Paltrow and Matt Damon, which is about the spread of a deadly virus and the ensuing global response.

SOUNDS EERILY FAMILIAR

Indeed. There was a surge in interest in the film last year because of covid-19, and Hancock clearly picked something up after watching it. He told LBC Radio that after observing the film's portrayal of the huge scramble for the vaccine once it became available, he insisted the UK order 100 million doses of the Oxford-AstraZeneca vaccine, rather than 30 million.

HOW DOES THIS FIT IN WITH "FOLLOWING THE SCIENCE"?

Hancock insisted that the Hollywood blockbuster was not his "primary" source of advice, but he said it did open his eyes to the "huge" demand for a vaccine once approved. "He would keep referring to the end of the film," one former Department of Health adviser told Sky News.

First UK vaccine safety data “reassuring,” says regulator

The UK’s medicines regulator has described the first safety data related to covid-19 vaccines as “reassuring,” with most side effects reported being mild and in line with those seen with other types of vaccine. “The benefits continue to far outweigh the risks,” said June Raine, chief executive of the Medicines and Healthcare Products Regulatory Agency (MHRA).

The agency published yellow card data for vaccines given between 9 December and 24 January, which comprise 22 820 reports from 7 164 387 first doses and 474 156 second doses. Most (16 756) are from people who received the Pfizer-BioNTech vaccine, and these list 49 472 suspected reactions. Administration of the AstraZeneca-Oxford vaccine began on 4 January, and 6014 yellow cards were reported up to 24 January, detailing 21 032 suspected reactions. A further 50 reports did not name the brand.

The number of yellow card reports we are receiving is very similar to what is seen with, for example, the flu vaccine

Munir Pirmohamed

By 24 January an estimated 5.4 million first doses of the Pfizer-BioNTech vaccine and 1.5 million doses of the AstraZeneca-Oxford vaccine had been administered, and around 500 000 second doses, mostly of the Pfizer-BioNTech vaccine. Overall, the data show around three yellow card reports per 1000 doses—a smaller proportion than the 10% of patients reporting them in clinical trials.

“We don’t expect everybody who gets a side effect to report on yellow cards,” said Munir Pirmohamed, chairman of the expert working group of the Independent Commission on Human Medicines. “The number of yellow card reports we are receiving is very similar to

what is seen with, for example, the flu vaccine, so this provides us with a great deal of reassurance.”

Most reported side effects were mild; a sore arm was the most common, and others included headache, tiredness, and a mild flu-like illness.

Allergic reactions

Severe allergic reactions were reported after administration of the first doses of the Pfizer-BioNTech vaccine on 9 December. The MHRA then advised against its use for people with a history of severe allergic reactions to any of its ingredients and said recipients should be monitored for at least 15 minutes.

A total of 101 anaphylaxis or anaphylactoid reactions after the Pfizer-BioNTech vaccination (1-2 cases per 100 000 doses) have been reported to the MHRA up to 24 January, and 13 anaphylaxis reactions after the AstraZeneca-Oxford vaccine.

Bell’s palsy is listed as a possible side effect of the Pfizer-BioNTech vaccine, and facial paralysis or paresis after this vaccine was mentioned in 69 yellow card reports; facial paralysis was mentioned in six reports after the AstraZeneca-Oxford vaccine. Philip Bryan, vaccine safety lead at the MHRA, said, “Bell’s palsy is something

MHRA received 107 reports of death after the Pfizer-BioNTech vaccine, 34 after the AstraZeneca-Oxford vaccine, and 2 in which the brand of vaccine was unspecified

School worry as more children infected in Israel and Italy

Experts have warned that schools must be reopened with caution, amid emerging evidence from Israel and Italy that more young children are being infected with new variants of covid-19.

Sharp rise

Paediatricians in Israel, which has surged ahead in vaccinating its adult population, reported a sharp rise in SARS-CoV-2 infections in children and teenagers, with more than 50 000 testing positive in January—more than seen in any month during the first and second waves.

Yuli Edelstein, health minister, told the *Jerusalem Post*, “The Israeli Association of Paediatrics are very worried about the rate of disease in younger students.” Some experts in Israel said the

rise was due to the emergence of the more contagious UK variant, which spreads more easily among younger age groups.

Cyrille Cohen, head of the laboratory of immunotherapy at Bar-Ilan University and a member of the national covid-19 vaccine clinical trial advisory committee, told *The BMJ* his figures indicated that, since the emergence of the UK variant B.1.1.7 in Israel in mid-December, the proportion of new daily cases accounted for by children aged under 10 had risen by nearly a quarter (23%).



H.LEVINE/SHUTTERSTOCK

Cohen urged caution over schools reopening. “Though I am convinced that education should be the first sector to open up, it is my opinion we should still reopen gradually . . . until we understand better the infection pattern of this new variant,” he said.

He said no evidence yet showed the new variant to be more dangerous to children, but he noted that in January Israel had opened its first special covid intensive care unit for children.

Italy saw similar warnings after a spike in cases in the northern village of Corzano. On 3 February 10% of its total population of 1400 (140) was reported to have tested positive for the virus, 60% of whom were children of primary or infant school age. Roberto Burioni, professor of virology at

San Raffaele Hospital in Milan, tweeted, “The much more contagious English variant calls for much greater precautions.”

Safer schooling consultation

On 5 February the UK Independent Scientific Advisory Group for Emergencies called for safer schooling to be prioritised as it launched a consultation document. Stephen Reicher of the University of St Andrews, and an iSAGE member, said, “For now, we must restrict all non-essential activities to bring down infections as fast as possible and reopen schools as soon as the level is low enough for us to start doing so without driving the pandemic back out of control.”

Michael Day, London

Cite this as: *BMJ* 2021;372:n383



Bell's palsy is listed as a possible side effect of the Pfizer-BioNTech vaccine

that can also happen naturally, so its association with the vaccine hasn't been established." The MHRA is investigating the association more thoroughly using the Clinical Practice Research Datalink—a database of anonymised GP records covering about 20% of the population.

The MHRA received 107 reports of death after the Pfizer-BioNTech vaccine, 34 after the AstraZeneca-Oxford, and two in which the brand was unspecified. Most reports concerned older people or those with underlying illness, the MHRA said, and a review of individual reports and patterns of reporting did not indicate that the vaccine had a role in the death.

"We know, for instance, based on data from [the Office for National Statistics], that for every 100 000 doses given to people aged 80 or over, around 200 people die of natural causes within a week," Bryan said.

The UK was the first country in the world to approve and start administering the Pfizer-BioNTech vaccine, but it is certainly not the first in the world to report its adverse reaction data. The MHRA has been criticised for its lack of transparency in not publishing the data or its risk management plan for monitoring the vaccines until almost two months after they began being given. Raine said, "We're committed to transparency with the data, [and] we'll be publishing our analysis weekly moving forward." But advice from the Commission on Human Medicines Expert Working Group to ministers regarding the vaccines and the working group's minutes remain unpublished.

"Seemingly positive news"

Peter Roderick, principal research associate at the Population Health Sciences Institute at Newcastle University, said, "It's good to see these data coming out, with seemingly positive news for now. I'm pleased as well to hear that there will be weekly reporting." But he added, "MHRA still has some way to go before it can be regarded as a transparent regulator."

Ingrid Torjesen, London

Cite this as: *BMJ* 2021;372:n363

Puberty blockers do not stop negative thoughts in children

Puberty blockers used to treat children aged 12 to 15 who have severe and persistent gender dysphoria had no significant effect on their psychological function, thoughts of self-harm, or body image, a study has found.

The findings, from a study of 44 children treated by the Gender Identity Development Service (GIDS) run by the Tavistock and Portman NHS Foundation Trust in London, have emerged as the trust prepares its appeal against a High Court ruling that led NHS England to pause referrals of under 16s for puberty blockers.

The appeal, expected to be heard between May and July, will challenge the ruling by three senior judges that children under 16 are unlikely to be able to give informed consent.

The study followed children who began treatment between June 2011 and April 2015. Inclusion criteria included the ability to give informed consent.

The High Court case was brought by Keira Bell, a former patient, and Mrs A, the mother of a patient on the waiting list. University College London Hospitals and Leeds Teaching Hospitals trusts, who provide the puberty blockers, intervened in the case to provide submissions.

The court has also agreed to hear from David Bell, an adult psychiatrist who worked at the Tavistock for 24 years. He did not appear in the original case but told *The BMJ* that he was able to speak more freely since retiring from the trust on 15 January.

Clare Dyer, *The BMJ*

Cite this as: *BMJ* 2021;372:n356

Covid aerosol risk may be higher than thought

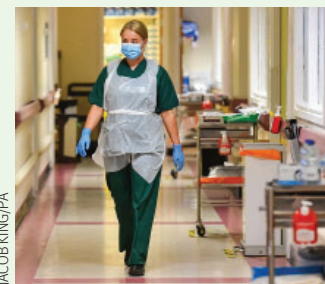
Pressure is mounting on the government and NHS trusts to adopt a more precautionary approach to personal protective equipment for NHS staff working outside intensive care after the results of a study indicated they may be at greater risk of SARS-CoV-2 infection through aerosol transmission than previously thought.

The study, funded by the National Institute for Health Research and available as a preprint, found the risk of aerosolisation was likely to be high in departments where infected patients were coughing, such as emergency departments and general wards. These are places where staff generally wear face masks only.

Intensive care settings

In contrast, the risks of SARS-CoV-2 aerosolisation seemed to be lower than expected in situations where patients receive continuous positive airways pressure (CPAP) and high flow nasal oxygen (HFNO)—procedures that have been presumed to carry a high risk of aerosol generation and are delivered by intensive care staff wearing the more protective FFP3 respirators.

Researchers in Bristol assessed aerosol emissions from 25 healthy volunteers when breathing, speaking, and coughing and also when using oxygen and respiratory support systems. CPAP (with exhalation port filters) was found to produce fewer aerosols than breathing, speaking, and coughing, and while HFNO did emit aerosols, most of the particles were generated by the HFNO machine, not the patient. Coughing was associated with the highest aerosol emissions.



JACOB KING/PA

CPAP produced fewer aerosols than breathing, speaking, and coughing

PPE policy

"Policy around PPE should be updated to reflect these adjusted risks," said James Dodd, study lead and a consultant senior lecturer in respiratory medicine at Bristol University's Academic Respiratory Unit.

Emergency department and acute medicine staff are more than twice as likely to be seropositive for anti-SARS-CoV-2 IgG than those working in intensive care units and anaesthetics. Dodd said exposure to patients who may be coughing and are earlier in the disease course could have a bearing on this, as could lower level PPE. More attention should also be paid to building ventilation, he said, along with reinforcing the need for patients to wear masks.

A Department of Health spokesperson said, "The UK Infection Prevention Control Cell conducted a comprehensive review of evidence and concluded current guidance and PPE recommendations remain appropriate."

Ingrid Torjesen, London Cite this as: *BMJ* 2021;372:n354

How big a threat is the E484K mutation to pandemic control?

First identified in the South African variant, the mutation has also been found in the UK and Brazilian variants, prompting fears the virus could become resistant to vaccines. **Jacqui Wise** looks at what we know so far



BEN BIRCHALL/PA

? What do we know about the E484K mutation?

E484K is a mutation that occurs in different variants of SARS-CoV-2 and has already been found in the South African (B.1.351) and Brazilian (B.1.1.28) variants. The mutation is in the spike protein and seems to have an effect on the body's immune response and, possibly, on vaccine effectiveness.

On 1 February Public Health England (PHE) announced that the Covid-19 Genomics (COG-UK) consortium had identified the mutation in 11 samples carrying the UK variant B.1.1.7 (sometimes called the Kent variant), after analysing 214 159 sequences.

? Where in the UK has it been identified?

Public Health England confirmed to *The BMJ* that it has now identified 11 cases of the B.1.1.7 variant carrying the E484K mutation around the Bristol area and 40 cases of the original SARS-CoV-2 virus carrying the same E484K mutation in the Liverpool area. Public health officials are carrying out enhanced contact tracing, additional laboratory analysis, and testing in these areas.

? Is this mutation something to worry about?

E484K is called an escape mutation because it helps the virus slip past the body's immune defences. Ravindra Gupta at the University of Cambridge and colleagues have confirmed that the new B.1.1.7 plus E484K variant substantially increases the amount of serum antibody needed to prevent infection of cells. We already know the B.1.1.7 variant is more transmissible, so a combination of a more rapidly spreading virus that is also better at evading immunity is worrying. If it isn't stopped it would outcompete the older B.1.1.7 variant.

Another concern is that the South African variant might be able to more efficiently reinfect people who have previously been infected with the original form of the virus. Lawrence Young, a virologist and professor of molecular oncology at Warwick University, said, "This is likely to be, in part, because the E484K mutation may weaken the immune response and also impact the longevity of the neutralising antibody response. So B.1.1.7 variants carrying the E484K mutation may be more efficient at reinfection."

B.1.1.7 variants carrying the E484K mutation may be more efficient at reinfection

Lawrence Young



? Will vaccines work against these emerging variants?

Research shows the current vaccines work against the UK B.1.1.7 variant without the E484K mutation. However, recent clinical trials by Novavax and Johnson & Johnson showed that their vaccines were less effective in South Africa than in the UK or US, which is presumably because of the high proportion of virus carrying the E484K mutation. Even so, Novavax reported a 60% efficacy of their vaccine in South Africa, which is still a fairly good response, similar to that of the influenza vaccine.

Scientists say vaccines can be redesigned and tweaked to be a better match for the new variants in a matter of months. The Oxford-AstraZeneca team, for example, announced they were already looking at updating their vaccine to make it more effective against the mutations that are being seen and it could be available by the autumn. It is possible it could take the form of a one dose booster that is updated and rolled out every year.

? What is the UK doing to monitor the spread of variants?

The UK has identified 105 cases of the South African variant B.1.351, so far. Most could be linked to travel, but 11 cases could not, meaning it is spreading within the local community. As a result the government announced it would carry out additional surge testing and sequencing in eight postcode areas in England. This is likely to be the tip of the iceberg, however, as less than 10% of samples from people who test positive are sequenced, and many people never get tested in the first place.

? Is monitoring good enough?

The UK has carried out nearly half of all SARS-CoV-2 genome sequences deposited to the global database, GISAID. A spokesperson for the COG-UK consortium said that since the start of the pandemic it has conducted genome sequencing on about 7% of positive test samples and this proportion is rising as case numbers fall and capacity increases.

This is the highest in Europe, apart from Denmark, which announced it will soon test

all positive covid-19 test swabs for the presence of variants. Globally, however, genomic surveillance of SARS-CoV-2 remains patchy. For example, the US sequences less than 1% of new samples, and many countries, especially in Africa, have no sequencing data at all.

? Is the UK sharing its capacity to carry out genomic testing?

On 26 January the UK government announced it was launching the New Variant Assessment Platform to offer genomics expertise to identify new variants of the virus to countries that do not have the resources to do so. This will be led by Public Health England working with academic partners and WHO's SARS-CoV-2 global laboratory working group.

? How can we stop any more variants emerging?

The SARS-CoV-2 virus makes around one or two mutations a month. This sounds quite a low number and is in fact lower than for other viruses, including influenza. The more the virus circulates, however, the more opportunity it has to change. So anything that can be done to suppress spread of the virus will help to limit new variants emerging, including distancing, mask wearing, and handwashing.

? Will closing the UK borders help?

From 15 February UK residents and Irish nationals travelling to the UK from 33 "red list" countries will have to quarantine in a hotel for 10 days. Non-UK travellers are currently banned from entry. However, the Labour Party, which complained that the government took 50 days to introduce the measure after the first South African variant was identified in the UK, is calling for the scheme to be extended to all international travellers.

Jonathan Stoye, from the Francis Crick Institute, said, "Under conditions of very high levels of virus replication even the most stringent of border controls, although they may delay spread, are unlikely to prevent the appearance of new variants."

Jacqui Wise, *The BMJ*
Cite this as: *BMJ* 2021;372:n359



B.1.1.7 plus the E484K variant substantially increases the amount of serum antibody needed to prevent cell infection

Ravindra Gupta



Even the most stringent of border controls are unlikely to prevent the appearance of new variants

Jonathan Stoye

Black people aged over 80 are half as likely as white people to be vaccinated in England

Targeted activity may be needed to tackle the disparities in access to covid-19 vaccines, the authors of a large study have said after finding that ethnic minorities, people living in areas of high deprivation, and those with severe mental health illness or learning disabilities seem less likely to have been vaccinated.

Between 8 December and 13 January 41% of people aged 80 or over in England who do not live in care homes were vaccinated. But the researchers, from the University of Oxford and the London School of Hygiene and Tropical Medicine, found much divergence in vaccination rates by ethnicity within this group of 476 375 people (of a total of 1 160 062 aged over 80). While 42.5% of white people were vaccinated, only 20.5% of black people and 27% to 29.5% of people of mixed, other, and South Asian ethnicities were. The other 39.7% were of unknown ethnicity.

Another disparity was seen in deprivation: 44.7% of people living in the wealthiest areas had been vaccinated but only 37.9% of those in the poorest areas. Patients with pre-existing medical conditions were equally likely, or more likely, to have received a vaccine across most comorbidity groups, with two exceptions: severe mental illness and learning disability. The analysis, carried out on behalf of NHS England, was published as a non-peer reviewed preprint.

The principal investigator, Ben Goldacre, told *The BMJ*, "We are

While 42.5% of white people were vaccinated, only 20.5% of black people and 27% to 29.5% of people of mixed, other, and South Asian ethnicities were. The other 39.7% were of unknown ethnicity



only describing the disparity in vaccination rates between different groups, and we cannot explain them. Nonetheless, it's fair to say this is either vaccine hesitancy or issues around the logistics of how the vaccination programme is rolled out, or a mixture of the two. The ethnicity gap that we are seeing is consistent with the gap that has been observed in previous vaccination campaigns of different vaccines for different diseases."

The authors said that live data monitoring could help healthcare workers make operational decisions about vaccine rollout. They said that targeted activity might be needed to tackle lower vaccination rates in certain groups.

Goldacre said, "We are providing these data as a service to help people and to identify problems and fix them early in a very fast moving vaccination programme. We are happy in principle to consider giving local teams access to local summary data."

Adrian O'Dowd, London
Cite this as: *BMJ* 2021;372:n357



DAN CHARITY/PA



THE BIG PICTURE

Myanmar medics resist military coup

Medical staff at Yangon General Hospital join the nationwide protest against the military coup in Myanmar. Making the three finger salute and wearing the red ribbons that symbolise resistance, the staff echoed calls to shut hospitals across the country as a gesture of defiance.

On 1 February Myanmar's military arrested the leader of the National League for Democracy, Aung San Suu Kyi, and declared a year long state of emergency

after losing the election in November and claiming the vote was fraudulent.

Two days later staff at 70 hospitals and clinics in 30 towns went on strike. In a statement the organisers of the medical resistance said, "We refuse to obey any order from the illegitimate military regime who demonstrated they do not have any regards for our poor patients."

Alison Shepherd, *The BMJ*

Cite this as: *BMJ* 2021;372:n368



ANADOLU AGENCY/GETTY IMAGES

Universal basic income and covid-19 pandemic

Evidence backs up health benefits and may show the way forward

The gulf between the wealthiest and poorest had been increasing even before the covid-19 destroyed the globe's health and economies.¹ Recent research indicates a growing depth of poverty, and women and children are the biggest casualties of this deepening divide.² The World Bank predicts the number of people in extreme poverty will increase by 70-100 million in 2021 alone.³

Welfare programmes were often criticised as unable to deal with economic changes, such as the threat of automation and rise in flexible work. However, since March 2020, rising inequality and drastic changes to the labour market have forced governments to implement economic initiatives, such as basic income programmes, that previously would have been politically untenable. Spain, for example, has given €1015 (£900) a month to 850 000 households most in need,⁴ and the US paid \$1200 to all adults earning less than \$99 000 annually.⁵ Evidence from the many pre-existing universal basic income schemes⁶ suggests they may be a valuable addition to other initiatives to alleviate poverty and improve health outcomes globally.

Safety net

Universal basic income programmes aim to provide a net through which individuals cannot fall by providing unconditional payments to a given population. In practice, many existing schemes have been guaranteed basic income, which is a means tested approach, as governments have dipped their toes in the water.

The first nationwide randomised trial of basic income started in Finland in 2017, where 2000 unemployed recipients were paid €560 monthly over two years.⁸ But most evidence comes from less developed countries. In a review of 24 cash transfer trials in



NEIL HALL/EPA-EFE/SHUTTERSTOCK

Poverty and stagnant income growth are inextricably entwined with poorer health outcomes

sub-Saharan Africa, all eight studies examining the financial effect found that short term poverty was reduced. Nine of 11 trials looking at healthcare use reported a positive effect, including an increased likelihood to seek healthcare when seriously unwell.

Pre-pandemic evidence from five out of six trials in Latin America reported a considerable reduction in short term poverty with universal basic income.¹⁰ In Brazil, poverty has fallen to its lowest level in 40 years as about a quarter of the population have been receiving monthly cash payments of \$110 since March 2020.¹¹

Poverty and stagnant income growth are inextricably entwined with poorer health outcomes. Evidence suggests reducing poverty improves mental health and access to sufficient nutrition. In the recent OpenSafely study of over 17 million adults in the UK, deprivation status was strongly associated with covid-19 mortality.¹²

Childhood poverty is inversely related to working memory in young adults.¹³ Children in the lowest 20% income bracket are 4.5 times more likely to develop severe mental health problems than those in the highest bracket.¹⁴

In a randomised controlled trial of universal basic income across

14 474 Kenyan households from 295 villages, rates of physical illness, mental health issues, and hunger were significantly lower in households receiving payments.¹⁵

A review of studies, focusing on the effects of universal basic income on health, was published in 2020.¹⁶ Twenty seven studies reported health benefits, including reduced mortality, improved adult health, and increased provision of nutrients for low birthweight infants.

Costs

One common counterargument to basic income is the cost. Sophisticated estimates value the cost of universal basic income in the UK at £65bn-£75bn.¹⁷ This is less than 10% of the UK government's total spending. The net cost is, at most, the same as the most optimistic estimates of the total costs of Brexit.¹⁸

Another criticism is that universal basic income does not reach those most in need. Some people who currently receive multiple social security benefits might lose out. However, this depends on the level of the basic income, and short term steps to ensure people are not worse off would be relatively low cost.¹⁷

Finally, there is a fear that universal basic income disincentivises work. A review of several unconditional cash transfers has found little evidence for this concern, however, with minimal effects on labour supply.¹⁹

Poverty is increasing, and this damages the health of the most vulnerable members of society. Fiscally conservative governments are backtracking on previously inconceivable economic spending because of ballooning unemployment rates and shrinking economies. Universal basic income, or a variant, may help economic and health outcomes once normality resumes.

Cite this as: *BMJ* 2021;372:n193

Find the full version with references at <http://dx.doi.org/10.1136/bmj.n193>

Salil B Patel, clinical research fellow, John Radcliffe Hospital, University of Oxford
salil.patel1@nhs.net

Joel Kariel, DPhil candidate, Department of Economics, University of Oxford

Protecting the environment from plastic PPE

Greener manufacture, use, and disposal are urgent priorities

Although measures to control covid-19 have been associated with some positive environmental effects, including decreases in global emissions of carbon dioxide,¹ the pandemic has exacerbated plastic pollution through high use of personal protective equipment (PPE).

In England alone, 2.3 billion items of single use PPE were distributed to health and social care services between February and July 2020, the same amount distributed throughout the whole of 2019.² Globally, 129 billion face masks and 65 billion gloves are estimated to have been used every month during the covid-19 pandemic.³

The disposable face mask market was estimated to have increased from \$800m in 2019 to \$166bn in 2020.⁴ If usual patterns of disposal continue, around 75% of plastic PPE waste related to covid-19 will end up in landfills or ocean environments.⁴ Evidence of improper disposal of PPE is emerging, with plastic masks and gloves found on beaches, ocean beds, and urban environments globally.^{5,6}

Microplastics

Surgical face masks, gloves, and gowns are commonly manufactured from plastics that break down slowly, such as polypropylene, polyurethane, polyacrylonitrile, polyethylene, and polyethylene terephthalate.^{3,5} A surgical mask made from these materials could take 450 years to fully decompose.^{5,6} These plastics are dispersed globally by wind and ocean currents and may persist as microplastics (fragments <5 mm).^{5,7} Plastic pollution has substantial adverse environmental effects, and growing evidence suggests that microplastics enter human food chains, where they may adversely affect health.^{5,9}

Governments in the UK, Portugal, and some US states have reversed or delayed policies restricting single use plastics

Elissa J Zhang, clinical academic, Westmead Hospital, Westmead, New South Wales

Lucy P Aitchison, University of New South Wales, Randwick, NSW

Nicole Phillips, director of medical services

Ramon Z Shaban, clinical chair of infection prevention and disease control

Andrew W Kam, registrar, University of Sydney
andrewkam@ranzco.edu

PPE waste overwhelmed waste management systems during the first wave of the pandemic.^{10,11} Capacity for local incineration, the mainstay of clinical waste disposal, was exceeded, increasing use of landfill and potentially contributing to improper PPE disposal.^{10,11} Although incinerators have adverse environmental consequences, including greenhouse gas emissions and release of hazardous compounds such as dioxins, their overall harm is less than landfill if appropriate pollution controls and technologies are used.^{8,12} Capacity strains on waste management systems have highlighted the need to consider surge capacity and the environmental impact of waste in disaster management plans.¹³

Another challenge to waste management is that contaminated PPE could transmit disease.¹⁴ This potential risk, combined with the complex composition of some types of single use PPE, make waste recycling challenging. Research into better methods of recycling PPE is ongoing, exploring methods such as feedstock recycling—breaking polymers into smaller molecules that can be used to create new products—or conversion into liquid fuels.¹¹⁻¹⁵

Although vaccines are expected to reduce the spread of covid-19, roll-out across the global population faces multiple logistic challenges and is likely to be slow.¹⁷ The increased use of disposable PPE is likely to persist. Strategies to reduce unnecessary exposure to potential pathogens, such as physical distancing and source isolation, should be the first line of defence, before PPE is needed, to reduce infection risk in healthcare settings and among the public.¹⁸ Rational and evidence based use of PPE will help reduce risk of shortages and control unnecessary waste.¹⁸

Policy reversal

Aside from PPE related waste, the pandemic has increased consumption of single-use plastic more broadly.^{3,8} This has been driven by what is likely to be a permanent shift towards industries that require more single use plastics (eg, e-commerce and takeaway food providers) and a public perception that single use plastics are more hygienic. Governments in the UK, Portugal, and some US states have reversed or delayed environmental policies restricting single use plastics during the pandemic.³⁻¹⁹

Although justified by the public health crisis, these policy changes have slowed hard won progress towards reducing the global impact of plastic pollution.^{11,13} It is now even more important that governments and non-governmental organisations design and implement policies to reduce use of plastics; develop alternative materials; promote a circular plastic economy where plastic products are recycled, refined, or reused at the end of their lifecycle; and educate the public. Together, these changes would help reduce the grave environmental threat caused by plastic pollution.

Cite this as: *BMJ* 2021;372:n109

Find the full version with references at <http://dx.doi.org/10.1136/bmj.n109>



Why test and trace will fail without support for people told to self-isolate

The spread of SARS-CoV-2 will only slow if those who test positive are able to stay at home. But experts fear that this is not as easy as the government appears to think. **Chris Stokel-Walker** reports

Carina Marquez was surprised to see the Latino man return to the test site she was running in San Francisco. He'd received a positive test result but had come back seeking advice.

"I think he was probably undocumented and still had to go to work," says Marquez, associate professor in the school of medicine at the University of California, San Francisco, and an infectious disease expert. "He was very nervous to tell his boss and was totally conflicted." Presenting only mild symptoms, he reasoned he couldn't be that infectious. The patient was torn between going to work to earn money for his family and doing right by his community by isolating.

For millions worldwide, a positive test isn't just a medical blow but a financial one too. UK government polling suggests just 17% of people with symptoms are taking a test for fear that a positive result and the ensuing self-isolation will lose them money.

It's the same quandary Marquez's patient faced—until she gave him a \$500 (£366) gift card to support his family. It's part of a Californian system implemented by primary care doctors and politicians, called the Right to Recover Act, to encourage the state's least wealthy to come forward for testing, funded mostly through philanthropy. In a paper for *Plos One* last October, Marquez and colleagues evaluated the scheme's success. "All of a sudden he relaxed," she says of her visitor. "He said: 'Okay, I can do it.' Before that he was like, 'I don't know.' It was a powerful thing to see."

Test, trace, isolate

While functioning test and trace systems have stuttered into life with differing degrees of speed,

depending on the country, support for people forced to self-isolate has universally lagged. "What's driving the majority of background community transmission is non-modifiable by individual choices," says Müge Çevik, co-author of a recent editorial in *The BMJ*, who researches infectious diseases at the University of St Andrews.

"Economically marginalised communities generally cannot simply choose to modify their transmission networks through changes to their living or working contexts in the absence of specific support."

Covid-19 is known to have disproportionately affected the poorest in society, often in jobs that either cannot be done from home or are unstable, or in industries such as hospitality that are not stable enough to survive the closures that lockdowns and social distancing have wrought. To stop working and isolate is to cut off your livelihood with immediate effect.

It's not that they aren't reaching out for help either: the UK Labour party says nearly three quarters of people who applied for discretionary grants from local councils were denied the funding despite being asked to self-isolate by the NHS Test and Trace app.

And it's not only financial support to stop working that's needed. People also need help to prevent spreading the virus to others in their households. This is a concern for

It's not just financial support that is needed, many people cannot self-isolate properly from the rest of their household

those needing to self-isolate who have tested positive or have been in contact with a positive case, as well as for NHS staff and other key workers who want to protect their families from potential exposure. Or indeed those who live in accommodation too small or unsuitable to isolate properly from the rest of the household.

Just one in eight people in the UK live alone, according to the Office for National Statistics. In London, 6.2% of households contain two or more unrelated adults. Within-household transmission is "very common," according to the Scientific Pandemic Influenza Group on Modelling (SPI-M), which advises the government, but can be mitigated in part by offering a "comprehensive package of information and support."

Yet government systems put in place to support those asked to self-isolate do not match what SPI-M says is needed.

Hotels to the rescue

Self-isolation can be difficult even with financial support, not least for those living in the mixed, multi-generational households that have proved to be one of the main vectors of transmission of SARS-CoV-2. Which is why some UK doctors have been working with the hospitality industry to try and provide space for those who don't have it, to slow the spread of the virus.

"There are people who need to isolate but are struggling to do so because of a number of factors, such as living in shared accommodation," says Akbar de' Medici, honorary associate professor at University College London, and medical director of Cavendish Health Concierge.

De' Medici has been working with the hotel chain Best Western to train hotel staff in infection control and prevention, should they be asked

Some UK hotel chains are ready to house people who would struggle to self-isolate at home but the government has not embraced the idea



BEST WESTERN

to step in to support hospitals. The partnership sprang up during the first wave of the pandemic, with two or three hotels around London working with local hospitals to offer NHS staff quarantine space, and another housing the homeless to try and prevent street spread.

But in the second wave there has been minimal action from the government to repeat the experiment, despite a third national lockdown.

“Everyone’s concentrating on the vaccine, test and trace is not as proactive as it was before, and the government’s focus has shifted away from these simple, short term solutions,” says de’ Medici.

The hotel industry has 20-30 000 unused hotel beds that could be converted into isolation hubs. “We’ve got 10 months of learning and putting together structures and protocols to manage covid positive patients,” says Rob Paterson of BWH Hotel Group, which runs Best Western hotels.

Paterson likens the effort to Dunkirk, where a flotilla of small boats helped evacuate Allied troops from France during the second world war. More than 500 hotels are waiting to accept homeless, covid positive patients needing step-down care, NHS staff looking to distance safely from their family while working, and those who have been asked to self-isolate but would find it difficult to do so from home, he says.

He reckons 5000 rooms could be prepared within 72 hours of being asked. The hotels are fully insured to handle patients and staff, and hotel workers have been trained to clean and work in a way that minimises risk of spread (only cleaning whole floors and only when empty, for instance). The whole enterprise is charged at cost with no profit made.

The government’s response has been muted, however. Hotel isolation is being implemented but only for a small number of international travellers arriving from certain countries where cases are high.

The reticence to the proposal goes against evidence that institutional self-isolation works. “In Wuhan, they pulled out every single weapon in the armoury against respiratory



diseases,” says Annelies Wilder-Smith, professor of emerging infectious diseases at the London School of Hygiene and Tropical Medicine. “But the true decline to zero was because they also isolated all mild cases. Every case that tested positive was isolated.”

The stories of China building hospitals from scratch reported in the early stages of the pandemic were a misconception: while they were called hospitals, they were largely makeshift shelters. Just last month, the country built a quarantine camp for 4000 people on the outskirts of Shijiazhuang, the provincial capital of the province that surrounds Beijing.

Hospital beds

China and other Asian countries such as Singapore have managed to control the spread of the virus by doing similar and admitting positive cases to hospital. That costs money, “but they do it, because they know nobody is totally capable of isolating themselves from other household members,” says Wilder-Smith.

And that say the experts is the reality the UK and other European countries—lurching from one lockdown to another while never really stemming the spread of the virus—need to wake up to. Closing schools, shops, and workplaces is only solving half the problem. People with mild symptoms shed the same amount of virus as severe cases, with some variation, and people aren’t perfect in adhering to social distancing and isolation rules,

Covid is known to have most affected the poorest in society, often in jobs that cannot be done from home

even in their own home. It is almost impossible to adhere fully to social distancing if you’re living in crowded or inadequate accommodation.

With colleagues, Wilder-Smith modelled what impact facility based isolation for all cases could have on the spread of disease. Offering five isolation beds per 10 000 people could reduce new infections by 57%, and deaths by more than a third.

But even if they were offered a place to stay away from family, the potential loss in income would be such that many might reject the offer, which is why it needs to be coupled with financial support. “The problems that happen during the period of isolation don’t go away, so being able to link to other financial support or mental health support is important,” says Marquez.

It’s a model that other cities in the US have also followed, including New York which also has a city government run programme offering a hotel room, free of charge, for up to 14 days if they do not have a safe place to self-isolate (for instance if they share a bathroom, live with someone considered vulnerable, or do not have space to stay six feet distanced).

“The financial support, the wraparound services, and the human connection can convince people to do things that are really hard,” she says, “because a lot of times that three days of lost wages can tip you over the edge.”

Chris Stokel-Walker, freelance journalist, Newcastle-upon-Tyne stokel@gmail.com

Cite this as: *BMJ* 2021;372:n327



THE BMJ INTERVIEW

Jeremy Hunt: I was too slow to boost the NHS workforce. Action can and must be taken now

The former health secretary tells **Gareth Iacobucci** of his regrets from his time in charge, how they have made the pandemic worse, and why this has fuelled him to be so outspoken against the current government

CHRISTOPHER PLEDGER/EYEVINE

“I wish I’d known about it from the outset,” says Jeremy Hunt. “I was very proud to push through very large increases [in recruitment] in 2016. But the truth is that not a single doctor has yet entered the workforce as a result of those changes.”

This is a big concession for a former health secretary, who admits that he was too slow to grasp the importance of workforce planning in the early part of his tenure (2012 to 2018). Hunt’s changes expanded the number of medical student places by 25%, from 6000 to 7500 from 2018 onwards, costing an estimated £100m. But this came after several years of intake plateauing and didn’t solve the immediate workforce crisis.

With the covid-19 pandemic exposing an already stretched NHS workforce to new levels of stress, burnout, and trauma, Hunt, who now chairs the House of Commons health and social care select committee, is in no doubt that action is needed, and now. “We’re in the rather ridiculous situation that three years after the NHS 10 year plan was published, we still don’t have the 10 year workforce plan,” he says.

“This has been the most challenging year for the NHS in its history. We should be asking ourselves, what do we need to do now to turn this into a 1948 moment [when the NHS was founded] and give the workforce the confidence that there is a long term strategic plan in place that will ultimately deal with the rota gaps, the pressures, and the shortages?”

Lack of workforce planning

Hunt is considered in the way he makes his criticism, perhaps conscious that he ran the NHS for six years in a period of austerity that led to the biggest ever NHS funding squeeze, staff shortages, reductions in bed capacity, and a junior doctors’ strike over new contracts.

“The question a lot of people ask is, does the NHS have enough capacity [and] resilience to handle a pandemic?” he says. “I would say that actually it has been surprisingly effective in the last year. But that

doesn’t mean that the NHS does have the capacity it needs, and that’s why I concluded during my time as health secretary that we need many more doctors and nurses.”

Though generally relaxed and reflective as he talks to *The BMJ* on video link, Hunt is unable to mask his frustration when he mentions this glaring aberration in workforce planning. He argues that the current short term approach—where staffing increases are negotiated between the Treasury and the Department of Health around spending reviews—is to blame and needs urgent reform. “We need a much longer time frame [for planning] to get the capacity into the NHS that we need,” he says.

“We should ask the Office for National Statistics to work with NHS England every year and publish what the 5, 10, 15, [and] 20 year workforce requirements for the NHS are going to be, so that we can make absolutely sure that we are training enough doctors, nurses, endoscopists, oncologists. All those different specialties,” says Hunt. He is sure that such numbers already exist. “We could easily publish them this year, and we should.”

On 26 January, Simon Stevens, chief executive of NHS England, told MPs that the number of people waiting more than a year for an operation had risen from about 2000 to 200 000. Given this and strained public finances, how does the NHS bolster a healthcare workforce that is in dire need of a break? Hunt says the circumstances demand boldness from the government.

“The NHS was set up in 1948 when we were bankrupt as a country, exhausted after the second world war, and yet we still found the imagination and vision to do something truly wonderful,” he says. “It’s going to be all hands on deck to try and bring those waiting lists back down. That is going to expose the gaps in our workforce even more.

If you don’t plan the workforce strategically, it ends up costing the taxpayer much more because the NHS recruits locum doctors and agency nurses who are much more expensive

“That’s why, for the sake of morale, with all that pressure ahead of us, we need that long term workforce plan.”

“If you don’t plan for the NHS workforce strategically, it ends up costing the taxpayer much more because the NHS then recruits locum doctors and agency nurses who are much more expensive,” he adds. “This is actually the best bet in the long term if you want good cost control as well as a happy workforce.”

Holding government to account

If things had gone differently in 2019, Hunt himself could now be ordering this as prime minister. But he lost out to Boris Johnson in the Conservative leadership race. The rest, as they say, is history.

Some might have expected a quiet retreat to the backbenches for the man who once said that health would be his last big job in politics (it wasn’t—he later became foreign secretary). Instead, a liberated Hunt has reinvented himself as a parliamentary inquisitor-in-chief, forensically holding officials and ministers to account leading the select committee. The incumbent health secretary, Matt Hancock, among others, has looked uncomfortable being grilled by his predecessor.

The BMJ spoke to Hunt in the week that the UK passed the grim milestone of 100 000 deaths from covid-19—“a horrifying number and it’s genuinely heart breaking for us as a country to go through this,” he says. Where does he think the biggest mistakes were made? “We’ve talked about test and trace, we’ve talked about the timing of lockdown, which is often debated,” he says. “The biggest mistakes in the social care sector were around the discharging of patients who were covid positive into care homes.”

“We have a lot to learn from countries like Germany that said that

HUNT’S CHANGES expanded the number of medical student places by 25%, from 6000 to 7500 from 2018 onwards, costing an estimated £100m

care homes were not allowed to take covid positive patients unless they were able to quarantine them for two weeks, and they were very strict about that. That may be the single reason why their death rate has been so much lower.”

More recently, Hunt has been calling for more financial support for people who are asked to self-isolate by NHS Test and Trace, noting that many people are not complying because of fears over loss of income. “We should just offer a blanket salary backfill promise that if you’re asked to self-isolate, we will refund any salary you lose,” he affirms. “Frankly, that would be cheaper than having to extend lockdown continuously.”

Pandemic groupthink

Hunt acknowledges that decisions he made while in office have affected the UK’s ability to respond to the pandemic. “We’ve really been on the back foot from the start on test and trace, and in some ways it dates back to the period when I was health secretary,” he says. In 2016, the UK government undertook the Exercise Cygnus simulation to test our preparedness for a pandemic. Hunt insists that the government implemented all of the recommendations from the report, but concedes that, in hindsight, the UK and other western countries were too focused on influenza.

“We did exhaustive pandemic preparations; we were lauded by Johns Hopkins University as being the second best prepared country in the world. But we were sadly also part of a groupthink that said that the primary way that you respond to a pandemic is the flu pandemic playbook [with a focus on areas like vaccination and boosting hospital capacity], rather



Hunt as health secretary gives evidence on the spending review to the Health Select Committee in May 2016

than the methods that you would use for SARS and MERS [surveillance and containment, community testing, contact tracing and isolation, and stockpiling personal protective equipment, and ventilators].

“That was not unique to the UK. That was shared in the US and across Europe. But it’s why there is this stark difference in the effectiveness of our responses compared with countries in East Asia. That meant that we didn’t have test and trace capability at the outset, but also that we spent much too long deciding to do it.”

This spring, the select committee will publish its report into lessons learnt from the UK’s pandemic response. As well as pandemic preparedness, it will examine the importance of domestic manufacturing of personal protective equipment and assess whether the UK got the right balance between central and local testing and contact tracing.

Hunt was one of the most vocal critics of the government’s decision to initially stop community testing and tracing last March, before it later reintroduced it with a new, centralised system in May. “Because we had to set up our capacity very quickly in May [2020], we opted for a centralised solution, which is certainly quicker to get up in a hurry,” he says. “But one of the

We should just offer a blanket salary backfill promise that if you’re asked to self-isolate, we will refund any salary you lose

big lessons of the future is to have localised contact tracing capability.” Trust, he says, is the reason— people are more likely to comply with advice if called by someone from their local council “than someone in a call centre 300 miles away.”

He supports the call for a public inquiry into the UK’s handling of the pandemic and suggests that this could begin as soon as the autumn, though not until the pandemic is under control. “Having given evidence to public inquiries myself as a cabinet minister, they are immensely time consuming,” he says, “I don’t think we would want to tie up Matt Hancock, Boris Johnson, or [vaccine deployment minister] Nadhim Zahawi in that kind of process at this stage.”

He insists that any inquiry should consider successes, such as vaccine development and distribution, as well as failings. “We have had probably the most effective vaccination programme anywhere in the world, in terms of the speed of approving and distributing vaccines, but also this is the country that developed one of the vaccines that has been approved for use,” he says.

“The UK has punched well above its weight in terms of helping the world find a solution to this terrible nightmare.”

Gareth Iacobucci, *The BMJ*

Cite this as: *BMJ* 2021;372:n335

“THE EXTREMELY BITTER JUNIOR DOCTORS’ DISPUTE WAS A SOURCE OF GREAT SADNESS TO ME”

For Hunt the positive aspects of his legacy include his focus on patient safety after the Mid Staffordshire inquiry and the 2018 long term NHS funding deal, which provided an extra £20.5bn spread over five

years, around 3.4% a year on average.

But he says that he particularly regrets the failure to reach a similar funding settlement for social care, and the “extremely bitter” dispute with junior doctors over

a proposed new contract. “It made it much harder for me to communicate my core priorities around patient safety to an absolutely vital and very hardworking part of the workforce,” he says.

“What I learnt from

that is that you can quickly get sucked into a very bitter dispute that neither side really wants—much more quickly than you might imagine. And it was a source of great sadness to me that it happened.”

