this week

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Covid patients to use oximeters at home

**EXCLUSIVE** Patients with covid-19 who don’t need immediate hospital attention but are at high risk of developing serious symptoms are to be given pulse oximeters to use at home, *The BMJ* has learnt.

NHS England is believed to have bought around 200,000 pulse oximeters, which clinical commissioning groups across England will be able to access. The initiative is due to be rolled out across the country over the next six weeks and is being led by Matthew Inada-Kim, national clinical lead for deterioration at NHS England.

NHS England has advised since the start of the pandemic that intervention is necessary if oxygen saturation levels fall. But it became clear that some patients develop “silent hypoxia,” where desaturation occurs but they have no obvious symptoms, such as shortness of breath. These patients tended to need invasive respiratory support and had poor outcomes.

Nigel Watson, chief executive of Wessex Local Medical Committees, whose area is expected to be one of the first to implement the home monitoring scheme, told *The BMJ* that the evidence was fairly strong that if oxygen saturation fell to 94% the mortality risk rose to around 13%, and if it fell further the risk increased to about 28%.

The idea is to create “virtual covid wards” of patients at risk, such as those over 65, or those under 65 with a chronic condition, and for them to monitor their oxygen saturation levels and relay them to their health teams, Watson said. “If it starts dropping and particularly goes to 94% then you’ll potentially take some action, which may include being admitted to hospital.”

Pilot areas used various arrangements to run the service. In North Hampshire a group of general practices employed two nurse practitioners, in Southampton it was the local GP federation, while in the Isle of Wight it was the local hospital.

Rob Barnett, chair of Liverpool LCM, confirmed local health officials were working on how virtual covid wards could be implemented to ensure admission to hospital before levels drop too much “to make the recovery almost impossible.”

“As we monitor more patients in the community, we will know what the tipping point is for them to get into hospital, which is likely to be earlier than if we weren’t monitoring them,” he said. “So, recovery will be better, but it inadvertently means we’re going to have more patients in hospital.”

Ingrid Torjesen, London

Cite this as: *BMJ* 2020;371:m4151

Older covid-19 patients and those with chronic conditions will be able to monitor their oxygen saturation levels at home
Doctors question ethics of treating adults with covid-19 in paediatric ICUs

Two hospital doctors are questioning whether adult patients would be able to give informed consent to being treated in children’s intensive care units if adult services became overwhelmed during the covid-19 pandemic.

Thomas Hampton and Victoria Sadlers, specialist registrars at Liverpool’s Alder Hey children’s hospital, ask how informed consent can be given when “quality of care provision is not quantifiable, and mortality cannot be compared between sites, so the care received cannot be proved to be equal or superior to that provided by our adult counterparts.”

In a letter to The BMJ (p 196) they said that “novel ethical decision making” was required in the first covid wave, when adult patients were treated in Alder Hey. The hospital formed a clinical decision making and a clinical ethics committee, which “met daily to provide guidance and support. A substantial concern remains, however, regarding the lack of consent for transfer to units that do not usually treat adults,” they wrote.

They cited new GMC guidance on decision making and consent, due to come into force on 9 November. “This almost directly contradicts the pandemic mindset in which it is accepted that resource allocation is a key part of distributive justice from a utilitarian perspective.”

Clare Dyer, The BMJ
Cite this as: BMJ 2020;371:m4144

Covid-19
Research losses predicted to be £7.8bn by 2027
Medical research charities are expected to have lost almost 38% of their fundraising income in the past academic year and to lose over 25% this year because of restrictions on fundraising events, charity shop closures, and economic uncertainty, the Institute for Public Policy Research found. The losses add up to £7.8bn less in health research from now to 2027, which could be terminal for the prime minister’s “science superpower” aspirations, said researchers, who called for a three year life sciences charity partnership fund equal to the predicted losses.

Elderly patients are avoiding GP contact
Over half (53%) of 1000 GPs surveyed by Cancer Research UK in September were concerned that fewer older people were contacting them with symptoms than before the pandemic. They were also concerned about less contact from patients with learning difficulties, patients whose first language was not English, people from poorer backgrounds, ethnic minorities, and people with existing health conditions. While fewer GPs were now reporting falls in the number of patients contacting them—29%, down from 62% in June—the charity said that patients needed more reassurance that practices were open and safe.

Reclassify emergency contraception, says BPAS
The British Pregnancy Advisory Service called for emergency contraception to be reclassified by the health secretary as a general sales list medication, which would allow women to purchase it directly from the shelf rather than requiring a consultation. The BPAS made the plea after finding that a third of pharmacies in England were unable to provide emergency contraception in a confidential and covid secure way because of limited space in their shops.

Hospital food
Plan for better onsite catering is published
The government said that it would establish an expert group of NHS caterers, dietitians, and nurses to act on recommendations from an independent review of hospital food, led by advisers including chef and restaurateur Prue Leith (below). The review recommended upgrading hospital kitchens to provide a 24/7 service, introducing digital menus and food ordering systems to factor in dietary requirements, agreeing professional standards for NHS chefs, and increasing the role of nurses, dietitians, and caterers in overseeing food services.

General practice
College leader is “livid” at attacks on profession
Martin Marshall, chair of the Royal College of General Practitioners, hit back at the “small but vocal number of armchair critics” who have accused general practice of being closed for business during the pandemic. In a speech to the college’s virtual conference on 22 October he said, “These criticisms make me livid because they gain a disproportionate amount of coverage in the media and have such a negative impact on the morale of the general practice workforce.” GPs have been at the heart of the UK’s response to covid and have “shown our mettle,” he said.

Hancock promises to cut GP bureaucracy
England’s health secretary, Matt Hancock, said he would seek to retain the cuts to general practice bureaucracy that were initiated during the pandemic. “We made changes, for instance, in the way that inspections operated, which I know was welcomed by many GPs,” he told the RCGP’s virtual conference. “I want to drive this agenda forward so we can free up time to focus on what matters most, which is giving high quality care to patients.”

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MEDICINE

Food insecurity

Paediatricians call for prime minister to act
In less than two days, 2757 members of the Royal College of Paediatrics and Child Health signed an open letter to the prime minister, Boris Johnson, calling for him to match the pledge made by the other UK nations to provide food vouchers to cover school holidays for children from low income families. The letter argues that childhood hunger should transcend politics and that good nutrition is at the heart of health, wellbeing, and development for children and teenagers.

Social care

MPs call for £7bn social care funding rise
The Commons Health and Social Care Committee warned that some care providers were at risk of collapse and that the sector required an extra £7bn a year by 2023-24 as a “starting point” to help meet demographic and care funding rise. MPs call for £7bn social care rise

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Care home company is fined for lack of safe care
A company running a care home was fined £200 000 after a fall contributed to the death of an 89 year old woman with dementia. Elli Figgins was found on the floor of her room at Curzon House near Chester at 4.10 am on the floor of her room at Curzon House near Chester at 4.10 am. She died eight days later.

After a CQC prosecution for failing to provide safe care and treatment, Chester Magistrates’ Court fined Vivo Care Choices and ordered it to pay a £170 victim surcharge and £19 305 in costs.

Doxycycline

Coroner calls for review of drug’s side effects
A coroner demanded action from the Medicines and Healthcare Products Regulatory Agency after a 19 year old student, Alana Cutland, who was doing an internship in Madagascar and had been taking doxycycline as an antimalarial drug, had several attacks of paranoia and jumped to her death from a plane. The inquest report from Tom Osborne, senior coroner for Milton Keynes, stated, “It was quite apparent from the evidence that she had a psychotic reaction as a result of taking the drug, and yet there is nothing on the drug information leaflet that either highlights or mentions this possibility.”

Abortion

Ruling paves way for stricter law in Poland
Poland’s constitutional tribunal ruled that existing laws allowing for the abortion of malformed fetuses was “incompatible” with the constitution. A ban on terminations for congenital birth defects would make abortions legal only in cases of rape or incest, or when the mother’s health or life was at risk.

Cite this as: BMJ 2020;371:m4131

COVID rates

In England

0.7% of the population in urban areas tested positive for covid-19 between 27 September and 10 October, which compares with 0.47% in rural areas (ONS Infection Survey).

SIXTY SECONDS ON…

SEWAGE

THE LATEST TARGET IN THE FIGHT AGAINST COVID-19?
Spot on. Though it’s not that new. Scientists have been collecting wastewater to check for RNA from SARS-CoV-2 in sewage since the start of the pandemic. It’s a good way to spot the prevalence of infection and the different strains—or lineages—of the virus in the community, says Davey Jones, professor of soil and environmental science at Bangor University.

WHAT CAN SEWAGE SCRUTINY REVEAL?
It’s a reflection of public health, says Jones, and has been used to track antimicrobial resistance in the community, drug use, and microplastics, as well as other viruses such as norovirus and hepatitis.

AND IN TERMS OF COVID-19?
Jones says wastewater sampling in north Wales helped to spot the surge in cases among students in September—even before they were tested—and led to successful control of the virus. Other analyses will help to indicate whether lockdowns are working and whether influenza viruses are circulating, to help people establish whether they have covid-19 or flu.

HOW WIDESPREAD IS THE PRACTICE?
Sampling has been rolled out to more than 90 wastewater treatment sites in the UK. It covers around 22% of the population in England, with plans to expand.

WASTE NOT, WANT NOT?
Indeed. Defra, the Environment Agency, and the Joint Biosecurity Centre are all showing an interest, with the centre conducting pilots to “test how this approach can generate targeted scientific intelligence to help health authorities make future decisions, including assessing how precisely wastewater can be used to identify coronavirus sources.”

CAN WE DUMP NHS TEST AND TRACE?
I couldn’t possibly comment. But Jones told The BMJ that wastewater samples are analysed within 48 hours. By comparison, only 15% of people who were tested for covid-19 in England in the week to 14 October received results within 24 hours, down from 33% the previous week.

Zosia Kmietowicz, The BMJ
Cite this as: BMJ 2020;371:m4142
Tier 3 GPs and hospitals hit by winter pressure six weeks earlier than normal

EXCLUSIVE Doctors in areas under strictest restrictions warn workloads are “horrendous,” as admissions pass spring levels

GPs in areas of England under the tier 3 covid-19 restrictions have said their workloads reached levels in early October that they wouldn’t normally see till the end of November, and they are worried how the NHS will cope this winter.

At the same time, some hospitals in these areas are admitting similar numbers of covid-19 patients to those they were admitting at the height of the first wave of the pandemic.

In terms of workload “we’re six weeks ahead of ourselves compared with last year,” said Rob Barnett, chair of the local medical committee in tier 3 Liverpool. “At the beginning of October our workload was equivalent to what we would normally expect towards the end of November,” he said.

Krishna Kasaraneni, a GP in South Yorkshire, said workloads were already “horrendous.” The increased pressure was due not only to the significant volume of both covid and non-covid patients but also the complexities of arranging care under covid protocols, he said.

Kasaraneni, who had been in clinic for almost two and a half hours when he spoke to The BMJ, said he had been able to deal with only five patients in that time as three had to go to hospital.

“You have got to try and do what you can to keep people at home and not be so cavalier and send people in,” he said, adding that this required many phone calls to secondary care colleagues. “The system is overwhelmed, so there’s quite a lot of waiting to try to get to the right person,” he said. On a positive note, he said there was much “camaraderie and teamwork” between primary and secondary care.

But a letter dated 6 October, issued in response to a threat of legal action from the not-for-profit Good Law Project, shows the government has modified its plans. The project claimed Moonshot was unlawful because it ignored scientific evidence and committed a vast sum of public money with no decision making transparency.

In a statement the project said, “Operation Moonshot has predictably fizzled out. It’s a far cry from Boris Johnson’s grandstanding in Parliament a matter of weeks ago and more proof of the mess this government is making of the testing programme.”

Gareth Iacobucci, The BMJ
Cite this as: BMJ 2020;371:m4112

£100bn mass test plan shelved

The government has abandoned plans to spend £100bn on a massive expansion of its national covid testing programme, legal documents have shown.

A letter from government lawyers also shows that the ambitious Operation Moonshot programme, first revealed in leaked documents seen by The BMJ last month, has now been quietly subsumed by the national test and trace programme.

The documents detailed a plan to carry out 10 million tests a day by early 2021, with the NHS in England budgeting £130bn a year to fund mass testing of the population “to support economic activity and a return to normal life.”

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As GPs you have got to try and do what you can to keep people at home
Krishna Kasaraneni, South Yorkshire

With workloads already six weeks ahead of where they would normally be, the GP said he had been dealing with only five patients in a three-hour consultation.

“I have got to try and do what you can to keep people at home and not be so cavalier and send people in,” he said, adding that this required many phone calls to secondary care colleagues.

The system was overwhelmed, so there’s quite a lot of waiting to try to get to the right person, he said. On a positive note, he said there was much “camaraderie and teamwork” between primary and secondary care.

Tackling health inequalities is more urgent than ever, says newly formed alliance

The pandemic has exposed how health inequalities can affect people not just over a lifetime but in a matter of weeks, a new coalition of 79 health and social care organisations has said.

The Inequalities in Health Alliance, formed by the Royal College of Physicians, has written to Boris Johnson to call for action.

Michaël Marmot, director of University College London’s Institute of Health Equity and the author of several key reviews looking at health inequalities, has praised the group’s efforts. He said, “The pandemic has exposed and amplified underlying inequalities in society. Health inequalities are the result. Tackling the social causes of health inequalities is even more urgent now.”

The alliance has asked the government to do three things: develop a cross government strategy to reduce health inequalities, enforce the socioeconomic duty placed on government...
Many patients discharged from hospitals in England in the past six months under new arrangements to free up beds did not get the follow-up support they needed, concludes a report from HealthWatch, which represents patients’ interests in England. Sometimes basic checks such as whether people needed transport to get home were missed, says the report. In many cases patients were feeling unprepared to leave hospital and confused about whom to contact for further information. Many reported not receiving a follow-up assessment after discharge. The report also highlighted concerns that some patients were not tested for covid-19 while in hospital or did not receive their test results before discharge.

The report was based on interviews with 590 patients or their carers on their experiences with discharge from hospital between March and August 2020. On 19 March the government issued national guidance to help hospitals free up 15,000 beds to cope with patients with covid-19. The “Discharge to assess” model aimed to help people leave hospital more quickly by having their ongoing care needs assessed in their own home or care home.

Families not kept updated
The report, written with the British Red Cross, found that 61% of patients said they received no information about the discharge arrangements, with many families not being kept up to date at a time when visiting was heavily restricted. The guidance required patients to be provided with a single point of contact if they needed further health advice after discharge, but 35% of respondents did not receive this. The report found that 82% of patients did not receive a follow-up visit and assessment, and nearly a fifth of those who did not receive a visit thought that they had significant unmet needs.

A quarter of patients (24%) were not tested for covid-19 during the time they spent in hospital. Despite the policy stating that all patients discharged to a care home should be tested, the survey found that 26% of respondents who were discharged to a home were not. Thirty per cent of patients did not receive their test results before being discharged, which could put family and carers at risk and be a particular problem for care homes, the report found.

Robert Francis, chair of Healthwatch England, said, “It’s essential we learn from what people have shared with us about the impact that a poorly handled discharge can have on them and their loved ones. Taking action now will not only reduce the risk to patients but will also help improve the way people leave hospital in the future.”

Tash Masud, president of the British Geriatrics Society, said, “A positive experience of being discharged from hospital can make all the difference for an older person living with frailty or other long term conditions. As new NHS discharge arrangements are implemented, it is critical that the gap between rhetoric and reality exposed in this report is eliminated so people feel safe, supported, and ready for the next stage of their recovery.”

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Pandemic discharges were often chaotic, says watchdog

bodies by section 1 of the Equality Act 2010, and adopt a “child health in all policies” approach.

The letter to the prime minister said that a cross government strategy was needed as health inequality was the result of varied factors. “All parts of government and public services need to adopt reducing health inequality as a priority,” it said.

The socioeconomic duty was also key to ensure the needs of vulnerable people were considered in every decision, the alliance said. “This gives us the best chance at avoiding unintended consequences falling disproportionately on the most disadvantaged.”

The pandemic had served to highlight the important role that a child’s health had in their adult lives. “We have seen all too clearly that by allowing more children to become obese in the past we increased their risk of dying from covid-19 in the present,” the alliance said.

“We need to be prepared for future pandemics, and make sure all public policy is focused on making sure every child has the best chance of good health throughout their life.”

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Why are old age and obesity such high risk factors for contracting serious covid-19?

More than 41 million people worldwide have been infected with SARS-CoV-2, with over a million deaths. Elisabeth Mahase asks what makes the virus so hard to control, and why are some people at greater risk.

**Why is it so hard to stop SARS-CoV-2 spreading?**

Paul Lehner, professor of immunology and medicine at the University of Cambridge, says that unlike the original SARS coronavirus or influenza, people with SARS-CoV-2 are most infectious before they become unwell, normally about a day before they develop symptoms.

“So you’re maximally transmitting virus while you’re feeling well,” he told a Science Media Centre briefing in London on 22 October. “This is a really brilliant evolutionary tactic of the virus. It means you can be out at the races, in a pub, singing in the church choir, at a matriculation—you’re feeling well. “This is a hit and run virus... The question then becomes: how can you make so much virus and yet feel well?”

Lehner explains that the answer lies in the virus’s ability to switch off cells’ natural response to it. “SARS-CoV-2 knows all about interferons. It has to, because it’s super-sensitive to them.

So it switches off the cells’ ability to make them, and it does this really well. In fact, it does it so well that you don’t even know you’re ill,” he says.

Interferons are proteins released by cells as a signal that a virus is present. In essence, they tell nearby cells to increase their defences. Lehner says that studies show you can’t tell which cells are infected until they are stained, then it can be seen they are “screaming with the virus.”

So can we do anything about this? Lehner says, “Yes, but we have to get better at asymptomatic screening.”

**Why is obesity a risk factor for severe covid-19?**

In July Public Health England estimated that having a BMI of 35 to 40 could increase a person’s chances of dying from covid-19 by 40%, while a BMI greater than 40 could increase the risk by 90%. But why is this?

Stephen O’Rahilly, director of the Medical Research Council’s Metabolic Diseases Unit at the University of Cambridge, also speaking at the briefing, said, “Two things happen when obesity occurs: the amount of fat increases, but also you put fat in the wrong places. You put it in the liver and in skeletal muscle. That disturbs metabolism. The key disturbance is very high levels of insulin in the blood.”

This disturbance is linked with a range of effects, including a rise in inflammatory cytokines and a reduction of diponectin, a molecule that directly protects the lungs, he says.

It’s also possible that fat increases in the lung, which may disturb how it handles the virus, he adds. “The simple stuff you read about—big chest, big bellies, et cetera—is all oversimplistic. What is really going on is metabolic, and we know that because if we look at genetic markers for the metabolic disturbance they are much more closely related to the bad outcomes than genetic markers for obesity itself,” O’Rahilly says.

**Survey: Ethnic minority doctors less likely to get consultant posts**

The big difference was in the likelihood of being offered a post the first time round

Doctors from ethnic minority groups have to apply for more consultant posts than white doctors to secure a job, a survey of applicants from 2018 by the Royal College of Physicians of London has found.

“The big difference was in the likelihood of being offered a post the first time round,” said a report of the survey. It found that “29% of white respondents were offered a post after being shortlisted for the first time, compared with just 12% of BAME [black, Asian, and minority ethnic] respondents.”

The RCP’s survey also found that white respondents had a 98% chance of being shortlisted after their first application, whereas among ethnic minority respondents the proportion was 91%.

The findings reflected a situation that had not changed for many years, said the college. Its analysis of the past eight years of surveys found consistent evidence that ethnic minority trainees were less successful at consultant interview, despite adjustment for potential confounding factors.

The RCP has now said it will work with NHS England and Improvement, NHS Employers, and the GMC “to make sure that employers are aware of these findings and that more needs to be done to ensure a level playing field.”

The college’s president, Andrew Goddard, said it was clear that racial discrimination was still a major issue within the NHS. He said, “We need to make sure everyone is given equal opportunities to achieve their potential and that the best doctors are appointed to the right jobs.”

“I look forward to working closely with the NHS, the GMC, and other medical bodies to do everything we can to put an end to racial discrimination in healthcare for good.”
FIVE MINUTES WITH . . .

Zana Khan

The GP talks about her experiences of racism and the need to be bold in tackling discrimination in the NHS

"Racism and discrimination are not things I've experienced previously in the same way as I do now. I often say that the past five years have been worse than the five years before that, and the five years before that. And I think this reflects political cycles. There is no better example than the 'hostile environment'—a systematic and psychological assault on attitudes towards people of colour.

"The pandemic has laid bare so many problems, including race and racism. I attended an academic meeting on racial discrimination. During that hour, an academic presented the eye watering differences in mortality between ethnic groups, an Asian doctor described being denied PPE when it was available, and I heard the story of a daughter being told her father had to be cremated rather than buried because he had covid-19—and this information was incorrect and in contradiction to Muslim burial practices. Around the same time, we had shocking news articles about the fact that black and minority ethnic (BAME) staff who complained about the lack of PPE were more likely to be disciplined.

"We must summon up inner strength to challenge what we feel is wrong, share our experiences, and feel confident that we will be supported.

"Voicing and tackling racism and racial discrimination are not just the remit of people of colour and BAME groups. Everybody must step forward to say what they think and to stand in solidarity."

Zana Khan is a GP specialising in the care of homeless people and inclusion health groups and is based at South London and Maudsley NHS Trust. She was speaking at the Royal College of GPs’ virtual conference on 22 October.
SPAIN

- On 21 October Spain became the first European country to pass one million cases. In May it relaxed one of the world’s longest lockdowns, but the country has struggled to contain outbreaks. Cases in and around the capital, Madrid, accounted for around a third of the country’s total, and the area remains in limited lockdown, with travel only for work, school, or medical reasons.
- Madrid’s regional leader, Isabel Díaz Ayuso, has opposed restrictions, leading to the resignations of local public health, primary care, and hospital chiefs and—to the national health minister’s consternation—one of the many political quarrels that are impeding containment measures. The government is considering a new national curfew while grappling with an underperforming test and trace system and a healthcare system that has long been hampered by austerity measures and is now buckling.

BELGIUM

- Already suffering the world’s third worst covid-19 mortality per capita, Belgium is facing a steep rise in incidence, with more than 160,000 new cases since the beginning of September. The government has closed bars and restaurants, imposed a curfew from midnight to 5 am, and limited groups to no more than four people.
- The country’s testing system has reached its capacity of around 65,000 tests a day, and testing is now restricted to patients with symptoms. Politico reported that in the week leading to 21 October there were more than 8,000 new infections each day and a doubling in the number of covid-19 admissions to hospital.

IRELAND

- The republic became the first country in the EU to re-enter lockdown, imposing a six week “circuit breaker” on 22 October. Although deaths are down to single figures, total cases have risen by more than 15,000 since the start of September, leaving the country’s test and trace system overwhelmed and forcing the health service to text more than 2,000 people to ask them to trace their contacts themselves.

FRANCE

- The government is considering extending the national state of emergency to 16 February. As of 17 October a strict 9 pm to 6 am curfew was imposed on Paris and eight other major cities, to last four weeks, after the country registered more than 30,000 cases in a single day. National media say hospitals in Dijon and Clermont have cancelled non-covid operations and staff holidays as they shift to emergency working, with TV station France24 quoting doctors saying this wave is already “worse than the first.”
Covid-19: Europe’s second wave

A relaxation of lockdowns and the public’s loosening of precautionary behaviours has seen recorded cases and deaths rise across the continent, and governments are now having to clamp down hard as their hospitals fill up once again. Mun-Keat Looi reports

Czech Republic

- A second national lockdown began on 22 October after the country recorded nearly 12 000 positive tests in 24 hours and the deputy prime minister announced that he had tested positive. Having avoided the worst of the first wave, the republic now has the worst infection rate in Europe, necessitating the declaration of a state of emergency on 5 October. Prague has seen violent clashes between anti-mask protesters and police as the government has struggled to convince the public of the ongoing danger.

Germany

- A sharp rise in cases this month has seen Germany take swift action. Curfews are now in place in Berlin, Munich, Frankfurt, Bremen, and Hamburg. Bavaria has been under a full lockdown since 20 October, with schools closed and residents asked to stay at home. Berchtesgaden county is one of the worst affected in the country, with 250 new infections each day per 100000 population. On 21 October Germany recorded 11 287 new cases—its highest ever daily total.
Gender diversity in academic medicine

A promising diversity incentive comes to a premature end in the UK

The BMJ analysis article examining the effect of gender diversity incentives in the UK’s National Institute for Health Research (NIHR) funding awards process (see p 193) has come at an interesting time.

Athena SWAN is a three level charter (bronze, silver, and gold) offered since 2005 to organisations that meet criteria to increase gender diversity. In 2011, the then chief medical officer and chief medical adviser to the UK government, Sally Davies, introduced a requirement that applicants for NIHR grants and places on academic training schemes must be working in institutions that held at least a silver Athena SWAN award. In September, as part of new measures to reduce bureaucracy for UK researchers in the wake of the coviD-19 pandemic, Louise Wood, co-lead for NIHR, announced an end to this requirement. Wood's announcement will come as a blow to those who believe gender equality to be a basic human right and gender diversity to be vital to the quality of health and medical research.

When the Athena SWAN charter was first introduced, many saw it as a box ticking exercise. Sally Davies’s initiative, however, seemed to stimulate awareness and activity around gender diversity in medical schools, leading to a 10-fold increase in silver and gold awards.

Ovseiko and colleagues’ analysis shows little change from 2006 to 2011 followed by an important improvement in gender balance among leaders of NIHR research themes; by 2016 the proportion of women in that role had risen threefold (to 24%) and the proportion of funding they acquired had increased more than fourfold.

Disappointingly, there was no change in the extreme gender imbalance among the more senior NIHR centre directors, but the change in theme leads is important because these individuals can progress to become directors. The analysis was observational, so cannot prove causality, but if 2021 data, when available, show a continued improvement, the evidence supporting an Athena SWAN effect would be highly suggestive.

Long way to go

In defence of her decision, Wood suggests that Athena SWAN has done its work and that gender diversity is now valued and supported throughout academic medicine, so the substantial administrative burden is no longer necessary. Her optimism seems misplaced. We have yet to reach critical mass in terms of female theme leads, and the more powerful and influential centre directors remain overwhelmingly male.

Ovseiko and colleagues cite evidence that gender diversity is important because it delivers research that is more interdisciplinary, higher quality, more rigorous, and more relevant. Studies have shown that women leaders get higher scores than men in multisource feedback exercises used in the UK to support the appraisal process. They outperform men not just in traditional female traits such as nurturing, but also in qualities such as taking initiative, driving for results, and displaying integrity and honesty.

To this can be added that medical women are over-represented in general practice and in the lower profile disciplines such as mental health, care of older people, and child health, where both the burden of disease and the cost to the public purse are high but the research base is relatively weak.

Reasons for the gender imbalance in academic medicine include an unequal distribution of caring responsibilities and associated part time working or career breaks. But these factors do not fully account for gender discrepancies, and universities are increasingly sympathetic to career breaks and part time working (for both women and men). In academic promotion, Unconscious bias is another contributor. This is being partially addressed through research identifying these biases, and by the implementation of anonymous peer review processes.

Also likely to be relevant are gender differences in response to competition. Competition is stressful. The stress response in humans is complex and likely to be gender related. Studies suggest that men are more likely to exhibit a fight or flight response and women a freeze or fold response. Neither is optimal in terms of creativity, productivity, and problem solving, but the fight response is less disabling in a competitive world. Competition is still believed to be motivating and helpful despite longstanding research suggesting the opposite. This enduring belief is likely to be serving male advantage in the academic world at the expense of high quality research.

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Covid-19’s known unknowns

The more certain someone is about the coronavirus, the less you should trust them.

In 2019, the medical historian Mark Honigsbaum concluded his book The Pandemic Century by saying: “The only thing that is certain is that there will be new plagues and new pandemics. It is not a question of if, but when.”

Look around and you might wonder if he was hopelessly wrong. Not about the pandemic, which turned up almost before his ink was dry, but about there being only one certainty. In the “science” of covid-19, certainties seem to be everywhere. We are not talking about those who insist hydroxychloroquine will save us, or who call masks “muzzles”, or who declare that many detected cases are false positives. We can also leave aside those who insist two opposing camps—Independent SAGE and the instigators of the Great Barrington declaration—both suggested that a high proportion of the UK population was infected during the first wave of covid-19. Although popular with President Trump, the model was rapidly revealed as misleading.

A third example is the creation of a new argument while quietly ignoring an earlier claim that has since been discredited. Models produced from two opposing camps—Independent SAGE and the instigators of the Great Barrington declaration—both suggested that a high proportion of the UK population was infected during the first wave of covid-19. Substantial serological survey evidence showed this was probably not so. Both then produced models that embraced work by others, showing that heterogeneity in contact susceptibility in the population could dampen infection trajectories, but without explicitly acknowledging their earlier conclusions.

We could find similar examples for every aspect of covid-19 science. Of course, overconfidence about our understanding comes in various guises. One is when the evidence changes little but conclusions based on it harden, as with the value of facemasks in the early stages of the pandemic. Views polarise alongside conflicting evidence on even their most strongly held views. Commentators who see new data or situations through the lens of their pre-existing views—be it “Let it rip” or “Zero covid now”—would fail this test.

Another example is the added traction that claims achieve because of the reputation—institutional or personal—under which they are advanced. For example, the Institute of Health Metrics and Evaluation—which produces the authoritative Global Burden of Disease reports—released a curve fitting model with strikingly low estimates of the future burden of covid-19 in the US. Although popular with President Trump, the model was rapidly revealed as misleading.

Respecting uncertainty

People may worry that acknowledging uncertainty risks a loss of authority, but this seems unlikely—ministers’ trustworthiness or authority has not increased with the confidence of their “game changing” pronouncements. Similarly, to allege that anyone who speaks of uncertainty is a “merchant of doubt” or exposes science to attack from these quarters, is to concede vital scientific ground by implying that only certainty will do. Generally, and particularly in the context of covid-19, certitude is the obverse of knowledge.

Two unequivocal authorities have written that “As our understanding of influenza viruses has increased dramatically in recent decades we have moved ever further from certainty about the determinants of, and possibilities for, pandemic emergence.” Their point is illustrated by the largely unexpected pandemic of coronavirus disease hitting a world bristling with influenza pandemic management plans.

When deciding whom to listen to in the covid-19 era, we should respect those who respect uncertainty, and listen to those who acknowledge conflicting evidence on even their most strongly held views. Commentators who see new data or situations through the lens of their pre-existing views—be it “Let it rip” or “Zero covid now”—would fail this test.

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PERSONAL VIEW, p 190
Victor Adebowale on systemic racism in the NHS

The NHS Confederation chair talks to Gareth Iacobucci about the importance of recognising and tackling inequalities

The fact of the matter is that this is a systemic issue, as awkward as that might be for some people to hear,” says Victor Adebowale. “That’s the evidence. It can be changed, but you can’t change something if you refuse to accept what it is.”

Adebowale’s stark assessment of racism in the NHS strikes a powerful note in 2020, the year in which the killing of George Floyd, the Black Lives Matter movement, and covid-19 have exposed racial inequalities around the world—and the urgent need to tackle them.

The Yorkshire born son of Nigerian parents has been tackling inequalities for many years, including a two decade stint in charge of Turning Point, a charity that supports people dealing with substance misuse, mental ill health, and learning disabilities. He was made a CBE in 2000 for services to the community, mental ill health, and learning disabilities. He was made a CBE in 2000 for services to the community, mental ill health, and learning disabilities. He was made a CBE in 2000 for services to the community, mental ill health, and learning disabilities. He was made a CBE in 2000 for services to the community.

After taking office at the NHS Confederation, Adebowale is acutely aware of the danger of staff burnout—and, with covid-19 cases now rising again, he says that it’s vital for staff to be supported by their employers in the workplace.

“The NHS has been under a lot of strain: there’s been a lot of moral harm and significant stress,” he says. “People haven’t taken holidays—they’ve been working in very, very difficult conditions, covered in protective gear. They’ve seen their colleagues die.

“I’m really worried about how we acknowledge the stress and the strain that they are under and support them to manage it, because they’re not machines.”

Reducing inequalities

“In some ways, what covid has done is exploit the weaknesses in society,” he says. “It has poured red paint down all the cracks. You can see the inequality, the inequity, the need for innovation. It has just made it so stark that we have to deal with these things.”

In February he coedited The BMJ’s special issue on racism in medicine, which issued a call to arms to tackle the racial inequality that persists in 2020 and urged the NHS to establish an independent “observatory” to inform action towards race equality goals.

Adebowale, engaging and convivial as he chats to The BMJ by video link five months after taking office at the NHS Confederation, is delighted that NHS England’s chief executive, Simon Stevens, has now approved the NHS Race and Health Observatory, which the NHS Confederation will be closely involved in. But he adds that the health service is only “at the beginning” of tackling the root causes of racism, with a lot of work still to be done on the leadership front.

“How do we ensure that leaders lead everyone all the time and not just some people some of the time?” he asks. “First, we have to make this discussible. Second, we have to make it measurable. You can’t be saying we are providing excellent care if it’s not excellent for everyone. And third, we have to make the right interventions in order to reverse and move the needle in the right direction.”

Speaking truth to power

The government was heavily criticised for not acting quickly enough on evidence showing that black and minority ethnic people were more likely to contract and die from covid-19, and groups that submitted evidence to Public Health England’s review into the issue say that their evidence was initially ignored.

A follow-up report did eventually acknowledge that racism may be linked to the raised death risk in ethnic minorities, and Adebowale believes that the government is now listening. But he adds that the pandemic has shown in clear and tragic terms why action is needed now, not later. “They have started listening and started opening up a conversation about the dynamics of inequality and inequity in race and health and care, but there is a way to go before we get alignment,” he says.

“It cannot be ignored any longer. We’ve got to crack on.”

An ability to communicate “in plain English” will be a key facet of his leadership of the NHS Confederation. “I’d like us to be bolder about speaking truth to power,” he says. “You don’t have to be aggressive or insulting, but just tell it like it is, because people recognise that.”

Shifting priorities

His ability to connect with leaders within the NHS Confederation—whose members include acute hospitals, primary care and mental healthcare providers, and the voluntary and private sectors—has been put to the test during the first six months of his tenure, given that it has coincided with a global pandemic.

“It’s not been easy, because they say that 70% of human communication is non-verbal, and I’ve spent a lot of time on Teams and Zoom,” he explains. “But I’ve done virtual visits to hospitals. It worked really well, talking to the top teams about what their issues are.”

He adds, “Obviously, the priorities have shifted. We’ve had nearly 50000 people die from covid-19. That can’t be for nothing.”

Adebowale is acutely aware of the danger of staff burnout—and, with covid-19 cases now rising again, he says that it’s vital for staff to be supported by their employers in the workplace.

“The NHS has been under a lot of strain: there’s been a lot of moral harm and significant stress,” he says. “People haven’t taken holidays—they’ve been working in very, very difficult conditions, covered in protective gear. They’ve seen their colleagues die.”

“I’m really worried about how we acknowledge the stress and the strain that they are under and support them to manage it, because they’re not machines.”

Now chair of the NHS Confederation—a post he has held since April—Adebowale cites reducing inequality as one of his top priorities, alongside improving access to services and digital transformation. He says that the disproportionate impact of the covid-19 pandemic on disadvantaged groups has only increased his desire for swift action.

The NHS is in my blood. I have a personal commitment to it which is pretty unshakeable.
We can’t just expect them to keep going indefinitely. We will lose good people.

“It’s not about seeing them as heroes—it’s about seeing them as human beings, with real needs, who need support.”

“For the whole population health, it’s not about learning from covid but also about building on recent changes in the NHS so that we can, to coin a phrase, ‘build back better,’” he says.

Population health
In Adebowale’s view, the NHS’s pre-covid shift towards integrated care systems and population health must continue, with GPs (“the front door to the NHS”) playing a prominent role. But he wants tribalism and territorialism between different parts of the system to be consigned to the sharps bin of history.

“The whole population health agenda starts with primary care, so there’s a lot of work to be done with primary care colleagues to make sure that they’re supported in this and that their voice is heard,” he says. “But what we don’t want is a kind of battle for supremacy. We need to be clear about the criteria for success of any new system, build the structure to support that success, and then evaluate it, rather than scrumming for who gets the key to the safe.”

This, he thinks, is where the NHS Confederation can be influential in helping the different parts of the system find common ground and speak with one voice.

“Those days when you were bound by your organisational walls are gone,” he says. “You have got to be working in partnership—otherwise you’re doing your communities a disservice.”

Collaboration
Adebowale believes that the NHS should continue to work with private sector providers to deliver services, noting how private sector capacity has been adopted to bolster elective care during the pandemic.

“The independent sector relationship has proven absolutely crucial as we work through covid and will continue to do so,” he says. “Gone are the days of ‘either/or’—it’s ‘and, and’ now. The public wants value, and they’re going to get that by people working together.”

And what about the voluntary sector, given his background in this area?

“We need to do more to highlight the relationship between the voluntary sector and the statutory sector in delivering population health,” he says. “I also think there’s more work to be done by the voluntary sector itself, to make its voice more coherent.”

But his desire for pluralism is matched by his enthusiasm for the NHS, which he says is “in my blood . . . I have a personal commitment to the NHS which is pretty unshakeable.”

He cites his mother, who was an NHS nurse for 40 years, and the NHS’s founding father, Nye Bevan, as two of his major inspirations. But what will Adebowale view as success in his role?

“He says, ‘If we can move the needle on equity to make it central to the policy around health and care, to ensure that individuals get the service that they need, where they need it, when they need it; and on digital innovation, not as a ‘nice to do’ but as core to the future of the service—then I’ll consider my tenure to have seen some success.

“If I can do that while retaining a sense of humour and not taking myself too seriously, I’ll be doing all right.’

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As the UK’s winter draws in, the southern hemisphere is enjoying spring. Despite dire predictions, it appears to have experienced a welcome side effect of covid-19: lower transmission of respiratory diseases.

Australia, New Zealand, and South Africa, as well as Argentina, Chile, and Paraguay, “skipped” the flu season in 2020. New Zealand death rates at the height of winter were the lowest absolute figure since 2016—including 25 covid-19 deaths; when accounting for population growth, it is the lowest death rate per 100 000 people in at least 10 years, the period for which data are available. Flu has been almost non-existent with a peak of 0.8% of people self-reporting flu like symptoms. GP surveillance has found no confirmed cases.

The pattern was similar in other countries: in one study, only 33 influenza positive test results were detected among 60 031 specimens tested in Australia, 12 among 21 178 specimens tested in Chile, and six among 2098 in South Africa.

Experts say that rather than it being a less virulent year, measures against covid-19—lockdowns, school closures, mask wearing, and social distancing—almost certainly had an impact. “Because influenza is transmitted in much the same way as covid-19, the steps used to control covid-19 are likely to be even more effective against flu, given the lower R value for seasonal flu because of pre-existing population immunity,” says Paul Hunter, professor in medicine at the University of East Anglia.

Bharat Pankhania, communicable disease specialist and senior clinical lecturer at the University of Exeter, puts it more directly: “When covid-19 arrives, people take cover. As a result of extra hand hygiene, social distancing, and other precautions, there are fewer other infections.”

UK expectations

Many commentators agree it is likely a similar pattern will follow in the UK—although it should not be taken for granted. Schools remain open and, as flu spreads readily through children, an outbreak is not impossible.

Plus, it is hard to make comparisons with countries in the southern hemisphere because there are variables and differences—not least that their winters are warmer than ours and complying with being outside when possible will be harder in the UK.

Julian Tang, honorary associate professor in respiratory sciences and clinical virologist at the University of Leicester, says compliance with covid-19 measures has likely been variable in both Australia and the UK—and, though the overall principles are similar, fine details differ. For example, Australia recommended 1.5 m social distancing versus the UK’s 2 m.

Public Health England says that what happens in Australia is not a clear predictor of the UK’s flu season, because the former spans tropical and sub-tropical latitudes while the UK is temperate and so seasonality is generally more consistent.

The timing and intensity of flu in the UK is more dependent upon factors such as population immunity (from prior infection and vaccination), local weather conditions, the dominant circulating strain, and how closely matched it is to prior strains and the season’s vaccine.

Vanessa Saliba, head of flu at Public Health England, told The BMJ, “We cannot be complacent, the
The southern hemisphere’s season doesn’t necessarily imply that the UK will have a similar experience and many factors are at play. For example, other strains of flu could still emerge, and the actual impact may be modified depending on what type of social distancing is in place.”

Ian Higginson, vice president of the Royal College of Emergency Medicine, says he is not aware of any plans to change service delivery because of any anticipated reduction in respiratory conditions. Higginson, a consultant in Plymouth who did his postgraduate training in New Zealand, says it is unlikely that anyone knows whether the experience of the southern hemisphere is a reliable predictor of what will happen in the UK.

“I’m not sure we can learn anything from their experience other than it’s possible that the measures taken to reduce the spread of covid-19 have an impact on the spread of other respiratory diseases,” he said.

“There are a lot of factors that can contribute to how good or bad a flu season is. And those in the southern hemisphere are going to be potentially quite different to the factors that we experience over here.”

**Vaccination**

Another reason for a predicted quiet flu season in the UK is an anticipated high uptake of the influenza vaccination. In South Africa, many people rushed to clinics to get flu shots once covid-19 cases rose, hoping to avoid at least one comorbidity.

In September, the UK’s Department of Health and Social Care announced its biggest flu vaccination programme to date, aiming to immunise 30 million people. But, so far, the programme has had supply problems. Boots suspended NHS and private flu vaccination bookings for under 65s in September, citing “unprecedented levels of demand.” After extending the free vaccination to the over 50s, NHS England then confirmed that eligibility will only be extended to those aged 50-64 “if circumstances permit.”

One US paediatrician has posited that flu vaccination may increase the likelihood of catching covid-19. Doctors who spoke to The BMJ said there was no evidence for this, and that it was inherently unlikely. Tang says Australian research suggests vaccination may enhance host immune responses overall in a possibly beneficial way.

Yvonne Doyle, medical director at Public Health England, says that the flu vaccine is more important than ever, to help reduce transmission of flu and protect the nation from a “double threat” of flu and covid-19, which would pose problems for an NHS where intensive care beds are already filling up. Last winter in the UK, flu came early, so the two viruses did not overlap much.

**Twin epidemic**

This year’s flu could be worse than expected. There is mixed opinion as to what that would mean for vulnerable patients if there were a twin epidemic—some believe this would provoke a double assault on the lungs, others think that an inflammatory response from one virus would prevent the second taking hold.

Research from PHE, published on 22 September as a preprint and not peer reviewed, suggests the risk of death more than doubled for people who tested positive for both flu and covid-19, compared with those with covid-19 alone.

In South Africa only six influenza positive test results were detected among 2098 specimens tested

**Flu vaccination will protect UK from double threat**

Yvonne Doyle
Where there is consensus is the impact on capacity if there were a twin epidemic. Surveillance for the two diseases is closely integrated and PHE is encouraging healthcare workers to test patients for flu alongside covid-19 where possible.

Mike van der Watt, chief medical officer at West Hertfordshire Hospitals NHS Trust, says staff are testing all emergency department patients on arrival and the trust’s new in-house tests offer simultaneous testing for flu, covid-19, and other common respiratory pathogens. He adds, “The impact of a dual epidemic is clearly a concern, but the Australian experience suggests that widespread mask use significantly reduced the seasonal impact of flu.”

That the two diseases have very similar symptoms will cause pressure on the covid-19 testing system, creating more capacity problems, as well as personal anxiety, according to Pankhania.

Jeremy Brown, professor of respiratory infection at UCL and a member of the British Thoracic Society, says that if we did have a significant flu season he believes it could occur “back-to-back” with covid-19, delayed because of social distancing. So, covid-19 might be over and done with before flu hits, though that would still be “pretty exhausting” for hospital staff.

Emergency medics are considering ways to minimise cross infection when winter hits, as well as how to deal with the usual capacity problems and staff absences from illness. Higginson says one challenge is space. “Patients must be kept safe in emergency departments from the effects of covid-19. We can’t have patients in our corridors. We kept patients squashed together in the past, but it’s never been the right thing to do. This demonstrates how wrong it was.”

Martin McKee, professor of European Public Health at the London School of Hygiene and Tropical Medicine, says this point is fundamental. It’s why countries hit by SARS redesigned their health facilities to reduce the risk of infections. He adds, “One of the reasons the UK has been hard hit is because of underinvestment in the health service for so long—when something like covid-19 comes along we can’t cope.”

Research he and colleagues conducted on high death rates in 2015—with a notable spike in January—posited that it was not flu alone that increased mortality but a health system unable to cope following large scale cuts.

McKee says there is something we can learn from the southern hemisphere’s winter experience: it makes us realise that there are other things we can do in addition to vaccination to tackle flu—concentrating on ways we can reduce airborne transmission. “This is an opportunity to reassess the way we look at these things,” he says.

Brown agrees, noting that the vaccine “varies in efficacy.” But he doesn’t think yearly measures are feasible, practically speaking. “It isn’t really politically or socially sustainable to have that sort of isolation installed on an annual basis.”

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