this week

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Tribunal right to silence is "discretionary"

The High Court has ruled that disciplinary panels are free to draw adverse inferences if a doctor refuses to give evidence

A longstanding belief that doctors could safely remain silent at medical practitioners tribunal hearings and that the panel would not draw negative conclusions has been overturned by the High Court.

The court has ruled that there is no "right to silence" at tribunals and that panels are free to draw "adverse inferences" from the fact that a doctor declines to give evidence.

Barrister Christopher Geering, writing on 2 Hare Court chambers' website, described it as "a dramatic new development." Solicitors Claire Raftery and Chris Dunn of the law firm Clyde & Co wrote in a blog, "This will have immediate implications for professionals appearing before their regulators."

The case was taken to the High Court by Evgeniy Kuzmin, who had an interim order of conditions imposed by the Medical Practitioners Tribunal Service in 2016. The tribunal found no misconduct in the original case, but the GMC brought a further case against him for allegedly failing to disclose all the conditions to his employers.

Kuzmin submitted a witness statement to the tribunal. After the GMC's evidence he made a submission of no case to answer. When this was rejected, he withdrew his witness statement. After hearing legal arguments, the tribunal concluded it had the right to draw adverse inferences.

Kuzmin applied to the High Court for judicial review of the decision. His counsel argued that regulatory hearings are seen as quasi-criminal proceedings to which the right against self incrimination applies.

The court disagreed. Its ruling said, "Both principle and the authorities . . . favour the proposition that disciplinary tribunals have the legal power to draw adverse inferences from the silence of an individual charged with breaches of the regulatory scheme . . . even if in practice they have not in the past drawn such inferences."

Kuzmin's case still has to go back to the tribunal for hearing. The court's ruling does not mean that the tribunal will necessarily draw adverse inferences, if he continues to refuse to give evidence. The High Court set out circumstances in which a tribunal might decide to draw such inferences: that a prima facie case has been established; the doctor had been warned that adverse inferences could be drawn and had explained why it would not be reasonable to give evidence; if the explanation was ruled not reasonable; and if there were no circumstances that would make it unfair to draw inferences.

Clare Dyer, *The BMJ*

Cite this as: *BMJ* 2019;366:l5224

LATEST ONLINE

- Former patients of Derbyshire psychiatric unit will be compensated for experimental treatment
- Journals retract more than a dozen Chinese transplantation studies over executed prisoner concerns
- US to investigate vaping links to severe lung injuries

SEVEN DAYS IN

Consultant lead of FGM guide is struck off for possessing extreme pornography

A consultant obstetrician who was responsible for guidelines on treating victims of female genital mutilation (FGM) has been struck off the UK medical register over the possession of extreme pornographic images.

Manish Gupta, who was an obstetrician and gynaecologist at Whipps Cross University Hospital in northeast London, was convicted at Snaresbrook Crown Court last October of possessing pornographic images and videos. He was also found guilty of possessing an image showing an act of bestiality and 14 prohibited images of cartoon children. He was sentenced to a 24 month community order.

Gupta, 48, co-chaired the Royal College of Obstetricians and Gynaecologists' guidelines committee, and in 2015 he oversaw the writing of its FGM guidelines.

Gupta told the tribunal he had suffered serious sexual abuse between the ages of 5 and 12. This, he said, lay at the root of his later interest in extreme pornography.

Tribunals are typically held partly behind closed doors when the doctor's health problems form part of the evidence, but Gupta asked for the whole hearing to be public, and the tribunal agreed. He has 28 days to appeal before he is erased.

Clare Dyer, *The BMJ* Cite this as: *BMJ* 2019;366:l5165

Drug deaths

England and Wales report all time high

Some 4359 deaths were related to drug poisoning in England and Wales in 2018, the highest number and biggest annual increase (16%) since the time series began in 1993, figures from the Office for National Statistics showed. Two thirds (2917) of the deaths were related to drug misuse, and 51% involved an opiate. Deaths involving cocaine during 2015-18 rose to their highest level of 637, up from 320. The north east had a higher death rate than all other English regions, and London the lowest.

Scotland

Doctors call for £3bn extra funding a year

Doctors' leaders in Scotland warned of an "ongoing decline" in hospital services unless years of underfunding are halted. A report by BMA Scotland set out 20 proposals for reform, including extra funding of around £3bn a year to increase health spending to 10% of GDP, in line with EU comparator countries. They also want a "more mature" approach to targets, better workforce planning, greater investment in staff health, and responsibility to run services given to consultants.

Bogus psychiatrist's records are reviewed

Health boards in Scotland are reviewing the treatment records of a bogus psychiatrist who practised in the NHS for 23 years without any medical qualifications. Zholia Alemi is serving a five year prison sentence for forging a widowed patient's will in an attempt to inherit her £1.3m estate. Alemi dropped out of the University of Auckland in New Zealand after failing the first year of a five year medical degree but joined the UK medical register after presenting faked documents. She worked for five health boards: Ayrshire and Arran, Tayside, Highland, Borders, and Greater Glasgow and Clyde.

Research news

Social media can harm by displacing sleep or exercise

Much of the harm attributed to social media use by young people is "unlikely to be directly related to social media use," researchers from London found, depending instead on whether it displaces sleep and exercise or involves cyberbullying, especially in girls. This finding, reported in *Lancet Child and Adolescent Health*, suggested that those trying to improve the mental health of young people should focus on preventing cyberbullying and ensuring they have enough sleep and physical activity.

Diabetes care has not improved US outcomes

From 2013 to 2016 just 23% of 1742 adults with diagnosed diabetes achieved targets set out in the 2018 American Diabetes Association guidelines (including controlled blood sugar, blood pressure, and cholesterol) as well as not smoking tobacco, a study in *JAMA Internal Medicine* found. Results were similar in 2005-08 and 2009-12. Deborah Wexler, study author from Harvard Medical School, said, "Barriers [to] accessing healthcare, including lack of health insurance and high drug costs, remain major factors that have not been adequately addressed on a population level."

Cannabis

Legislation fails to change consumption in Canada

Statistics Canada's latest cannabis survey suggested that, in 2019, essentially the same number of Canadians reported having used cannabis in the previous three months (about 4.9 million) as in 2018, before legalisation. The Cannabis Act became law on 17 October 2018. The number of Canadians over 65 reporting use in the second quarter of the year increased from 3% in 2018 to 5% in 2019. Use among 15-64 year olds was stable. More Canadian males use cannabis than females (21% *v* 12%), and males were twice as likely to report daily or almost daily use (8% *v* 4%).

Practices

Patient told to find new GP after sharing CQC rating

Culcheth Medical Centre in Warrington was criticised for writing to a patient advising her to register elsewhere after she posted a link to a local newspaper story about the practice's "requires improvement" rating from the CQC. In a letter to the unnamed patient the practice manager cited a breakdown in the patient-doctor relationship.

MEDICINE

NICE

Treat impetigo with antiseptics, not antibiotics

Clinicians should treat non-bullous impetigo with a topical antiseptic rather than antibiotics, says new draft guidance from NICE. Its review with Public Health England found a topical antiseptic, such as hydrogen peroxide 1% cream, was just as effective as a topical antibiotic. In some situations antibiotics will still be suitable, such as if a person has widespread non-bullous impetigo, the guide says.

NICE guidelines say antiseptics are as effective as antibiotics for non-bullous impetigo

Drug pricing

Cystic fibrosis drugs rejected for NHS Scotland

Expensive drugs for cystic fibrosis were rejected for NHS use in Scotland, but discussions continued with the manufacturer. The Scottish Medicines Consortium, which advises NHS

Scotland, said that "significant uncertainty" remained about the overall health benefits of Orkambi (lumacaftor and ivacaftor) and Symkevi (tezacaftor and ivacaftor) in relation to their costs. The decision mirrors that taken in England by NICE .

Company offers to pay NHS £8m to resolve inquiry

The drug company Aspen may have to pay the NHS £8m after the Competition and Markets Authority investigated an arrangement it made with two rival companies, which left it as the sole supplier of fludrocortisone acetate (100 µg tablets), used to treat Addison's disease. As a result of the ongoing investigation Aspen approached the CMA and offered to resolve the issue with certain actions, including a payment of £8m to be divided among England, Scotland, Wales, and Northern Ireland. This offer is still pending final approval.

Intravenous feeds

NHS declares national emergency over shortage

The NHS declared a national emergency incident "at the highest level" in response to an ongoing shortage of intravenous feed supplies in England. Aidan Fowler, NHS national patient safety director, said the service was considering importing products to ensure sufficient supplies. Shortages arose when the manufacturer Calea was ordered by the Medicines and Healthcare Products Regulatory Agency to change its manufacturing process after safety concerns.

Digital GP

App service Livi expands to 1.85 million patients

The digital GP service provider Livi will cover 1.85 million patients in Birmingham, Surrey, Northamptonshire and Shropshire, after agreeing deals with local GP federations. The Swedish company launched its video consultations app in the UK last October with 40 general practices in the North West Surrey clinical commissioning group area, covering 360 000 patients.

Cite this as: *BMJ* 2019;366:l5206

INFANT DEATHS

Unexplained infant deaths [from SIDS and unascertained deaths] in England and Wales fell to 183 in 2017, 19% down from 226 in 2016. The unexplained infant mortality rate was 0.27 per 1000 live births in 2017, the lowest on record

[Office for National Statistics]

SIXTY SECONDS ON . . . ICE LOLLIES

HAVE YOU LOOKED AT THE CALENDAR? SUMMER'S NEARLY OVER

These lollies aren't designed to cool you down on a hot day: they're for postoperative patients.

AFTER HAVING THEIR TONSILS OUT?

No, although some evidence shows that those patients should have ice lollies too. These are high risk patients recovering from major surgery, in a nine bed intensive care unit at the University College London Hospitals foundation trust.

SO, THEY'RE A SNACK?

More like SNAP-1 (Sprint National Anaesthesia Project), whose data on patients' experiences after surgery have inspired David Walker, a professor of perioperative medicine, to start offering ice lollies to his patients. But there's a serious reason for the lollies than just "an ice treat."

SPILL THE ICED TEA

The data show that one of the top complaints after surgery is thirst, says Walker. "That's not just feeling a little bit dry; it's intractable thirst. Thirst to the point of it becoming disabling and really uncomfortable."

SURELY THAT'S WHAT WATER'S FOR?

As Walker explains, these patients are thirsty but not necessarily dehydrated. "A glass of water might be thirst quenching, but it would put water into the circulation that the patient doesn't need," he says. Also, postoperative patients often don't want to eat or drink anything—but they can suck an ice lolly.

HAS ANYWHERE ELSE TRIED LOLLIES?

Yes. Studies from the Netherlands and Brazil have also found they can help patients to stop feeling thirsty and can reduce nausea and vomiting.

DOES THE ICE CREAM VAN CHIME?

No. Patients in Walker's unit are asked every morning by nursing staff whether they'd like a lolly, and they can have as many as they like.

THAT'S LIVING THE DREAM!

It really is: in Walker's unit, living the "DREAM" means patients are drinking, eating, and mobilising as soon as possible after surgery. "We want patients out of bed, sitting in a chair, and eating and drinking as early as they are able," he says.

Abi Rimmer, *The BMJ*

Cite this as: *BMJ* 2019;366:l5218

Health check changes must be evidence based, say GPs

A review of NHS health checks must involve a "rigorous evaluation" to ensure they are safe, accurate, and of benefit to patients, GPs have warned.

The review, announced in last month's prevention green paper, will include considering extra musculoskeletal and hearing loss checks, and look at how to digitise and offer "personalised interventions" based on risk, predisposition, and DNA.

Health checks are intended to spot early signs of major conditions, including stroke, heart disease, and type 2 diabetes. Between 2014 and 2019, around 14 million people were offered a check; less than half (48.1%) attended one.

The Department for Health said a review could lead to a "more data led predictive system" offering checks based on risk factors—for example, targeting drinking advice at 40 to 49 year olds. It will also consider a specific check-up for people nearing retirement age to help prevent or delay care needs.

While some experts welcomed the more targeted approach, others said the scheme needs to be evaluated for cost effectiveness. Glasgow GP Margaret McCartney (above) said, "It seems bizarre the programme is not being subjected to independent cost effectiveness analysis. I fail to understand why the evidence safety check of the UK National Screening Committee is not being used for this massive, expensive programme."

Elisabeth Mahase, *The BMJ*

Cite this as: *BMJ* 2019;366:l5201

No-deal Brexit may worsen drug shortages, pharmacists warn

Despite best efforts from government, the NHS, and others, contingency planning can only go so far to eliminate these risks
Sandra Gidley, RPS

The Royal Pharmaceutical Society fears that there will be drug shortages in a no-deal Brexit despite the government's "multi-layered approach" to mitigate risks.

Documents compiled this month by the Cabinet Office under the codename Operation Yellowhammer, which were leaked to the *Sunday Times* on 18 August, set out the likely effect of Britain leaving the EU without a deal.

The reports posited that, because three quarters of medicines come to the UK from France through Dover—where disruption is expected to last as long as six months—these drugs were vulnerable to severe delays. "While some products can be stockpiled, others cannot because of short shelf lives," the authors of the documents said. They added that the Department for Health for England was developing a multi-layered approach to mitigate the risks.

A department spokeswoman said that, in addition to commissioning a £25m "express freight service" to deliver medicines, the government would also build buffer stocks of medicines and strengthen processes for dealing with shortages. It will also procure extra warehouse capacity, clarify regulations so companies can continue to sell in the UK, and support companies to improve the readiness of supply chains, she said.

The department's assurances were not enough to allay the RPS's concerns. Its president, Sandra Gidley, said, "The government has acknowledged that medicine shortages have become more common in recent years, and pharmacists already help manage shortages every day so that patients can receive appropriate treatment."

Supply chain

Gidley added, "A no-deal Brexit risks putting further strain on the supply chain. Despite best efforts from government, the NHS, and others, contingency planning can only go so far to eliminate these risks.

"If we're moving towards a no-deal exit, without a transition period, the public, NHS staff, and the science and research community will be looking for

IN ADDITION to it commissioning a £25m "express freight service" to deliver medicines in a no-deal Brexit, the government would also build buffer stocks of medicines and strengthen processes

Johnson urges new drive on MMR vaccines

SPL

Babies can receive their first MMR vaccination at 12 months and a second four years later

The prime minister, Boris Johnson, has said that urgent action is needed to boost the number of children receiving the measles, mumps, and rubella (MMR) vaccine after the the World Health Organization withdrew the UK's measles-free status.

In the first quarter of this year 231 cases of measles were confirmed in the UK. Many patients were infected abroad, with some onward spread in under-vaccinated areas. The UK achieved measles-free status in 2016 after three years of limited spread. However, there has been a small, steady decline in coverage of the MMR vaccine in recent years.

Earlier this month WHO warned that, in the first six months of 2019, almost three times as many measles cases were reported globally as in the same period last year. The disease is now classed as endemic in several European countries, including Belgium, France, Germany, and Italy.

Second dose

Public Health England says one in seven 5 year olds in England starts school without a second dose of MMR vaccine. In London, that figure rises to one in four.

Johnson said he would call a summit of social media companies

GETTY IMAGES

Three quarters of drugs come to the UK from France and could be subject to severe delays, said Cabinet Office document

more information from the government about what this means."

Doctors in Scotland and Wales have been reporting ongoing medicine shortages to *The BMJ*. Andrew Buist, chair of the BMA's Scottish general practitioners committee, said that doctors throughout the country were experiencing shortages, some for three to four years. "They cover a wide variety of medications, including various creams, ear drops, certain types of blood pressure pills, antidepressants, HRT [hormone replacement therapy], and others," he said. "It's frustrating for doctors and patients alike."

He said that a no-deal Brexit was likely to exacerbate shortages, "no matter how much you try to plan for it."

Ronnie Burns, a GP and member of Glasgow Local Medical Committee, said GPs in his area were unable to prescribe certain drugs. "The main problem is that the picture keeps changing all the time: you don't know, when you walk into work one day, what the shortage is going to be," he said.

He said the current shortage of sodium valproate could lead to serious clinical incidents. "If someone can't get the sodium valproate and then has an epileptic seizure or something significant happens, where does the liability lie? Will it come back to us? I don't think it's been tested yet," he said.

Stockpiling

He was also aware of patients trying to stockpile drugs. "I've had to be the bad guy and say no," said Burns. "If everyone thinks there's a shortage and everyone asks to stockpile, that is actually what creates the shortage."

Sara Bodey, North Wales LMC chair, said doctors in her area had also been experiencing drug shortages for some time. "HRT is the biggest problem because so many different products are unavailable," she said.

"Contraceptive pills, low molecular weight heparin, antihypertensives, lithium, and methadone have all had recent supply problems."

Abi Rimmer, Gareth Iacobucci, and Elisabeth Mahase, *The BMJ*

Cite this as: *BMJ* 2019;366:l5226

to discuss how they could help to promote accurate information about vaccination. Advice on the NHS.uk website will also be updated to tackle misleading vaccine information.

In addition, NHS England is writing to GPs, urging them to promote catch-up programmes for 10-11 year olds, as well as for people aged 5-25 who have not had two doses.

The Department for Health is due to deliver a strategy in the autumn to improve vaccination uptake. This is likely to include asking the NHS to use technology to identify who has missed vaccinations, to issue reminders, and to make booking appointments easier.

Helen Stokes-Lampard, chair of the Royal College of General Practitioners, welcomed the involvement of social media. She said, "It is not just the responsibility of GPs and other health professionals to combat anti-vaxxer propaganda. We also need technology companies to tackle negativity and confusion."

Boris Johnson called for a renewed effort for both doses of MMR to meet 95% vaccination coverage rates

In England only 87.2% of children get the second MMR vaccine dose. In London it has dropped to 77.8%

Jacqui Wise, London

Cite this as: *BMJ* 2019;366:l5219

FIVE MINUTES WITH . . .

Seena Fazel

The forensic psychiatrist explains misconceptions about violence and people with mental illnesses

"A major misconception is that mentioning a connection between mental illness and violence will increase stigma. Denying the association doesn't help anyone because there is one.

"Our umbrella review of meta-analyses from last year highlighted that every single included study showed an increase in violent behaviour for all psychiatric disorders we studied except epilepsy, in comparison with the general population.

"The contribution of mental illness to violent crime is, however, often overstated. When you read recent reports on mass shootings, you'll see quoted percentages varying between 5% and 78%, depending on the definition of mental illness used. Terminology is key—a mental health related stressor doesn't equate to suffering from an illness.

AN FBI STUDY SHOWED 25% OF MASS GUNMEN WERE DIAGNOSED WITH A MENTAL ILLNESS

"The best evidence we have is an FBI report that looked at pre-attack behaviours of a small sample of 63 shooters. They found that 25% had been diagnosed with a mental illness of some kind—including mood, anxiety, and personality disorders—and only three had been diagnosed with a psychotic disorder. I consider this 25% to be the upper possible limit.

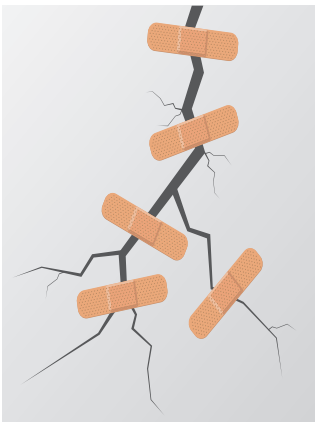
"The chances of a person reoffending after leaving prison are higher for people with a mental illness, especially for those with substance abuse problems. We've developed a tool called OxRec3 to help identify people at high risk of relapse. We have limited data on people after they leave prison, but there are three interventions supported by good evidence: providing opiate substitution treatment for substance misusers, antipsychotics to those with severe mental disorders, and psychostimulants for people with attention deficit/hyperactivity disorder.

"Violence is preventable, the risk factors modifiable. It's about getting the right treatment, to the right people, at the right time."

Seena Fazel is a professor of forensic psychiatry and Wellcome Trust senior research fellow in clinical science at the University of Oxford. He was speaking at a press briefing at the Science Media Centre on 14 August

Pat Lok and Stijntje Dijk, *The BMJ*

Cite this as: *BMJ* 2019;366:l5199



INVESTIGATION

Trusts forced to take matters into their own hands

Frustrated with government inaction, some NHS organisations have taken steps to shore up their workforce, reports **Gareth Iacobucci**

PENSIONS CRISIS

New tax rules are compounding a workforce emergency, our editorialists report (p 221). Antony Goldstone and David Bailey welcome the government's recent acknowledgment but say the NHS cannot wait for the review it has promised. Paul Youngs, in his Personal View, concurs that action is needed now (p 232). Meanwhile, on this page, Gareth Iacobucci's original investigation shows how trusts are responding locally. And on p 218 Melanie Newman reports on the battle being fought by the BMA and other public sector unions

Some NHS trusts are already taking action to tackle the NHS pensions crisis ahead of the government's proposed solution, out of concern about the ongoing effects on their workforce, *The BMJ* has learnt.

On 6 August, after months of lobbying by the BMA and employers, the government announced that it would consult on plans to allow doctors in England and Wales to control how much they pay into their pensions from April 2020, to avoid punitive tax charges that apply when the tax free allowance on the value of their pension is exceeded (see box, right).

The new approach, which the government has said it will consult on, will add more flexibility than the previous "50:50" proposal, which suggested doctors could halve their monthly contributions to avoid tax charges.

The pensions crisis has escalated in recent months, with evidence emerging that thousands of consultants and GPs in the UK are retiring early or avoiding taking on additional work because of tax rules.

"Greatest threat" to patient care

Some NHS trusts have put in place their own schemes, *The BMJ* has found, to tackle what the BMA described as "the greatest immediate threat" to medical workforce capacity and patient services.

Finn O'Dwyer-Cunliffe, pension policy adviser at NHS Providers, the healthcare suppliers organisation, said that, although trusts had "consistently made it clear they would prefer a national solution," some had put local schemes in place.

"A lot of the feedback we've received recently highlights how urgent this is from a capacity perspective for trusts and workforce managers when they're looking at planning for the increased demand over the winter," he said. "There's certainly an urgency that means that it could be difficult to sit and wait for a preferential government scheme."

There's an urgency among our members not to see local arrangements as a long term fix
Finn O'Dwyer-Cunliffe, NHS Providers

Earlier this year *The BMJ* reported that a small number of NHS trusts were allowing doctors to opt out of the NHS scheme and receive employers' contributions as salary. More are now following suit. Before the government's announcement, *The BMJ* asked NHS trusts in England what they were doing in response to the pensions crisis. As at July 2019 at least 16 trusts had either set up or were considering some form of salary flexibility scheme.

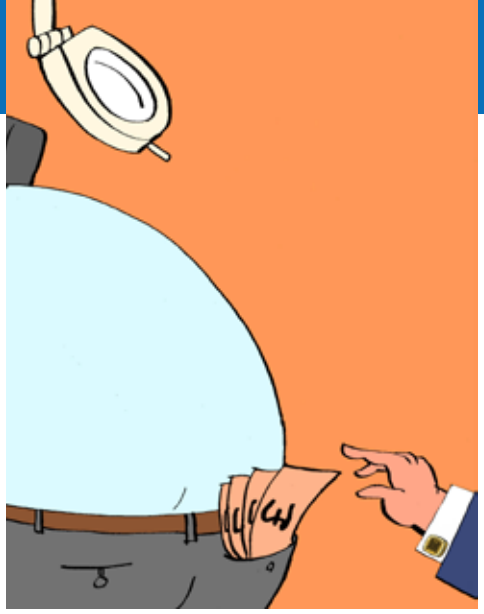
Others said they had organised seminars on pensions taxation and enlisted independent financial advisers to speak to staff (box, below right).

NHS Providers said that most of the trusts that were taking action were "recycling" contributions: paying the lost employer contribution as salary.

In a briefing document summarising local options for trusts, NHS Providers said that a handful of trusts had also explored the potential to pay directly for services provided by consultants who have formed a limited liability partnership, to offer more flexibility to manage pension savings.

Among the trusts to implement a local scheme is Dorset County Hospital NHS Foundation Trust. From September 2018 it allowed staff to opt out of the NHS pension scheme and receive their employer's contributions directly.

Mark Warner, the trust's director of organisational development and workforce, said it decided to go down this route because of concerns raised by consultants about both the annual allowance and the lifetime allowance.



NHS SCHEME: WHY DOCTORS DON'T WANT TO LEAVE

- Doctors' contributions rise with salary and range from 5% to 14.5%
- Employers' contributions range from 14.38% to 20.68%, significantly more than average
- Pensions are larger on retirement than the public sector average, and many members get a lump sum
- Life assurance and family benefits in the event of a member's death
- The ability for some members (2008 scheme) to "draw down" and take partial benefits from age 55

"We were not trying to do something out of kilter," he said. "But in the absence of a national solution we felt we had to do something to address the operational concern of people reducing their working capacity.

"I absolutely welcome that [the government] is continually looking at different options. But I hope some things could be implemented immediately, as I don't think we can wait until next April."

Warner conceded that Dorset's scheme hasn't had huge take-up by doctors, who have been ambivalent about quitting the NHS scheme. "It's fair to say it hasn't had a big impact as yet. Doctors are still asking to reduce their [work] capacity. They don't want to leave the NHS pension scheme but don't want to be penalised financially [by having extra taxes]," he said. However, Warner added, by offering the option the trust had raised awareness of the issue.

O'Dwyer-Cunliffe said the reluctance to quit the NHS scheme was consistent with what NHS Providers was being told by its members. But he warned that this situation might not continue and highlighted a growing awareness of taxation pitfalls among staff.

"Obviously there will continue to be a very difficult decision for any senior clinician or member of staff to make about opting out of a scheme which provides such great benefits (see box, above). But there's certainly an urgency among our members not to see local arrangements as a long term fix," he said.

The government's proposal is likely to prove more attractive than local schemes because it will allow staff to cut contributions and therefore their tax payments while staying within the NHS scheme, which they can't do at present.

York Teaching Hospital NHS Trust, which had set up a staff retention scheme in which employees could receive 50% of the employer's pension contribution as salary, told *The BMJ* it had suspended this offer "pending a national solution."

But Northumbria Healthcare Trust, which has a similar scheme in place, said it would maintain it and consult affected staff on "the best way forward" when a national solution comes into force.

Pressure on workforce

The pensions crisis has increased pressure on an already overstretched workforce. The most recent survey by the BMA earlier this month found that, of 6170 respondents, 42% of GPs and 30% of consultants had reduced their working hours because of pension tax charges. A major stumbling block is the "taper" that was introduced in 2016, which effectively means that as earnings go up the ▶

OPT-OUTs, RESTRUCTURING, ADVICE: TRUSTS' RESPONSE

Northumbria Healthcare Staff who have reached the lifetime allowance or the annual allowance threshold can opt out of the NHS scheme and get the employer's contributions paid as salary. Up to 40 senior members of staff have asked to be part of the arrangements, which has "partly mitigated" staff shortages. Similar schemes are operated by **University Hospitals Coventry** and **Warwickshire and North Cumbria University Hospitals**.

Royal Marsden The trust is reviewing its existing retire and return policy, arranging awareness raising sessions, and working with other trusts to lobby for national action.

University Hospital Southampton The trust has run information sessions for consultants and senior managers, with KPMG accountants, on the long term allowance, the annual allowance, and tapering.

WHAT WE KNOW ABOUT THE PROPOSED REFORMS SO FAR

What are the problems?
Changes to pension tax rules introduced in 2016 meant that as earnings go up the amount of pension that can be saved without incurring tax goes down. Everyone pays tax on any growth of the deemed value of their pension above the tax free annual allowance of £40 000. The "taper" that was introduced meant that, for every £2 of "adjusted income" (all taxable income plus pension growth) above £150 000, the annual allowance is "tapered down" by £1, to a minimum of £10 000. In practice, most doctors with a taxable income of £160 000 to £170 000 face full tapering of their tax free allowance if they stay in the NHS pension. Some have had tax bills of £60 000 and have cut their working hours or retired early as a result. The current lifetime allowance is £1.055m.

What is the consultation on?
Giving senior clinicians flexibility to set the exact amount they put into their pension pots. For example, they could pay 30% contributions for a 30% accrual rate, or any other percentage in 10% increments, depending on their financial situation. Trusts would then have the option to recycle employees' unused contributions back into their salary. This replaces the 50:50 proposal put out for consultation in July.

What is the planned effect?
The government hopes the added flexibility will enable senior doctors to take on extra work without breaching their annual allowance and facing high tax charges. The 50:50 proposal was seen by the BMA and others as too restrictive.

When will the changes take effect?
From April 2020, the start of the next financial year. But the government has also promised to give more immediate guidance to trusts setting out how they can provide local flexibility this financial year, to allow doctors to do extra work without breaching the tax relief limits. The intention is to allow staff to opt out of the NHS pension scheme mid-year and give their employers discretion to maintain the value of the clinicians' total reward packages.

Will it solve all the problems?
On its own, no. But the chancellor, Sajid Javid, has also promised to review how the tapered annual allowance supports (or not) public services such as the NHS. The BMA has told *The BMJ* that only fundamental reform of tax policy will resolve the problems and is pleased the Treasury is engaging with it and the NHS on possible solutions. But it remains to be seen how far the chancellor will be willing to shift on the issue.

amount of money that can be saved in a pension tax free goes down.

Royal Cornwall Hospitals NHS Trust, another organisation that is considering how to make pay and working arrangements more flexible, said it had been forced to use agency staff to cover gaps because of staff reducing their hours as a result of pension tax charges.

O'Dwyer-Cunliffe said, "The fact is that the NHS relies on quite a considerable amount of overtime work from senior staff, and the operation of the taper has put that at risk. There will always be a risk—where capacity is significantly reduced—that one short term way to plug that gap is by paying high rates for temporary staff."

He added, "It's not just about money or plugging gaps or filling rotas, it's about the positive that a substantive and experienced staff bring to an entire team."

Provider trusts are also concerned that the government's scheme will not apply to senior managers as well as to clinicians, which O'Dwyer-Cunliffe called "a real case of inequity."

Even among the medical profession there remains a belief that while the government's action is welcome, the problems will endure until the Treasury commits to wider pension tax reform.

After the government's announcement, the BMA's chair of council, Chaand Nagpaul, said, "The new proposed flexibilities will provide short term relief for many doctors, but they themselves do not tackle the core and underlying problem. This lies in tax reform. And as we have said before, it is the overhaul of the annual allowance and tapered annual allowance that will make a difference to all doctors, including consultants, GPs, and medics in the armed forces."

NHS Providers sounded a similar note. "We need to see the detail of the consultation, but this proposed solution may not wipe out the problem completely," said O'Dwyer-Cunliffe. "A change to the operation of the annual allowance taper would have a much larger impact."

Patrick Bloomfield, a partner at the pensions consultancy firm Hymans Robertson, said the issue had shown that the UK's "malfunctioning pension tax system" needed to be simplified.

Gareth Iacobucci, *The BMJ*

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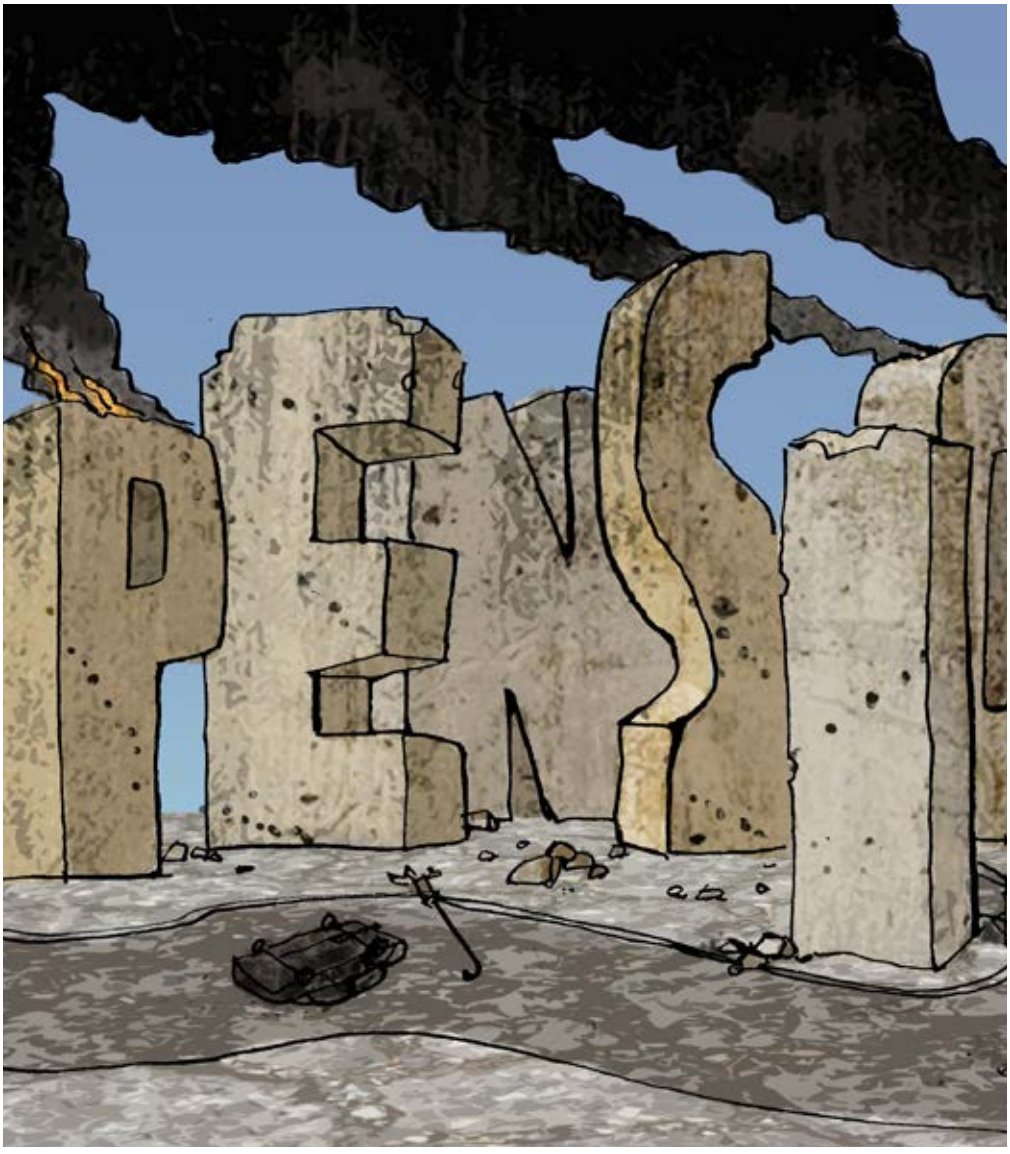
PENSIONS CRISIS

The fight to end the tax trap continues

Recently announced changes will bring relief to thousands of NHS doctors—and patients. But underlying problems remain. Other public servants face similar problems, and they're also fighting back, finds **Melanie Newman**

The prospect of lengthening NHS waiting lists and a consultant exodus to avoid massive tax bills led to the government promising on 7 August "immediate action" and a consultation on giving senior clinicians more flexibility in how much they can pay into their pension pots.

Waiting lists have risen by 50% in some hospitals because doctors have refused extra shifts. Rules from 2016 imposed new limits on how much higher earners could contribute to their pensions without incurring tax charges. A tapered annual allowance gradually reduces the tax free limit. About a third of NHS consultants and GP partners were affected, the government said.



The rules are complex, and some doctors have received huge unexpected tax bills after exceeding the limits, effectively paying more to work more. To avoid that risk some doctors have reduced their hours, retired early, or quit the NHS scheme.

The government has proposed new rules that from the next financial year would allow senior doctors to decide the exact level of their pension contribution at the start of each year so they could do extra work without breaching the limits.

Employers and doctors could stop contributing to the pension once the level is reached, and employers could choose to pay their contribution into doctors' salaries instead so doctors do not lose out on the value of their employers' share.

This financial year, employers will be given guidance to offer local flexibility so doctors can opt out of the pension scheme mid-year. Employers can use "discretionary flexibility" to maintain the value of clinicians' total reward. And the Treasury will review the tapering annual allowance, the government said.

The announcement is a victory for doctors and the BMA. Chaand Nagpaul, the BMA's chair of council, said, "After a year's tireless lobbying . . . it is good to see the government finally sitting up, taking notice, and proposing action." However, the proposals amount to only "short term relief," he added, and would not fix underlying problems. He welcomed the review of "the punitive tapered annual allowance" and said the BMA "will continue to argue that wider reform to the annual allowance itself is also needed."

Unions representing dentists and firefighters have threatened legal action if the same flexibilities are not extended to their members.

50:50 option "not fit for purpose"

Previously, to stem the growing disquiet, the government had proposed a "50:50" option for NHS pensions, whereby doctors could halve their contributions. Since 2014 a similar option in the local government pension scheme has allowed members to halve their contributions while retaining full life and ill health cover, instead of completely variable contributions as in the new NHS proposals.

The 50:50 option for local government employees was intended to help low paid workers stay in the pension scheme in periods of financial hardship. However, most users have been people wanting to manage their lifetime allowance for pension tax purposes.

Nagpaul described the 50:50 option as "not fit for purpose." He said, "This method is overly restrictive and can leave doctors putting either too much or too little into their pensions."

Jeff Houston, head of pensions at the representative organisation the Local Government Association, agreed, warning, "It really only works for those who are approaching the lifetime allowance limit." Most problems with exceeding the annual allowance are caused by closed final salary pension schemes, he said.

Many staff who have transitioned to "new" career average defined benefit schemes, introduced by the NHS and other public sector employers in 2015, still have a link between their current pensionable pay and their "old" final salary pension. That is, future increases in pay increase the value of the old pension. That's normally good news. But where members have a new pension as well, the growth in both schemes counts towards their annual allowance, which can then create a tax charge.

We took it on because of the injustice
Sean Starbuck, Fire Brigades Union, which won a legal battle with the government over public sector pension changes

Wider reform to the annual allowance itself is needed
Chaand Nagpaul, BMA

Breaking the link

Houston belongs to the cross sector Public Services Pensions Tax Working Group, which has been working on an option to break the link between current pay and final salary pensions. "This may be the best way forward on the annual allowance issue for all public sector workers, including doctors," he said.

He believes this would still be the case even with the government's latest concessions to doctors. "The ability to vary your pension accrual will not apply to final salary pensions," he explained.

He told *The BMJ* that he had heard that the government's consultation will include a proposal to phase in increased pension contributions arising from pay rises and promotions. So, for example, a doctor might get a £10 000 pay rise but would receive only 50% of the associated increase in pension contributions in the first year, 75% in the second year, and 100% in the third year.

This would have some impact on the final salary element of the annual allowance, Houston said, but also raises more questions. "These are a few more sticking plasters," he said. "I don't see anything that will help as much as enabling the member to break the link with the final salary scheme or opting to count some of their pay as non-pensionable."

The working group's chair, Andrew Hopkinson, national leader of the Fire Leaders Association, told *The BMJ* that breaking this link would prevent future increases in pay from pushing the final salary element of a member's pension above inflation. Old benefits would increase only with inflation (not pay), so there would be no growth for annual allowance purposes. Only new pension growth would be considered towards the annual allowance.

"There is a risk for members that future pay increases not counting towards their old pension will mean that this is lower than if they were still connected. But there is also a possibility that the [inflation] growth on their old pension is better than having the salary link and a tax charge," Hopkinson explained.

Hopkinson set up the working group a year ago. "We started to see the impact of the tax allowances and began to talk to colleagues—the police, NHS, local government, civil servants, the prison service, the armed forces, education," he said. "This was a growing issue for all public services."

Since its first meeting in June 2018 the group has expanded to about 30 individual and organisation members, including employers (NHS Employers is a member, but the BMA is not), and experts on private sector pensions. It's collecting evidence of the effects of pension tax changes, including by surveying members, and is proposing solutions.

Remove or raise the limits

The BMA has asked the government to remove or raise the allowance limits. The working group is also exploring other alternatives. "We'd like to see that. It's an easy fix, winding the clock back," Hopkinson said. "But if that's not possible we want to discuss other options."

The group met the then chancellor, Philip Hammond, in June and discussed several options, including breaking the link with final salary pensions, Hopkinson said. Voluntary limits could also be placed on pensionable pay—for example, to exclude acting-up allowances from increasing a final salary pension.

"Our approach is collaborative and solution seeking," Hopkinson added. "Our hope is that by being representative of many factions our single voice will be heard more willingly in Whitehall."

A BMA spokesperson said, "We are working with colleagues in other trade unions to share information and represent a unified argument to government.

"We have met previously with the Public Services Pensions Tax Working Group and propose to meet with them again in the near future."

Litigation has also led to some successes. As part of the 2016 changes that moved most public sector workers to new, less generous, pension schemes, the government introduced transitional arrangements whereby workers within 10 years of retirement age could stay on the old terms.

Firefighters and judges took the government to court, arguing unlawful age discrimination. After a long struggle ending in the Supreme Court, and a strike, the firefighters and judges won their battle. Discussions on remedy are under way.

Sean Starbuck, national officer for the Fire Brigades Union, said, "We took it on because of the injustice." Under the 2016 scheme, firefighters would not have been able to retire before 60. Research showed that much of the workforce would have been unable to meet compulsory fitness requirements at that age.

After a long struggle ending in the Supreme Court, and a strike, firefighters and judges won their battle

"We had a huge swathe of members suddenly facing some sort of capability dismissal when they couldn't maintain their fitness," said Starbuck. "We were criticised by other unions for doing it. They were frustrated because they'd made deals."

But any such deal would still have meant too many FBU members working longer and potentially being sacked on capability grounds, he said. "We couldn't sit by and let that happen."

Judges and police

Judges were in a different position. They faced being moved from a tax exempt scheme to one covered by the new tax limits, as well as being asked to work for longer. "They stuck by their guns as well," said Starbuck, as they saw their case through.

Doctors could learn from the firefighters' uncompromising stance. After their union's victory, the BMA wrote to the health secretary for England, Matt Hancock, threatening to take legal action on behalf of doctors over the 2015 NHS pension scheme changes. On 3 July the BMA said in a statement that it was supporting "at least a dozen" doctors who were suing the government for age discrimination.

The Police Federation of England and Wales arguably has a lesson in how not to approach such problems. Its handling of the pension changes has lost the organisation considerable support from members. Officers were furious that the federation decided not to take legal action against a new police pension scheme. Four police officers then mounted their own challenge without federation support, which they won this month.

The federation's chair tweeted that he had been subjected to "relentless and considerable" personal abuse since the June 2019 Supreme Court ruling in favour of the firefighters and judges. But any chance that bridges could be built were lost after the federation reiterated that it would not cover the four officers' legal fees, a decision that prompted even more social media outrage.

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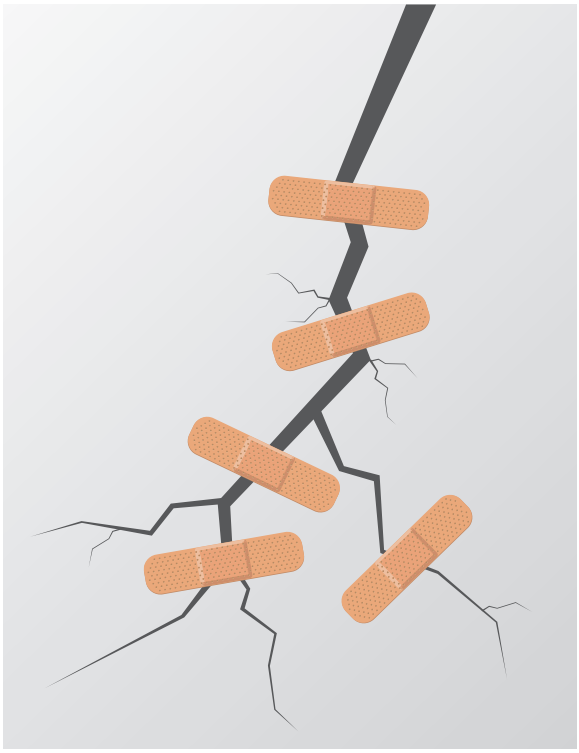
Time is running out to protect NHS staff

Government must act decisively to avert potentially catastrophic workforce losses

The scale of the NHS pension crisis is becoming clear. Surveys by the BMA,[1] the Hospital Consultants and Specialists Association,[2] and NHS Employers[3] indicate that around half of senior doctors in all specialties are planning to stop doing overtime, reduce sessions, or retire early because of punitive changes to the way their pensions are taxed, most notably the annual allowance and tapered annual allowance.

This comes at the worst possible time for the NHS, with hospital consultants, staff and associate specialists, and GPs all facing critical workforce shortages.

The secretary of state for health and social care, Matt Hancock, belatedly announced a four month consultation in July,[5] hailing "pension flexibility" as the solution. Central to this strategy was a "50:50" solution whereby half a pension is accrued in exchange for half contributions. This option was widely acknowledged as inadequate,[6 7] providing too little flexibility to be useful for most doctors. Thankfully, the government recently announced that this consultation would be scrapped,[8] offering instead to consult on full flexibility. This was accompanied by a welcome statement from Sajid Javid, the new chancellor, that the government would be "reviewing the operation of the tapered annual allowance."



Around half of senior doctors in all specialties are planning to stop doing overtime, reduce sessions, or retire early

Are they listening?

Review cannot wait until the next tax year. The tapered annual allowance, introduced in 2016, is an ill conceived tax and the root of the current crisis. It is poorly designed with "tax cliffs"; but, more fundamentally, the annual allowance itself makes little sense in defined benefit schemes such as the NHS. It was designed principally to limit tax relief on pensions and prevent avoidance in the private sector. Tax relief is adequately limited by the lifetime allowance, and it seems overkill to limit tax relief on the way in to pension saving (annual allowance), on the way out (lifetime allowance), and then finally tax again on withdrawal (income tax on pension payments).

Then comes the substance of the new consultation. Following multiple warnings from professional organisations, unions, and NHS providers the "50:50" strategy has been ditched in favour of exploring full flexibility. However, without "recycling"—paying the lost employer contribution as salary—even full flexibility will amount to a substantial pay cut for consultants and especially for GPs, who already have access to the employer contribution. Full recycling must not be optional for employers as is currently proposed.

Details on the renewed consultation are scant,[8] but there are already areas of potential concern. First is the suggestion that any fixes will remain restricted to senior clinical staff. Other NHS staff, including senior management, are also affected. Denying them access to a solution will only divide the workforce. Conversely, it remains fair to offer flexibility only to those NHS staff who need it. For those on lower salaries the current arrangements are excellent value and the best chance of security in retirement.

There remains a suggestion that doctors may buy "additional pension." This is a disingenuous "pay more, get less" strategy that is a staggering 127% more expensive (for a 45 year old retiring at state pension age) than buying a standard pension. A worked example in the original consultation shows the employee bearing all the cost of the additional pension, while lost employer contributions from additional flexibility are presumably recycled into employers' budgets or government coffers.

Employer pension contributions are an important part of doctors' rewards packages. It is not for employers or government to dip into these funds when doctors are forced out of the pension scheme by crippling disproportionate pension taxes. Full recycling is cost neutral to the NHS and should be offered to all affected staff.

Scrap the taper

In the worst cases, the tapered annual allowance leaves doctors actually paying to work. It is wrong that non-pensionable overtime can trigger massive pension tax liabilities for no possible pension benefit. The taper must be scrapped, but the annual allowance in its entirety also requires urgent reform.

The BMA and others have been warning the government for almost a year that this pension crisis was coming. The new administration must take immediate steps to tackle the root cause—unfair pension taxation—before it is too late to save our NHS.

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THE BIG PICTURE

Lives at risk in Kashmir blackout, doctors warn

The situation in Indian administered Kashmir, where the government has imposed a security lockdown and communications blackout, is preventing people from seeking medical help, doctors have warned.

In a rapid response sent to *The BMJ* a group of 18 doctors from across India warned that the "grim" situation had led to a "blatant denial of the right to healthcare." Coordinated by Ramani Atkuri, a public health consultant in Madhya Pradesh, the letter calls for the government to lift the restrictions immediately.

The lockdown came after India's parliament voted on 5 August to revoke Article 370 of its constitution, which gave the state of Jammu and Kashmir special status.

The government then sent tens of thousands of troops to the Kashmir valley to counter any unrest and imposed a curfew that forced residents to show a pass to leave their homes, even in the case of medical emergencies.

Internet access has also been shut down, causing havoc for shopkeepers and pharmacists who order their products online. Vital supplies such as insulin and baby food are running out, reports say.

In the rapid response, dated 16 August, the doctors warn of drugs shortages and travel problems, including patients not being able to reach routine care, people unable to call ambulances, and staff struggling to get to work. They wrote, "Some doctors worry about their patients on dialysis as only those from Srinagar [Kashmir's biggest city] have been able to come for treatment, while those living outside have not been able to reach the hospital. Certain medications are out of stock in the local stores.

"There are reports of other patients who have not been able to reach the hospital for their scheduled cycle of chemotherapy. The situation has also led to a lot of mental stress among a population already living with high levels of psychosocial stress."

Elisabeth Mahase, *The BMJ*

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AFP/GETTYIMAGES

INFECTIOUS DISEASE

Ebola in Africa: lessons learnt

Doctors Ian Crozier and Eugene Richardson worked during the 2014-16 outbreak in Sierra Leone and the current outbreak in the Democratic Republic of the Congo. They tell **Mara Kardas-Nelson** about how the countries responded

A worker prepares a biosecure unit for Ebola patients at a treatment centre in North Kivu province in the Democratic Republic of the Congo

In the DRC it's possible to provide care that was not possible early in the outbreak in many parts of Sierra Leone
Ian Crozier

Mara Kardas-Nelson: How does clinical care differ in Sierra Leone and the DRC?

Ian Crozier: I got to Sierra Leone in August 2014, in the early days of the outbreak. We didn't have adequate numbers of clinicians, we lacked the necessary equipment needed for basic clinical or laboratory monitoring, we were using repurposed hospital spaces or rapidly constructed large tents that weren't equipped to care for severely ill patients, and we often didn't have effective operating protocols for care provision or for protection of healthcare workers.

In general, care at the bedside in the DRC has advanced significantly. It's now routine to be able closely to monitor a patient's vital signs, and laboratory tests and results can be accessed daily. There are more clinicians staffing treatment units than in Sierra Leone, and these now often have key specialists like paediatrics, critical care, and obstetrics. And most care in North Kivu province, a major hotspot, is being delivered in innovative care spaces that allow a new level of care and interaction between the patient, clinical teams, and family members, such as the biosecure ALIMA CUBEs and innovatively designed treatment units constructed by Médecins Sans Frontières and Samaritan's Purse.

In the DRC it's possible to provide care that was not possible early in the outbreak in many parts of Sierra Leone. Newly developed supportive care protocols have been issued by WHO, and I have been very encouraged to see a more advanced level of supportive care increasingly "baked in" to the DNA of the response.

MK-N: In West Africa many ill people stayed in the community, and many did not seek treatment at all. Do you see the same in the DRC?

Eugene Richardson: In Sierra Leone patients didn't go to health facilities in part because there wasn't enough staff to treat them. That's not necessarily the case in the DRC, which has four times the number of doctors per capita. But patients are still showing up to treatment units late and sometimes dying two or three days later. Or they're not coming at all.

A *Lancet Infectious Diseases* paper said this was due to mistrust, claiming that only 25% of people in the DRC believe that Ebola is real. The paper suggests that "conspiracy theories" are driving the epidemic, but that discounts a very real history of colonial exploitation: the brutal rule of Leopold II of Belgium in the 19th century; the fact that the country's first democratically elected president was killed with the support of the CIA in 1961.

There's a theme of people arriving in a way that doesn't benefit people in the Congo. So of course they don't want to comply with outside forces. Rejecting intervention—it's almost like a habitual reaction now.

People have been dying from malaria, measles, and armed conflicts for years, and there's a sense that no one's come to help. And then all of a sudden they see people from abroad with SUVs and money. They feel all of this is being foisted on them. They feel we're the ones spreading Ebola.

MK-N: One major problem in the West African outbreak was the lack of local clinicians. Is that a problem for the DRC?

IC: It's notable that most treatment units are staffed predominantly by Congolese clinicians rather than expatriate clinicians. That's very different from Sierra Leone, where most of the doctors were from outside West Africa.

Congolese clinicians are incredibly competent and have been resilient in a very difficult time, considering all of the attacks that have taken place amid general insecurity in North Kivu. This has affected the ability to provide care. I was in Butembo and Katwa in March and April, when there were major attacks directly on treatment units. We had to move patients in the middle of the night, and later NGOs withdrew. All the advances we've seen—in staff, structures, supplies, and systems—stall when they no longer have the

BIOGRAPHIES

Ian Crozier is a clinician scientist contracted by Leidos Biomedical Research to the US National Institute of Allergy and Infectious Diseases

Eugene Richardson is an assistant professor of global health and social medicine at Harvard Medical School

REUTERS/SAMUEL MAMBO

sociopolitical traction they need. I find the Congolese clinicians' resilience remarkable.

And though we didn't face this level of violence in West Africa, I also saw this resilience among healthcare workers from Sierra Leone, who dealt with serious material constraints that hindered their ability to provide care.

MK-N: What are international organisations doing?

ER: Some NGOs have left the DRC because of violence, so WHO has found itself in an implementing role, which is very different from its more technical role in the West Africa outbreak. WHO is taking on a lot of the logistics, like bringing in supplies, overseeing vaccination campaigns, and contact tracing. It's doing a good job, even though it hasn't had the funds it has needed throughout much of the response. The public health people from WHO AFRO [the African regional office] are doing incredibly good work, such as supporting in-community education about how Ebola spreads, an experimental vaccine, and treatment.

In Sierra Leone the British and Sierra Leonean military and NGOs were running the show. In the DRC the Ministry of Health was playing a leading role, although that's changed since the international emergency was declared. The government in Kinshasa has neglected the region historically and colluded in its plunder, so the idea of a militarised response here, as was done in Sierra Leone, is not possible, because people don't trust the military after years of armed conflict.

People feel all of this is being foisted on them. They feel we're the ones spreading Ebola
Eugene Richardson

MK-N: Experimental treatments have been offered in the DRC via a randomised control trial. How is that working?

IC: Therapeutics have been widely available to patients who make it to a treatment centre, first through compassionate use, and now through the RCT. Conversations around informed consent, which have included local and anthropological input, have been carefully considered and are initiated by social workers and often include Ebola survivors. The RCT has been led by the DRC National Institute for Biomedical Research, in partnership with the US National Institutes of Health, WHO, and NGOs.

From what I've seen there's been good community understanding and acceptance of this study. Indeed, almost every patient who's exiting a treatment unit as a survivor has received an Ebola virus specific therapeutic. That's a remarkable shift from Sierra Leone and the western African outbreak in general, where less than 5% of all patients received an experimental therapeutic as part of a study or under compassionate use.

MK-N: The DRC outbreak has continued for a year. Why isn't there an end in sight?

ER: I worry that a hypertechnical approach, with a focus on vaccinations and new drugs, is backfiring. It may be causing a lot of people to recoil. To access these interventions people have to go through an ordeal of consent and paperwork. That does not normally accompany medical interventions, raising suspicion of ulterior motives.

I've been surprised to see how much refusal there is. In one village I visited, of a couple of hundred people, only eight people took the vaccine. I think this is a reaction to depredation from Kinshasa and foreign entities over many decades.

Maybe we have to approach things differently. For example, we could consider paying people to get the vaccine, rather than assuming they'll trust an outside force. We also need to provide high quality care across the board, not just for Ebola but for malaria, obstetrics, surgical services—things that people need every day.

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OBITUARIES, p 252

EDITORIAL

A more sustainable NHS

Inhalers and anaesthetics with a lower carbon footprint are quick wins that should be implemented now

Theresa May's announcement earlier this year committed the UK to reduce emissions to net zero by 2050.[1 2] While the NHS is leading by example in reducing use of natural resources, it also contributes substantially to the UK's carbon footprint, accounting for 40% of public sector emissions.[3]

Sustainability is embedded in the long term plan, which calls for reducing carbon emissions by a third from 2007 levels and increasing the NHS's sustainability.[4] The plan lays out several strategies to achieve this, ranging from shifting the NHS fleet to electric vehicles, switching patients to dry powder inhalers when clinically appropriate, and transforming anaesthetic practices. Other necessary steps include reducing waste, water, and carbon use by achieving best practice efficiency standards and adoption of innovative concepts such as telehealth for people with long term conditions.[4]

Internationally, the UK is viewed as a leader in healthcare environmental sustainability, with a dedicated NHS sustainability unit formed in 2008. Between 2007 and 2017, the NHS reduced its footprint by 18.5% while increasing clinical activity by 27.5%,[3] but decarbonisation must be accelerated to achieve the targets set within the Climate Change Act.[1]

We need a healthcare service that defines sustainability as a core dimension of quality

Carbon hot spots

The health and social care system's carbon footprint was 27.12 megatonnes of CO_2 equivalent in 2017.[3] The two largest hotspots were medical equipment, responsible for 13.2% of emissions, and pharmaceuticals, responsible for 12.1%, thanks to the high energy requirements associated with manufacturing, packaging, and transport.[5 6] Relatively quick reductions could be achieved in two areas: metered dose inhalers, which represent 3.1% of the carbon footprint of the NHS—a similar proportion to construction (3%) and staff commuting (3.9%)—and anaesthetic gases, which represent 1.7%.

Modern anaesthetic gases include sevoflurane, desflurane, and isoflurane as well as nitrous oxide, which is used as an adjunct for surgical procedures and childbirth. All are potent greenhouse gases with 130-2540 times the global warming potential of carbon dioxide. Reduced consumption, use of gases with lower global warming potential, and use of intravenous anaesthetics when appropriate would help reduce our footprint.[7]

Metered dose inhalers have hydrofluorocarbon propellants that are powerful greenhouse gases and persist in the atmosphere for between 14 and 260 years. Dry powder inhalers do not use these propellants and have substantially lower global warming potential.[8]

An estimated 70% of inhalers dispensed in England are metered dose inhalers.[9] Other European countries prescribe predominantly dry powder inhalers.[10] In the UK, lack of awareness and higher cost are the commonly cited barriers to widespread use of dry powder inhalers,[9] but in practice, they can be the same price or less than other inhalers.[11] A recent directive by parliament's Environmental Audit Committee recommended that by 2022 at least 50% of prescribed inhalers should be of low global warming potential, and that dry powder inhalers be promoted unless there is a medical contraindication.[9] In both adults and children, care must be taken to ensure the prescribed inhaler can be used appropriately.[12]

To encourage awareness of the environmental impact of asthma inhalers NICE has produced a decision aid for clinicians and patients. The aid facilitates discussions with patients and families about which inhaler best aligns with their priorities and will support carbon reduction targets without compromising clinical care.

Climate friendly

Promoting climate friendly inhaler options and reforming anaesthetic practices will not be enough on their own. A system-wide approach is required to move us towards a carbon neutral healthcare system, with support from NHS leaders, healthcare providers, frontline clinicians, and the public. We need a healthcare service that considers sustainability in all its activities and defines sustainability as a core dimension of quality. Healthcare professionals need to support the implementation of relevant initiatives, discuss the environmental effect of therapeutic choices with their patients, and advocate for system-wide, global action that protects the health of the whole population.

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