this week

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Plan to lower BP threshold unveiled

Thousands more people could be eligible for drugs to lower blood pressure under draft clinical guidelines published by NICE.

The new recommendations reduce the threshold for risk of cardiovascular disease (CVD) at which blood pressure lowering treatment should be considered. The guide suggests treatment be offered to patients under the age of 80 years with a diagnosis of stage 1 hypertension if they have a 10 year CVD risk of 10% or more. This is in contrast to the 20% risk threshold used in previous NICE guidelines.

The change could result in as many as 450 000 more men and 270 000 more women in England being eligible for treatment. But NICE said many of these patients were likely to be already being treated because of variation in how earlier recommendations were implemented.

Anthony Wierzbicki, consultant in metabolic medicine and chemical pathology and chair of the guideline committee, said the draft shifted the focus to earlier intervention. "It unifies and simplifies the advice given to GPs in implementing the NHS Health Check, and it supports the NHS long term plan's aim to improve chronic disease prevention," he said. "The guideline also places a greater emphasis on achieving and maintaining blood pressure targets."

Helen Stokes-Lampard, chair of the Royal College of General Practitioners, acknowledged the value of taking steps to prevent CVD. But she said many GPs feared the unintended harms of prescribing drugs whose benefit was limited. She said, "Lowering the threshold for treatment or diagnosis of hypertension is likely to affect thousands if not millions of patients, so this decision must be evidence based."

She added that although clinical guidelines were useful for GPs, they were not "tramlines forcing us to practise in certain ways." She said, "GPs are highly trained to prescribe taking into account the guidelines but also the circumstances of the individual sitting in front of them, including physical, physiological, and social factors that might be affecting their health."

Some experts warn the recommendations do not go far enough. Stephen MacMahon, professor of medicine and principal director of the George Institute for Global Health at the University of Oxford, described the draft guidelines as "surprisingly conservative."

He said, "There is strong evidence that greater reductions in blood pressure

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NICE estimates that more than 700 000 patients who are not currently eligible could get treatment to lower their blood pressure if the draft guideline is implemented

LATEST ONLINE

- BMA backs doctors fighting government over "discriminating" NHS pension scheme
- SAS doctors to be asked about their workplace experiences for the first time
- Philippines to charge Sanofi staff and government officials over dengue vaccine

SEVEN DAYS IN

Life expectancy in England and Wales has fallen by six months

GETTY IMAGES

Life expectancy of adults in England and Wales has fallen by around six months, according to figures from the Institute and Faculty of Actuaries.

The institute, which works on behalf of pension and insurance companies, expects women who are now 65 to die at 89.2 years on average, down from last year's estimate of 89.7. For men expectancy has fallen from 87.4 to 86.9 years. Compared with 2015, projections are down by 14 months for women and 13 months for men.

The change is attributed in part to a long term slowdown in improvements to mortality, which were 2% or higher a year for most of the period 2000 to 2011 but then fell to around 0.5% a year. The slowdown represents a "new trend rather than a blip," the institute said. Medium or long term influences were at play, rather than short term events such winter temperatures or seasonal respiratory disease, it said.

Danny Dorling, professor of geography at the University of Oxford, linked the fall to government policy. "Something began having an influence shortly after 2010," he said. "Older age mortality rose as services for the elderly were massively cut," adding that numerous research projects have ruled out other influences.

Harriet Pike, Cambridge Cite this as: *BMJ* 2019;364:l1123

Public health

Make cleaner air a national priority, says PHE

Public Health England called for local and national government to do more to improve the UK's air quality, with a raft of recommendations such as setting more ambitious targets for electric car charging points and encouraging low emission fuels and electric cars. It said that more could be done to boost investment in clean public transport and foot and cycle paths to improve health, and it called for more clean air zones and for redesign of cities to reduce people's exposure to highly polluting roads. Long term air pollution kills between 28 000 and 36 000 people a year, said the agency.

Social attitudes survey

Satisfaction with NHS is lowest for over a decade

Public satisfaction with the NHS fell to 53% in 2018, the lowest level since 2007, an analysis of the 2018 British Social Attitudes survey shows. This was three percentage points lower than in 2017 and 17 points below its historical peak of 70% in 2010, said the analysis by the King's Fund and the Nuffield Trust. Long waiting times, staff shortages, and a lack of funding remained the top three reasons people gave for their dissatisfaction in 2018.

US news

Esketamine approved for resistant depression

The FDA approved Spravato (esketamine) nasal spray in conjunction with an oral antidepressant for treatment resistant depression. Esketamine, a derivative of the anaesthetic drug ketamine, will be available through a restricted distribution system because of the risk of serious adverse outcomes resulting from sedation and dissociation, the FDA said. Some US clinics already offer it off label, and patients have reported that it works within hours instead of the weeks that other antidepressants can take.

Scott Gottlieb resigns from FDA

The commissioner of the Food and Drug Administration, Scott Gottlieb (right), resigned unexpectedly after serving less than two years. He said that he would leave within a month as he was tired of the long weekend commute to see his wife and three young children. In January he denied rumours he was quitting. A successor has not been named. A new commissioner must be approved by the US Senate.

NHS infrastructure

Lack of capital investment is undermining care

Declining and inadequate spending available for new NHS buildings in England is risking the care of patients and staff productivity and could derail ambitions to transform the NHS, a new report by the Health Foundation concluded. The report condemned the "short termist approach" that had seen a 21% reduction in capital funding for NHS trusts in England over the past eight years. The report noted that capital investment in England was much lower than that in similar countries and that there had been £500m of cancelled or postponed capital investment this year alone.

Mental health

Loneliness and universal credit widen "care deficit"

Growing social and economic hardship is resulting in "a substantial care deficit" in communities, NHS mental health trust leaders warned. A new report by NHS Providers looked at levels of demand and at what lay behind the growing pressure. The report identified widespread concern about benefit cuts and the effect of the universal credit. It also suggested that loneliness, homelessness, and financial hardship were adding to pressure on mental health services.

Diabetes

Guidance issued on flash glucose monitors

NHS England published clinical guidance for CCGs on national availability of flash glucose monitors for patients with type 1 diabetes from April. A *BMJ* investigation last year showed how a postcode lottery denied tens of thousands of patients access to the devices.

MEDICINE

More paediatricians are needed for Scotland to have acceptable standards of care

Workforce

Scotland "needs 82 more paediatricians"

Children's health in Scotland is at risk because there are too few doctors to deliver the necessary standards of care, the Royal College of Paediatrics and Child Health warned. Its workforce survey concluded that Scotland needs at least 82 extra full time consultant paediatricians (a 25% increase) to bring the service up to an acceptable standard. Service pressures led to inpatient paediatric units in Scotland having to be closed to new patients for 137 days in the year to September 2017. Neonatal units were closed on 120 days in the same period.

Legal news

Court orders tobacco payout to Quebec smokers

A class action lawyer (below) was among those celebrating when Quebec's Court of Appeal upheld a landmark 2015 judgment ordering three tobacco firms to pay $C16bn (£9.1bn) in damages to Quebec smokers. Imperial Tobacco, JTI-Macdonald, and Rothmans, Benson & Hedges lost their appeal on all substantive grounds. Interest that accrued during the appeal process will add more than $C1bn to the payout in Canada's biggest ever class action suit, which was first filed 21 years ago.

Irish GP admits prescribing opioids inappropriately

Patients of an Irish GP are to be told for the first time that they were prescribed unnecessary opioids and that their doctor was administering some of the drugs to himself. The unnamed GP admitted to the Medical Council of Ireland that over five years he administered opioids orally or intramuscularly to one or more of 36 named patients, when he knew or ought to have known that it was "inappropriate or not clinically warranted."

Sex inequality

Male leaders should be women's allies

Sex equality in the NHS workforce will be achieved only if men act as allies to women, a report argued. Launched on International Women's Day, the report gathered views from men in senior NHS leadership roles. Published by the Health and Care Women Leaders Network, the report called on male leaders to challenge ingrained behaviours and assumptions, within their organisations and in the NHS more widely.

World's health bodies are slow to tackle inequality

Many of the world's health organisations are making slow progress in tackling problems of gender pay gaps and sexual harassment, a report concluded. The second annual report by Global Health 50/50, an independent initiative to promote action on gender, analysed policies and practices of 198 health organisations covering an estimated 4.5 million employees.

Cite this as: *BMJ* 2019;364:l1125

AGE SHIFT

In 2018 20% of staff and associate specialists and locally employed doctors were aged 20 to 29, up from 12% in 2012, reflecting the fact that more junior doctors are taking a break from training

[General Medical Council]

SIXTY SECONDS ON . . . REVERSING TYPE 2 DIABETES

AH, LAST WEEK'S BIG NEWS STORY

It sure was. "Soup and shake diet offers hope of reversing diabetes for millions" and "Weight loss can reverse type 2 diabetes" were some of the feverish headlines.

WHAT FED THE NEW HEADLINES?

A cluster randomised controlled study in *Lancet Diabetes and Endocrinology* that looked at a structured weight management programme for reversing type 2 diabetes. The two year update to the Diabetes Remission Clinical Trial (DiRECT)—a low energy (825-53 kcal per day) formula diet for 12 to 20 weeks followed by structured primary care support—found sustained remissions at 24 months for 53 of 149 people in the intervention arm (36%).

DOES THIS ADD EVIDENTIAL WEIGHT?

You could say that. The initial trial of 298 patients, which reported in 2017, found that 68 of 149 intervention participants (46%) did not have the disease a year later.

DID SOME PEOPLE BENEFIT MORE?

Sustained remission was linked to the amount of weight loss. Two thirds (29 of 45) of people who maintained a weight loss of more than 10 kg were still in remission after two years, compared with 5% of those who lost less than 5 kg.

DOES IT MATTER WHEN A PATIENT'S DIABETES WAS FIRST DIAGNOSED?

It does. The participants had type 2 diabetes for less than six years, and the authors noted that "remission, although still possible, is less likely after longer disease duration."

SHOULD ALL OBESE TYPE 2 PATIENTS BE FOLLOWING THIS PROGRAMME?

Elizabeth Robertson, research director for the charity Diabetes UK, said the findings were "exciting" but added, "Type 2 diabetes is a complex condition, and this approach will not work for everyone. That's why we're investing in further research, to understand the biology underlying remission."

WHAT IS THE NHS DOING?

NHS England has committed to test a programme. The latest findings are likely to strengthen calls to expand this scheme.

Gareth Iacobucci, *The BMJ*

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(Continued on page 421)
produce greater reductions in stroke and heart attack. Yet the draft guidance recommends blood pressure targets that are only slightly lower than the starting level for treatment.

"This will almost certainly result in large numbers of patients not achieving the full potential benefits of treatment because of inadequate reduction in blood pressure."

He also criticised NICE's recommendation for a stepped approach to treatment. "Much lower blood pressure targets are required, and multiple drugs need to be used right from the start if patients are to achieve the largest reduction in the risks of stroke and heart attack."

Criticism

Liam Smeeth, head of the department of non-communicable disease at the London School of Hygiene and Tropical Medicine, criticised NICE's reliance on "arbitrary thresholds" for diagnosis of hypertension. The guideline specifies that treatment should be considered for patients with a diagnosis of stage 1 hypertension (a clinic blood pressure of 140/90 mm Hg or higher).

"There is higher risk at higher blood pressure levels, but no evidence to support a distinct threshold above which people need treatment and below which they don't," he said. "We should be moving towards a more unified approach to cardiovascular disease prevention, identifying people at high risk and targeting all their major risk factors rather than seeing blood pressure in isolation."

NICE said its guideline committee had considered new studies indicating that people with blood pressure below 140/90 mm Hg might also benefit from drug treatment. But it said some of the studies were difficult to interpret and could not be used directly to inform its recommendations.

NICE's draft is open for consultation until 23 April. Final guidance is expected in August.

Harriet Pike, Cambridge

Cite this as: *BMJ* 2019;364:l1105

NHS is to test scrapping the four hour A&E target

We are keen that changes are not imposed due to political will but are developed collaboratively
Taj Hassan, Royal College of Emergency Medicine

NHS England is to test plans to scrap the four hour target for seeing and treating patients in hospital accident and emergency departments, as part of a radical shake up of waiting time standards.

The proposals come out of a clinical review of access standards by NHS England's medical director, Stephen Powis, which assessed how targets might be altered to reflect advances in clinical practice and service delivery since they were introduced in the 2000s. The review sets out changes to standards across urgent and emergency care, elective care, cancer care, and mental health, which it says should be tested this year.

The review proposed replacing the current emergency care targets with five new standards (box, left).

The current four hour standard has proved "useful in focusing on flow in the best hospitals," the review said, but has provided "limited insight into patient care" as it does not measure total waiting times or differentiate according to severity of condition. There is also a "false perception that delivery against the standard is the sole responsibility of those working within emergency departments," because it measures only "a single point in often very complex patient pathways," it added.

PROPOSED EMERGENCY CARE TARGETS

- Time to initial clinical assessment to "identify life threatening conditions faster"
- Time to emergency treatment of critically ill and injured patients
- Mean waiting time across all A&E departments and mental health equivalents
- Improved use of same day emergency care, to avoid unnecessary overnight hospital stays
- New call response standards for 111 and 999

Ignoring sepsis guide could lead to fines

We've come a long way in improving how we identify and tackle sepsis
Celia Ingham Clark, NHS England

NHS hospitals in England could be fined if they fail to adhere to new guidelines for detecting and treating adult sepsis.

The mandatory guidance requires hospital staff to alert senior doctors if patients with suspected sepsis do not respond to treatment within an hour. All NHS trusts in England will be contractually obliged to comply with the new guidance from 1 April.

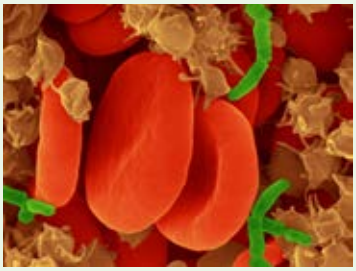
NHS commitment

The advice—drawn up with the Royal College of Physicians, the Royal College of General Practitioners, NICE, and the UK Sepsis Trust—follows a commitment in the NHS long term plan to tackle the condition, which claims around 52 000 lives a year in the UK.

Hospital teams should look for sepsis at an early stage in patients coming to emergency departments and those already on wards, the guidance states. Staff should also take sufficient note of non-specific symptoms and concerns expressed by relatives and carers such as acute changes in behaviour, it adds.

The latest advice notes that some staff found NICE's 2016 guidance difficult to translate into practice. Despite recent improvements—screening rates in emergency departments rose from 78% to 91% between 2015 and 2018—NHS England said more action was needed to increase compliance.

The advice comes as the NHS is set to pilot clinical standards aimed



Elsewhere the review proposed testing several mental health access targets designed to deliver parity of esteem between mental and physical illness. To help speed up cancer diagnoses a target will be tested to provide a definitive diagnosis to all people with suspected cancer within 28 days of urgent referral.

Publishing the interim review Powis said, "As we build an NHS that is fit for the future, now is the right time to look again at the old targets which have such a big influence on how care is delivered, to make sure they take account of the latest treatments and techniques, and support—not hinder—staff to deliver the kind of responsive, high quality services that people want to see."

In a joint statement Derek Alderson, president of the Royal College of Surgeons, and Andrew Goddard, president of the Royal College of Physicians, said that current targets had driven improvements but had also led to "some perverse behaviours."

"In the spirit of advancing medicine by testing hypotheses, we support plans to pilot NHS targets and measurements for cancer, emergency, and planned treatment in England," they said. "It is crucial any new standards are developed in partnership with doctors and patients."

The Royal College of Emergency Medicine, which opposes scrapping the four hour target, said, "The college is very clear that rather than scrapping the four hour access standard, it should be supported by a series of complementary metrics that help understanding of the causes of long waits and crowding in emergency departments."

The college's president, Taj Hassan, said, "We are keen to ensure that changes are not imposed due to political will but are developed collaboratively."

Gareth Iacobucci, *The BMJ*

Cite this as: *BMJ* 2019;364:l1148

PROPOSED MENTAL HEALTH TARGETS

- See all mental health patients needing urgent or emergency care within one hour of referral from emergency departments
- Provide expert assessment within hours for emergency referrals and within 24 hours for urgent referrals in community mental health crisis services
- Waiting time standard of four weeks for children and young adults who need specialist mental health services
- Waiting time standard of four weeks for adult and older adult community mental health team services

at providing quicker diagnosis and treatment of sepsis for patients arriving at emergency departments.

Celia Ingham Clark, medical director for clinical effectiveness at NHS England, said, "We've come a long way in improving how we identify and tackle sepsis.

"After the success we've had ramping up earlier sepsis diagnosis in many parts of the country, all hospitals will now be required to deliver the best possible practices."

Tim Nutbeam, clinical adviser for the UK Sepsis Trust, welcomed the initiative. "If delivered correctly it will ensure rapid and effective treatment for patients who need it most, while ensuring clinical decision makers are supported in making informed, balanced decisions," he said.

"This next step will ensure every patient gets the attention they need within existing resources."

Gareth Iacobucci, *The BMJ*

Cite this as: *BMJ* 2019;364:l1124

"Wards need more visible consultants"

The newly appointed GMC chair has called on senior doctors to provide visible frontline leadership in hospital wards and to call out examples of poor practice.

In a speech at the Royal College of Physicians and Surgeons of Glasgow Clare Marx highlighted research showing that patients' mortality rates improved by 33% when a consultant surgeon was on the ward.

"This is something we could do, within the resource we have, that could potentially make a huge difference to patients," she said.

Marx also gave the example of a surgeon colleague who had organised his department to have a consultant "at the front door" who took GP calls. She said, "He is a surgeon who deals with a pretty rare subsection of bowel surgery, so for him to go from this to being at the front door is quite a big change, and he led his colleagues to do the same."

Such clinical leadership should go hand in hand with challenging examples of poor practice, Marx argued. "The bottom line is—and this is a conversation that we have had in the medical fraternity for a long time—we know who the good surgeons are and we know who the not so good surgeons are," she said.

MORTALITY rates fall by **33%** when consultant surgeons are on wards

"What are we doing about it? Because we know patients do worse if we are not as good. That is the bottom line."

Speaking on the eve of International Women's Day, Marx highlightedthe lack of women in senior clinical roles. "Women still are markedly under-represented in the medical leadership workforce. They are also under-represented in academic roles and, of course, in surgery."

She added, "In England only 24% of trust medical directors are women. It's not a pipeline issue: there have been plenty of women around for a long time. What is it that we are not doing to encourage these women or to make the role possible?"

Abi Rimmer, *The BMJ*

Cite this as: *BMJ* 2019;364:l1109

NEWS ANALYSIS

How will reclassification of pregabalin and gabapentin affect doctors and patients?

From 1 April pregabalin and gabapentin will be reclassified as class C controlled substances in the UK. The change, announced last October, is expected to prompt a decline in the use of the drugs as prescribing, dispensing, and collecting them becomes more onerous for doctors, pharmacists, and patients.

The reclassification will make it illegal to supply pregabalin and gabapentin through repeat dispensing. Pharmacists will need to dispense the drugs within 28 days of a prescription being written, and doctors will have to hand sign prescriptions, unless a system for electronic prescription of controlled drugs is agreed and rolled out. NHS England sent guidance to general practices about the changes last month (see box, right).

After representation from community pharmacy groups it has been decided that pregabalin and gabapentin will be exempt from safe custody regulations, meaning that they will not be required to be kept in controlled drug cabinets.

The reclassification has been prompted by a growing number of deaths associated with misuse of the two drugs: the number linked to pregabalin increased sharply from four in 2012 to 136 in 2017, and those linked to gabapentin rose from eight in 2012 to 59 in 2016. Toxicologists suspect that these numbers are just the tip of the iceberg.

Illegal diversion and addiction

The Advisory Council on the Misuse of Drugs recommended the reclassification in 2016 because of concerns about medical misuse, illegal diversion, and addiction. In the previous five years, prescribing of pregabalin had increased by 350% and gabapentin by 150%.

The extra workload may make GPs think twice about starting pregabalin in someone who could benefit
Ley Sander, UCL Queen Square Institute of Neurology

The drugs are indicated for the treatment of epilepsy, peripheral and neuropathic pain, and generalised anxiety disorder in adults, and a particular concern is that they may have been prescribed off label to avoid or reduce prescribing opioid analgesics.

"These drugs are not that effective for a lot of the types of pain they are being prescribed for," said Emma Davies, advanced pharmacist practitioner in pain management at the Abertawe Bro Morgannwg University Health Board in Wales. "If they're being used for patients without the signs and symptoms of neuropathic pain then they're likely to be more harmful than helpful."

While doctors and pharmacists understand the reclassification and are supportive, there are warnings that changes will have workload implications and make collecting drugs more laborious for patients.

Martin Johnson, clinical lead for chronic pain for the Royal College of General Practitioners, said, "Patients with epilepsy, pain, and anxiety who benefit from taking the drugs have

FROM 2010 TO 2015 prescribing of pregabalin increased by 350% and gabapentin by 150%

REX

NHS and Vertex deadlocked over price of cystic fibrosis drug

Both sides of the stalled negotiations on the provision of the cystic fibrosis (CF) drug Orkambi (lumacaftor/ivacaftor) accused the other of inflexibility while giving evidence to the Health and Social Care Committee's inquiry this week.

Vertex Pharmaceuticals has been in dispute with NHS England over the high price it is demanding for Orkambi—£105 000 per patient a year. The mounting frustration over the impasse was highlighted by a demonstration of patients, families, and campaigners after the hearing in Parliament Square.

Jeff Leiden, chief executive officer of Vertex Pharmaceuticals, told the committee he was due to meet the health secretary, Matt Hancock, on 11 March and would put forward some "new ideas."

Scottish deal

He suggested they could discuss a deal similar to that agreed in Scotland, which would see Orkambi supplied to NHS patients at a discount to the list price, pending further talks on how to measure the drug's cost effectiveness.

Last July, after a year of talks, NHS England published what it said was a

ADVICE TO GPs

- Ensure your practice team is aware of the change
- Contact your system supplier for the date of the Electronic Prescription Service update
- Identify and review all repeatable prescriptions for pregabalin and gabapentin
- Stop repeat dispensing for gabapentin and pregabalin as early as possible before 1 April and put transition arrangements in place for patients
- Inform all patients currently taking pregabalin and gabapentin about the impact this change will have on their prescriptions. Ask them to ensure they request any prescriptions in plenty of time, to help the NHS to manage the transition process
- Update digital systems that print out paper prescriptions to ensure the quantity appears in words and figures.

Source: NHS England

valid concerns because this move will mean having to visit their GP every 28 days in order to review and renew their prescription. This will inevitably increase workload for GPs. With epilepsy, there is an inherent danger of fits if the supply of the drug is interrupted."

Ley Sander, head of the Department of Clinical and Experimental Epilepsy at UCL Queen Square Institute of Neurology, and medical director of the Epilepsy Society, said patients on stable medication would find the reduced prescription length and physical prescriptions "very inconvenient," as many already complain the current 56 days with an automated system is too short.

Review delays

Other controlled drugs such as barbiturates are used for epilepsy, and Sander said patients whose epilepsy is well controlled on these drugs sometimes face delays in getting them or are called into the GP surgery for a review.

While gabapentin and pregabalin are not used widely for epilepsy, they have had a useful and important role in treating certain patients, particularly pregabalin in patients with associated anxiety, Sander said. "There is a risk people may go back and their prescription may not be ready, and this will cause anxiety. This will add to the problem."

The extra workload was likely to make doctors "think twice about starting pregabalin in someone who could benefit," he said.

Davies agreed, saying that being a controlled drug "gives a certain weight to that prescription" and "makes people more alert to the fact that they ought to be reviewing them on a regular basis."

Ingrid Torjesen, London

Cite this as: *BMJ* 2019;364:l1107

The NHS is being offered the best price in the world

Jeff Leiden, Vertex

"fair and final offer" of around £500m over five years for all of Vertex's approved drugs and any that are approved in the future. Vertex rejected the offer and has also withdrawn Symkevi (tezacaftor/ivacaftor), a therapy that was in development, from the approval process.

Leiden told the committee, "It's not that we won't take that offer, it's that we can't." He said every other country will want the same, which amounts to around £10 000 per patient per year, and that wouldn't allow it to develop the next generation of CF drugs.

Leiden said Vertex had done deals in 17 countries over Orkambi and that NHS England was being offered the "best price in the world." He criticised NICE's cost effectiveness assessments, saying the system was 25 years old and not fit for purpose.

Extreme outlier

John Stewart, NHS England's national director of specialised commissioning, called Vertex an "extreme outlier" in terms of its behaviour when compared with other pharmaceutical companies. He said all the company was interested in was trying to change the NICE appraisal process and had made absolutely no movement on price.

Jacqui Wise, *The BMJ*

Cite this as: *BMJ* 2019;364:l1094

FIVE MINUTES WITH . . .

Oliver Johnson

The doctor describes how in 2014 he found himself in Sierra Leone in the middle of the Ebola outbreak

"I was 28 and I'd been in Sierra Leone for just over a year when the Ebola outbreak started, not doing clinical work but policy and teaching. I remember seeing the news about unexplained deaths in Guinea.Then we heard a few days later it was Ebola.

"Once the outbreak took hold in Freetown, panic set in. International organisations evacuated, flights were cancelled, patients avoided the hospital, and a lot of colleagues were infected. I shared a hospital office and despite not planning any clinical work, I had to step in to help.

Body bags

"You never knew when you woke up what you were going to face. I would often spend the morning suited up in the Ebola unit. The first thing we had to do was to put those who hadn't survived the night into body bags, clean the unit, make sure everyone had their drugs. Later in the day I'd talk to the media to try to alert the world.

"People were exhausted and overwhelmed. When they get tired, people make mistakes and infections happen. More than once I felt hot and flushed and wondered whether this was the first of it. I was afraid for myself, but I was more afraid for my colleagues. I always knew there was a good chance I'd be medi-evaced to the UK.

"Far more than a medical emergency, Ebola is a social phenomenon; it's a situation where public trust matters. I focused too much on the medical stuff—beds, personal protective equipment, ambulances—and not enough time saying to myself, 'What is the experience my patients are having?' The hazmat suits, tarpaulins, and all of these dead bodies were creating a profound sense of fear that undermined the response.

"I'd do it again without hesitation. I've never felt such a sense of purpose—I was exactly where I was supposed to be."

Oliver Johnson co-authored *Getting to Zero: A Doctor and a Diplomat on the Ebola Frontline*, with former Irish ambassador Sinead Walsh.

Joanne Silberner, London

Cite this as: *BMJ* 2019;364:l1106

Podcast details, page 444

FAR MORE THAN A MEDICAL EMERGENCY, EBOLA IS A SOCIAL PHENOMENON

THE BIG PICTURE

Surgeon as puppeteer

What's the difference between a surgeon in an operating theatre, surrounded by a team of nurses, anaesthetists, and technicians, and a puppeteer?

Not as much as you might think, says Roger Kneebone, professor of surgical education and engagement science at Imperial College London. For his recent talk for Gresham College, the London institute that hosts free public lectures, he was joined by Rachel Warr, a leading puppeteer and dramaturg.

Along with the need for a strong team, Warr highlighted the parallels between the skills required in open surgery and in traditional Japanese Bunraku puppetry, and in suturing and operating string marionettes.

Warr and Kneebone (right of picture) also discussed how a puppeteer preparing for performance can shed light on the world of surgery.

Kneebone said, "This 'performative' aspect of surgery is often eclipsed by a focus on scientific knowledge and specific procedural skills. Yet there is much to be learnt from performers outside medicine, especially those whose work combines teamwork with dexterity and fine motor precision."

Alison Shepherd, *The BMJ*

Cite this as: *BMJ* 2019;364:l1146

CROSS BORDER CARE

An unhealthy Brexit

Clinical leaders in the UK and Ireland are concerned for patients and staff, as many critical questions remain unanswered with only days until the UK is due to leave the EU. **Niamh Griffin** reports

Leaders of the royal colleges including Derek Bell (second from left), Jackie Taylor (third from right) and Mary Horgan (third from left)

At a meeting in Belfast last month more than 150 doctors from medical royal colleges in Ireland, Scotland, and England found little that was positive for health when the UK leaves the European Union, scheduled for 29 March.

The seminar, brainchild of Mary Horgan, president of the Royal College of Physicians of Ireland and a consultant in infectious diseases and internal medicine, considered Brexit's potential effects on workforce and the safety of patients.

Jackie Taylor, a geriatrician and president of the Royal College of Physicians and Surgeons of Glasgow, emphasised that the colleges are apolitical but added, "As clinicians we are used to working with uncertainty, but this takes uncertainty to a completely different level.

"The question is: will Brexit be bad for the health of the NHS?" But with less than a month to go, she said, "things remain stubbornly opaque."

A healthy Brexit must include, Taylor said, maintaining current standards of care and not increasing workforce challenges when changing immigration rules for non-UK staff. She also highlighted concerns that funding for health may be diminished in a post-Brexit world.

"The NHS currently, in real terms, increases its budget by only about 1% per year [across the UK], and that hasn't been enough to keep up with demand. Things would be worse if we have a no-deal Brexit, but we don't know that yet.

"I'm afraid the magic money tree that was promised probably doesn't exist," she said to muted laughter.

She was referring to the Leave campaign's promise of £350m extra a week for the NHS. In June the UK prime minister, Theresa May, said that the NHS will receive £20bn extra funding by 2023, but economists contend this will come from tax hikes, not a Brexit dividend.

Speakers from Ireland and the UK discussed the reasons, including burnout, for their young doctors moving to other countries, even before Brexit, and for rising numbers of early retirements.

Taylor highlighted recruitment as a key challenge for medicine, with 12.5% of doctors in the four NHS countries reporting a non-British nationality. Southeast England and Northern Ireland have the highest concentrations of NHS doctors from other EU countries.

Mutual recognition of qualifications with EU countries is not yet guaranteed, she warned. This uncertainty has already led four in 10 EU doctors surveyed by the BMA to consider leaving the UK. "It's not just about doctors. The Royal College of Nursing has reported a 90% reduction in nurses from the EU registering. Social care in particular is going to be impacted. Health and social care are integrally related," Taylor said.

The category of visa for non-UK health and social care workers after Brexit is not yet known, and Taylor warned that criteria requiring high salaries for foreign workers would limit applications.

Fear of a hard border

Discussion of the particular case of Northern Ireland was led by Colm Henry, a geriatrician, fellow of the Royal College of Physicians of Ireland and chief clinical officer with the Irish Health Service Executive. "I grew up beside what was then a very hard border, and it was like a different country," he said. "It had a profound influence on the communities, without any cooperation in health, education, or any other agency."

Policing of the border between Ireland and Northern Ireland since its creation in 1921 has varied with the political environment. Since the 1998 Good Friday agreement cross border health projects have sprung up. For example, cooperation in

primary percutaneous coronary intervention between Altnagelvin Area Hospital in Derry and Letterkenny Hospital 37 km away in Donegal has led to improved outcomes among patients on both sides of the border. Anyone experiencing a cardiac incident on the south side of the border can now be taken to Altnagelvin. In return a cardiologist from Letterkenny crosses the border to do a weekly shift in Derry.

Patients in Donegal with cancer benefit from a similar arrangement with Altnagelvin. Donegal is one of the largest counties in Ireland but is sparsely populated and lacking in healthcare. Henry said, "Before this, people from Letterkenny travelled down to Galway, about four hours by bus. You have to be at maximum hydration; you can imagine what that meant, with stops by the side of the road. We now have a co-funded radiotherapy facility in Altnagelvin Hospital."

Clinicians along the border can access this and social care programmes under the Cooperation and Working Together partnership between services in Northern Ireland and the Republic, which facilitates cross border collaboration. This runs from the top of the decision making pile, with the North South Ministerial Council, established under the Good Friday Agreement, down to emergency protocols for ambulance responses.

Henry said that in a peculiar twist of fate the border has brought funding for this work. Up to €53m (£45m) is earmarked for delivery between now and 2022 from an EU programme called Interreg. It promotes EU cross border understanding; western Scotland also qualifies.

The regions on both sides of the border in Ireland will, for example, gain €8.8m for acute care hospital services and €7.6m for mental health.

People won't accept it

Henry, striking one of the evening's few positive notes, insisted these projects would survive after Brexit: "I can't see how they can be reversed: people won't allow it. The first time an ambulance is stopped with a patient for PPCI coming from Muff in Donegal, there will be uproar. I don't think that's a fool's optimistic guide to Brexit—I just don't think people will accept it."

Clinicians are used to working with uncertainty, but this takes uncertainty to a completely different level
Jackie Taylor, president of the Royal College of Physicians and Surgeons of Glasgow

One doctor who works in the border area suspected that "barriers will be built up incrementally," and other comments from the floor lamented the lack of a health minister in Northern Ireland, since the collapse of the power sharing government in January 2017.

Reflecting on the discussions afterwards, Derek Bell, an acute medicine doctor and president of the Royal College of Physicians of Edinburgh, said, "It is our wish that the practical effects of Brexit are kept as far from the frontline of healthcare delivery as possible, so that both staff and patients can continue to work to deliver the best care."

Andrew Goddard, a gastroenterologist and president of the Royal College of Physicians of London, said afterwards, "We want the government to work with the EU, the NHS, and health organisations to put patients at the heart of their negotiations, because this ongoing uncertainty is causing a real challenge to NHS workforce planning, the supply of medicines, and medical research."

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TRAVEL INSURANCE AND DRUG REGULATION

Government advice for UK citizens travelling in EU countries after Brexit is to rely on travel insurance to replace the European Health Insurance Card reciprocal system. But questions remain for British people living in the EU who have also used the EHIC for everyday care.

"With a no-deal Brexit the EHIC disappears immediately," said Jackie Taylor of the Royal College of Physicians and Surgeons of Glasgow. "That has major implications, particularly for the 190 000 people living predominantly in Spain and France. They cost us £500m at the moment in terms of contributions. If they all return en masse we would need about 900 extra beds."

Regulation of drugs is also an area of concern. The "serious shortage protocol" would allow pharmacists to supply a different strength, quality, or pharmaceutical form of a prescription only drug or to supply a different drug, which pharmacists and doctors are unhappy about.

Taylor compared the situation to the television comedy *Yes Minister*, with health ministers rather than medical professionals deciding how to handle a drugs shortage.

Speaking from the floor of the meeting in Belfast, one doctor asked whether she could be held legally responsible for any ill effects to her patients from such an adjustment. No one could answer.

EDITORIAL

Twin crises in pain and prescription opioids

National pain strategies are part of the solution

Solutions are urgently needed to conflicting crises in chronic pain and prescription opioid use in the US and internationally.[1-3] Roughly 50-100 million Americans are living with ongoing pain. At the same time, over 130 Americans die every day from opioid overdose.[6]

Long term use of opioids is increasingly associated with harmful side effects, risk of misuse, abuse, and addiction.[6-8] However, stable doses of opioids can provide durable pain relief with limited side effects for a subgroup of people.[9] Consequently, a poor risk:benefit ratio overall may obscure a positive profile in some patients with chronic pain. This creates serious tension between opioid aversion in general and the needs of patients who rely on opioid maintenance treatment to enable daily functioning.

Research is urgently required to better understand the complex and interdependent factors underlying these twin crises, and to develop guidelines for pragmatic medical care that de-emphasise prescription opioids in post-surgical, primary care, and pain clinic settings.[10]

Welcome developments

These efforts are currently centred on evaluations of non-opioid treatments for pain, including procedural interventions, non-opioid medications, psychological treatments, physical therapy, complementary and alternative medicine, and self management approaches.

National pain strategies, such as those in the US, Australia, and several European countries, are another welcome development.[2-12]

These strategies agree that the high prevalence and severity of chronic pain should be seen as a public health concern, to drive research into improved prevention and treatment across basic, translational, and clinical sciences.

The US problem of overprescription of opioids has led to criminal cases against doctors

National pain strategies aim to improve the quality of pain care and reduce inequity by overcoming barriers to care among underserved populations. Prevention, assessment, treatment, and self care interventions must be available regardless of age, gender, ethnicity, income, education, geographical location, language proficiency, health literacy, or medical condition. Most pain care can be coordinated by primary care clinicians, with the option of referral to specialists for patients with additional comorbidities, complexity, or risk.

A further common theme is the need to empower patients through a greater understanding of their symptoms, how to seek care, and the role of self management. Education is key to these efforts—for healthcare professionals, patients, and families. Wider public education is also important to deepen societal understanding of the burden of chronic pain and all available solutions.

Unfortunately, efforts to improve care are hampered by rogue clinicians seeking to exploit a critical public health problem for personal gain. *The BMJ* recently reported allegations against several Michigan doctors accused of "prescribing opioids to addicts who in return submitted to painful back injections and other unnecessary treatments so that the doctors could bill the US government for over $450m (£359m)."[13]

Their guilt or innocence remains to be determined, but the resulting scrutiny on both pain procedures and opioids has been a mixed blessing. Some of the extra attention on the challenges of chronic pain is welcome and necessary, but it also includes overly reactionary policy responses that are unsupported by evidence and likely to have unintended harmful consequences for many vulnerable patients.

Over-reaction

The state of Oregon, for example, recently proposed a ruling that would mean that all patients receiving Medicaid (state funded healthcare for people on low incomes) are forcibly weaned off opioids.[14] The proposal lacks a clear plan of execution or monitoring and could expose highly vulnerable people to severe medical and psychological adverse events. A slightly revised version of this policy is moving forward despite a joint objection from clinicians and people with pain that has received international attention from media and human rights organisations.[15]

Keith Humphreys, an addiction specialist and former White House senior policy adviser for national drug control policy, identified three types of doctor: those doing the right thing for the right reason (the largest group); those doing the wrong thing for the right reason (a smaller group); and a tiny proportion of doctors doing the wrong thing for the wrong reason.

Policy makers must allow the first group to do their job, in partnership with patients and families. The second group need education to align their practice with their intentions. The third group must be policed, prosecuted, and jailed when appropriate. In the meantime, we must avoid over-reactions that harm optimal patient care. Evidenced based national pain strategies, properly implemented, are a better way forward.

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EDITORIAL

Child health unravelling in UK

Poverty is a key driver of the UK's dismal performance

Last week yet another report highlighted the poor state of child health in the UK.[1] The Nuffield Trust analysis, focusing on adolescent health, shows we compare poorly with other countries in terms of childhood long term conditions, obesity, asthma deaths, and young people not in education, employment, or training.

Other recent reports show we also lag behind in terms of health for babies and younger children.[2 3] Mental health for children in the UK has been described as being "in crisis."[4] The Nuffield Trust further shows that 11% of young people aged 15-19 years in the UK are living in severe material deprivation. This is the fourth highest rate in Europe, with a worsening trend over time.

The situation seems to be getting worse for many child health outcomes: one of the most important indicators of population health, infant mortality, is now rising in England, particularly in the most income deprived local authority areas.[7]

The poverty effect

Child poverty has been rising over the same period. Since 2010, welfare benefits available to families with children have been systematically reduced, disproportionately affecting those who are most disadvantaged.[8 9] Current estimates suggest that 4.1 million children in the UK are living in poverty, most of whom are in working households. The Resolution Foundation, an independent think tank, predicts a further 6 percentage point rise over the next five years, pushing child poverty to its highest level on record. By 2023-24, the proportion of children living in relative poverty is on course to hit 37%, affecting an extra 1.1 million children.[10]

Child poverty is the one of the most potent drivers of lifelong ill health and health inequalities. Child poverty causes poor child health.[11] It causes children's deaths from asthma, injury, infections, and prematurity. It causes mental health problems that blight children's life chances.[12] It is a common, modifiable exposure that has a big influence on child development across the population, affecting readiness for school and generating the early inequalities that track through to influence chances in later life.[13 14]

Poverty causes children's deaths from asthma, injury, infections, and prematurity

Many solutions have been suggested to tackle poor health in the UK, but in the absence of policies to reduce child poverty all are likely to fail. In public health we often invoke the metaphor of drowning in a river to highlight the futility of fixing downstream factors such as lifestyle without first moving upstream and sorting out whatever is pushing people into the river in the first place.

The NHS long term plan goes some way towards raising the profile of children and young people in policy discussions, and there is also a welcome focus on health inequalities.[1] But the lack of joined-up thinking across government sectors and agencies is a serious impediment to progress. How does the NHS expect to reduce inequalities in child health when cuts to local government services essential for child health are highest in the most disadvantaged areas[15 16] and the roll-out of universal credit is widely predicted to entrench child poverty still further?[17]

As long as political chaos and uncertainty continue, the most vulnerable in society will lose out. Various advocates (but not enough) have voiced concerns about the ongoing deterioration in the social determinants of health—as the systems that provide a foundation for health and development are eroded. We are now seeing a great unravelling of the health of both children and adults.[18] These latest data on national trends from the Nuffield Trust and other analyses[18] are deeply troubling, but the way forward is clear.

Children first

To improve child health and reduce inequalities, responsible agencies must implement the recommendations published in multiple inequalities reports internationally, including the Black report,[19] the Marmot report,[20] and our Due North report.[13] The government must put child health at the centre of policy making and take immediate steps to reduce child poverty. We have the fiscal tools to do this—pensioners' incomes have been protected throughout the tumultuous period since the 2008 recession.

Let's not forget that money is the ultimate personalised medicine: parents exchange it for health promoting goods and services such as better housing, better clothes, healthier food, and life affirming school trips for their children.[11]

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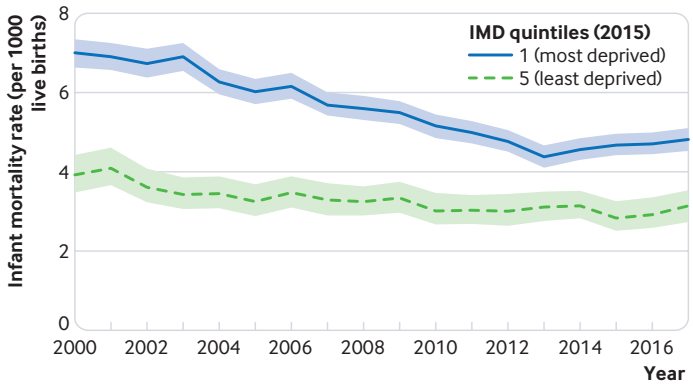

Infant mortality trend in the highest and lowest Index of Multiple Deprivation (IMD) quintile groups for local authority districts in England, 2000-17, with 95% binomial confidence intervals[7]

ESSAY

Doctors can't care for patients if the NHS doesn't care for doctors

Improving clinicians' wellbeing requires a radical rethink by local and national healthcare leaders, who need to ensure that it is taken as seriously as infection control, writes **Caroline Elton**

A GP, six years after completing her postgraduate training, comes to see me, an occupational psychologist, to discuss whether she should continue working as a doctor. She recounts a horrendous first day as a trainee doctor: desperately unwell patients and the rest of the team off sick, on annual leave, or away on courses.

I ask her if she thinks this day had any impact on her current feelings about her profession. She says that she can't see a link, but the next day she emails: "I was thinking about your question. On reflection, it was just the beginning of a huge number of experiences that brought me to my current belief on working within NHS medicine. It just doesn't care. It chews people up, spits them out, and then gets another well meaning chump to replace them. Sorry if that sounds harsh, and I do have some sadness in writing it, but I also think it is true."

This sort of response is far from atypical. A 2017 survey by researchers at Manchester University found that of more than 900 GPs in England a third reported a "considerable or high likelihood" that they would quit direct patient care within five years. This is the highest level since the first national GP Worklife Survey in 2005.

Newspapers are full of reports of cancelled elective surgeries, failures to meet targets for emergency or cancer care, and doctors of all specialties voting with their feet.

That the NHS needs additional funds has political consensus, but parties disagree about how much and from where it should come. Without long term investment to meet the costs of caring for an ageing population, it's hard to have faith in the future of the NHS.

> The NHS chews people up, spits them out, and then gets another well meaning chump to replace them

Money isn't all that is needed, however. Concerns about the wellbeing of doctors have been raised regularly for at least 30 years. During this time, though, the NHS has had periods of better and worse funding.

The poor wellbeing of staff isn't a problem exclusive to the UK. "Physician burnout" is a global phenomenon; worldwide, we need to think more carefully about the human cost to doctors of providing patient care.

The current mantra in the NHS is that care should be "person centred." This term was coined in 1969 by the UK psychoanalyst Enid Balint to mean an approach that understood the patient as "a unique human being." She contrasted it to illness oriented care, which aimed "to find a localisable fault, diagnose it as an illness, and then treat it."

Since then, for the past 50 years, the debate about what patient centred care should look like has continued. Over time, terminology has symbolically shifted from "patient centred" to "person centred," because, for example, "we use the word 'person' in order to emphasise a holistic approach to care, that takes into account the whole person—not a narrow focus on their condition or symptoms."

Balint understood something fundamental about people and caring relationships. Shortly before her death in 1994, she and colleagues wrote: "At the centre of medicine there is always a human relationship between a patient and a doctor. This is the unchanging core of medical work, despite whatever technical advances are made."

A quarter of a century after Balint wrote these words, I worry that the core of medical work has shifted; I am no longer confident that the human relationship remains central to the practice of medicine. A poignant example of this shift comes from the description by the late GP and academic Kieran Sweeney about the treatment he received following a diagnosis of mesothelioma: "In the care I have received, the transactions have been timely and technically impeccable. But the relational aspects of care lacked strong leadership and at key moments were characterised by a hesitation to be brave."

Sweeney also described how alone he felt with his diagnosis and how he looked to the professionals caring for him to "be with him" in his suffering. With the pressures of delivering ever more technically complex clinical services to ever more patients, it is easy to see how helping patients not to feel alone in their illness can get overlooked.

This is certainly what some of the doctors I see lament when they describe finding themselves too busy or too exhausted to treat patients in the way they had envisaged they would when they entered the profession.

Person centred care isn't the end of the story. In 1993—the same year that Balint wrote about the centrality

BIOGRAPHY

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CHARLOTTE KNEE

PRIYA SUNDRAM

of the human relationship between people and their doctor—a high profile taskforce was assembled in the US. Its aim was to investigate how to train healthcare professionals to care more effectively for an ageing and culturally and economically diverse population, in which chronic diseases were ever more significant.

In its subsequent report, the Pew-Fetzer Task Force proposed a different model—relationship centred care—which aimed to capture "the importance of the interaction among people as the foundation of any therapeutic or healing activity." In this new model, it wasn't only the doctor-patient relationship that was seen to be important, but also doctors' relationships with their patients' communities and with other healthcare practitioners.

The original description of relationship centred care acknowledges that practitioners need to look after their own health if they are to be able to care for others; this seems like a step in the right direction. It says almost nothing, however, about the responsibility of the institutions in which doctors train and work to take care of their students or staff. What models of patient centred, and even to some extent relationship centred, care seem to have overlooked is that good patient care is predicated on good care of the carer. This idea is not new, and nobody has expressed it better than the intern Chuck, in the US psychiatrist Samuel Shem's classic novel *The House of God*: "How can we care for patients if nobody cares for us?"

Doctors feel resentment, terror, hatred, disdain, or disgust towards their patients

We might learn something about the nature of caring relationships in general by considering the original locus of care in all of our lives—maternal care. I'm not suggesting that medical care should be modelled on maternal care, or that doctors could or should feel for their patients as they do their children. That would be absurd.

However, unpicking the psychology of maternal care can illuminate aspects of caring relationships that tend to get overlooked in medical culture. First, the feelings that mothers have for their infants aren't always akin to the warm and sweet "motherhood and apple pie" ideal. Nobody has captured this better than the paediatrician and psychoanalyst Donald Winnicott, who playfully and provocatively listed many reasons why mothers may, at times, have hateful feelings about their infants:

> "He [the baby] is ruthless, treats her as scum, an unpaid servant, a slave."
>
> "His excited love is cupboard love, so that having got what he wants, he throws her away like orange peel."
>
> "He is suspicious, refuses her good food, and makes her doubt herself, but eats well with his aunt."

Winnicott explicitly linked the inevitability of mothers sometimes having hateful feelings for their infants to psychoanalysts having similar feelings for their patients. Yet this fundamental insight hasn't permeated the practice of medicine.

The doctors I see often feel ashamed to recount feelings of resentment, terror, hatred, disdain, or disgust towards their patients. The literature on either patient centred or relationship centred care rarely confronts the full gamut of emotions that caring for somebody else in profound distress can entail.

Second, our early psychological attachments to our mothers (or primary care givers) have long term

FOSTERING WELLBEING: FROM INDIVIDUAL TO ORGANISATION

Too often measures to improve wellbeing concentrate on the individual doctor and leave it at that. So the literature is full of studies on the impact of stress management or mindfulness programmes on the wellbeing of clinicians, and this is the case even though research has consistently highlighted the organisational origins of physician burnout.

Although we mustn't look at everything decades ago through rose tinted glasses, we must, however, recognise subtle erosion of many informal structures that used to help junior doctors get support from peers and more senior colleagues. The list is far from exhaustive, but these include:

- Larger medical school intakes, so that even when a doctor has a colleague from the same medical school they may never have met before
- Foundation doctors moving all over the country rather than training in a hospital that they knew from their undergraduate studies
- Rotations lasting four rather than six months in the first two years of practice, meaning less time to build confidence in each rotation
- Doctors living off-site in their first year of practice, and the removal of the doctors' mess
- Replacing the old style "firm" with a shift system, making it harder for junior doctors to feel part of a coherent team.

In addition, we need to factor in the impact of high profile disciplinary cases, such as that of trainee paediatrician Hadiza Bawa-Garba, that have created a climate of fear among junior doctors.

effects on our social relationships in adulthood. In particular, how we were cared for when we were dependent infants influences how we care for others when they are vulnerable, and also how we seek care when we are feeling distressed.

Intergenerational work has found that a new mother's security of attachment to her own mother affects the chance of her becoming depressed after the birth of a child. While there isn't comparable research on how doctors' security of attachment to their mothers impacts on their capacity to care for their patients, a study of ambulance workers found that, after a critical incident, those who were more securely attached were less distressed, recovered more quickly, and were more likely to seek emotional support from those around them.

Third, the emotional weight of bearing responsibility for a new infant's life—the exhaustion, fear of something going wrong, and isolation (if you are poorly supported)—all take a psychological toll on a new mother. Postnatal distress is common: the World Health Organization suggests that 13% of women experience a mental disorder, principally depression. Although prior psychological difficulties increase the risk of maternal postnatal depression, her network of support, from partner, family, and friends, is also critical.

Again and again, I hear junior doctors describe a medical correlate of this maternal dynamic—exhaustion, the burden of responsibility, the ever growing fear of making a mistake, the isolation, and the lack of support from other colleagues. A conversation I had recently with a distressed trainee on a surgical placement is all too typical: "I'm run ragged, and I can't look after the patients in the way that I want. On more than one occasion I've been shouted at by my seniors. I'm all by myself in this giant hospital covering the postsurgical ward while my seniors are in theatre. I feel so alone."

So what's the answer? Here's a revolutionary idea: might contemporary approaches to infection control provide clues as to how best to support medical staff? Infection control efforts permeate every level of healthcare—individual doctors, the team, the organisation, the region, and the country as a whole.

But there isn't a similar focus on protecting doctors from the transmission of psychological distress from patients, their relatives, or their peers to the doctor. In fact, the inevitable psychological burden that caring for patients places on healthcare providers is given woefully little attention.

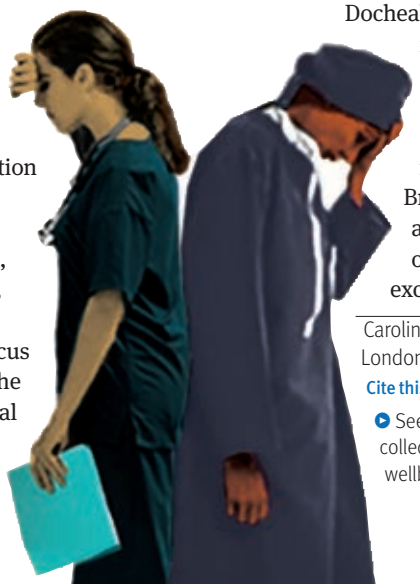
There's no single simple solution to improving the emotional wellbeing of staff. We know the same is true for infection control, which isn't restricted to putting up posters around the hospital saying "remember to wash your hands."

In a first for a medical centre in the US, Stanford Medicine recently appointed oncologist Tait Shanafelt as its first "chief wellness officer." In his previous role at the Mayo Clinic, Shanafelt showed that by working across the whole organisation physician burnout could be substantially reduced.

He identified seven key drivers of burnout: workload, efficiency, flexibility or control of work, culture and values, work-life integration, community at work, and meaning in work. Then he introduced strategies that reduced the impact of each of these drivers on the individual, the team, and the organisation as a whole. It can be done. But it needs leadership from the top and an investment of time and resources.

A report last year from a group of institutions including the US Harvard TH Chan School of Public Health and the Harvard Global Health Institute concluded that "physician burnout is a public health crisis."

As well as improvements in mental health services for physicians—which is already happening in the UK with services such as the Practitioner Health Programme and Dochealth—the report also called for the appointment of chief wellness officers on the main board of each healthcare institution. Such roles may sound alien to British ears, but comparable appointments to the boards of NHS trusts would be an excellent first step.



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See bmj.com/wellbeing for a collection of articles on clinician wellbeing