this week

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MATT SAYWELL/BMA NEWS

Fraud sparks review of 3000 doctors

The GMC is urgently reviewing around 3000 doctors' qualifications after it emerged that a psychiatrist was able to practise for 23 years with fraudulent credentials.

Zholia Alemi joined the UK medical register in 1992 under an exemption that allowed certain graduates from Commonwealth countries to register on the basis of their qualification without having to pass the standard Professional and Linguistic Assessment Board exam.

Alemi presented what appeared to be a primary medical qualification from the University of Auckland, a letter confirming her graduation, and a reference from employers in Pakistan. In reality, she had dropped out of medical school after failing the first year. Her only qualification was a degree in human biology, and the documents she presented were forged.

Alemi most recently worked as a consultant psychiatrist with a dementia service in west Cumbria. Her fake credentials were exposed by the *News and Star* newspaper, which investigated after her conviction for faking a patient's will.

Alemi, who had befriended the 84 year old patient, was jailed for five years at Carlisle Crown Court for forging her will in an attempt to inherit her £1.3m estate. The judge, who was unaware of her earlier fraud, said, "Your status as a doctor was integral to your confidence trick."

The GMC said Alemi had registered under a section of the Medical Act that had not been in force since 2003. It added, "We have started an immediate review of all doctors who joined the register via this route and who are still licensed to practise. Initial indications are that there are up to 3000 doctors whose records we will be rechecking to verify their authenticity.

"It is important to stress this is an incredibly rare case and there is nothing to suggest other doctors who took this route are anything but honest and hard working."

Alemi was formally warned by a medical practitioners tribunal in 2012 for failing to disclose a conviction for careless driving and for sanctioning the detention of psychiatric patients without the authority needed. But neither the medical authorities nor the police checked her qualifications.

The GMC's chief executive, Charlie Massey, said, "We are confident that, 23 years on, our systems are robust and would identify any fraudulent attempt to join the medical register."

Clare Dyer, *The BMJ*

Cite this as: *BMJ* 2018;363:k4909

Charlie Massey, the GMC's chief executive, said he was confident its systems were now robust enough to spot a similar fraudulent attempt to join the UK medical register

LATEST ONLINE

- Brexit: Doctors must speak up about risks to patients, says BMA chair
- Abortion: US global gag rule is having "chilling effect" on sexual health service providers
- Referring patients with suspected oral cancer to dentists may delay diagnosis, say GPs

SEVEN DAYS IN

NHS to overhaul England's national cancer screening programmes

National cancer screening programmes in England are to undergo a major overhaul as part of the NHS's upcoming long term plan. A review led by Mike Richards, the government's former cancer tsar, will focus on how to increase early detection by using advances in technology and new approaches to selecting people for screening.

Richards said, "There is no doubt the screening programmes save thousands of lives every year. However, we want to make certain they are as effective as possible. This review provides the opportunity to look at recent advances in technology and innovative approaches to selecting people for screening, ensuring the NHS screening programme can go from strength to strength and save more lives."

The review, which is expected to report next summer, will assess the effectiveness of current cervical, breast, and bowel cancer programmes. It aims to make recommendations on how to modify these, on introducing new technologies, and integrating screening with other initiatives to promote early diagnosis. It will also look at how screening should be commissioned, delivered, and quality assured; how to integrate research and evaluation; and how to ensure the necessary workforce is trained to deliver them.

Gareth Iacobucci, *The BMJ* Cite this as: *BMJ* 2018;363:k4866

General practice

BMA calls for Capita to lose GP support contract

The BMA urged NHS England to strip Capita of its contract to provide back-office support services to GPs after it emerged that as many as 48 500 women had not received information or results from cervical cancer screening because of an "administrative error." The BMA's GP committee said that Capita's stewardship of the service had been "nothing short of shambolic" and urged NHS England's chief executive, Simon Stevens, to bring primary care support services back in house. NHS England said that all patients affected and their GPs were being contacted.

International news

Cuba withdraws 8000 doctors from Brazil

Cuba plans to bring more than 8000 doctors back from Brazil after Jair Bolsonaro (right), the right wing president elect, made comments that Cuba's health ministry called "contemptuous and threatening to the presence of our doctors." On 2 November Bolsonaro, who has yet to take up office, said that the Cuban doctors would all have to requalify in Brazil. Cuban nationals account for more than half of the 16 000 doctors working in Brazil's Mais Médicos (More Doctors) programme, launched in 2013 to deliver healthcare to the country's poorest and most remote regions.

Public health

Ban energy drinks for under 16s, say doctors

In its response to the government's consultation on energy drinks the Royal College of Paediatrics and Child Health called for a ban on their sale to children under 16, also urging minimum pricing, warnings of high caffeine content, clear sponsorship rules, and education in schools. The college's president, Russell Viner, said that many young people consume energy drinks "because they wake them up, give them energy, and are cheap. In fact, energy drinks have the opposite effect, with their ingredients making them lethargic, agitated, and anxious."

Families are bombarded with sugary promotions

Restrictions on placing unhealthy food and drinks in prominent locations at supermarkets are urgently needed, the Obesity Health Alliance said, after research found that sugary products comprised 43% of all food and drink products in prominent areas, such as store entrances, checkout areas, and aisle ends. Overall, 70% of all food and drink products in prominent locations were products that contribute significantly to children's sugar and energy intake.

Premature birth

Omega 3 fatty acids can reduce risk from 12 weeks

Increasing the daily intake of omega 3 long chain polyunsaturated fatty acids during pregnancy led to an 11% reduced risk of preterm birth of ‹37 weeks and a 42% reduced risk of early preterm birth of ‹34 weeks, a Cochrane review found. Philippa Middleton, lead author, said that the optimal daily dose for preventing premature birth was 500-1000 mg of long chain omega 3 fats (containing at least 500 mg of DHA), starting at 12 weeks of pregnancy.

Climate change

Plant based diet would most improve land use

Getting the UK population to eat less beef, lamb, and dairy products and more plant based foods as recommended by the government's "Eatwell" guidance would release more land from agricultural use than other policies, a report from the Committee on Climate Change said. This would make more land available for peatland restoration, sustainable biomass production, and forests for carbon sequestration, helping to cut greenhouse gas emissions while also improving health by reducing obesity.

Mental health

MPs request evidence for men and boys inquiry

The House of Commons Women and Equalities Committee launched an inquiry into mental health in men and boys (https://bit.ly/2Fnl3up), focusing on issues that affect male mental health, the social and economic costs, and which groups are particularly at risk. The deadline for written submissions is 18 February 2019.

MEDICINE

Nicotine

FDA to crack down on teenage vaping

The US Food and Drug Administration tabled new rules to make it much harder to purchase e-cigarettes, the flavoured liquids within them, and menthol versions of traditional cigarettes. The announcement came as new data from the 2018 National Youth Tobacco Survey showed a 78% rise in current e-cigarette use by US high school students in the past year alone. Scott Gottlieb, FDA commissioner, said that the aim was to make nicotine products "less accessible and less appealing to children."

Vapes with child friendly flavours are targeted by the new FDA rules

Wellbeing

Half of anaesthetists have no rest facilities

The Royal College of Anaesthetists and the BMA called on the health secretary to ensure that all healthcare staff have access to high quality rest facilities, as a survey by the college found that nearly

half (49%) of anaesthetists did not have access to a dedicated place to rest during or after their shift. Ravi Mahajan, college president, said, "Righting this wrong is relatively easy to solve if it is made a priority by local and national NHS leadership."

Research news

Meditation can help reduce PTSD symptoms

Transcendental meditation—effortlessly thinking of a mantra, without concentration or contemplation, to produce a settled, psychophysiological state of restful alertness—may help to lessen the severity of post-traumatic stress disorder, a randomised controlled trial of 203 US veterans with PTSD found. After three months of treatment, meditation was just as effective at reducing symptoms as prolonged exposure therapy (the psychotherapy most commonly used) and was better than health education classes, researchers reported in the *Lancet Psychiatry*.

Bullying and violence at work raise heart risk

People who are bullied or experience violence at work had a higher risk of cardiovascular disease, and the greater the exposure to these stressors the higher the risk was, showed a prospective study of nearly 80 000 working adults in Denmark and Sweden published in the *European Heart Journal*. The authors said, "The effect of bullying and violence on the incidence of cardiovascular disease in the general population is comparable to other risk factors, such as diabetes and alcohol drinking, which further highlights the importance of workplace bullying and workplace violence in relation to cardiovascular disease prevention."

Cite this as: *BMJ* 2018;363:k4901

ALCOHOL

The biggest damage caused by alcohol is not acute harm—but cancer. Alcohol attributable cancer caused

85000

deaths in Europe in 2016 and is three times more common in men

[WHO European Office]

SIXTY SECONDS ON . . . REVERSE MENTORING

SOUNDS A BIT DRY

Hold your horses. The act of flipping traditional roles so the more junior person acts as mentor is gaining traction.

WHOSE BRAINWAVE WAS THIS?

General Electric chief executive Jack Welch is said to have returned to the US after an overseas trip in 1999 and ordered his senior staff to find junior mentors who could teach them computer skills.

SO, IT'S HELPING OLD FOLK TWEET?

Partly. But it's more about bridging what the Resolution Foundation calls the "yawning chasm" between Millennials (born 1980-2000), who feel squeezed and, ahem, "salty" about university debts and unaffordable housing, and Baby Boomers (born 1946-64), who are sniffy about younger people's reluctance to stay in jobs, save, shave their beards, and look up from their screens.

IS THIS APPROPRIATE FOR MEDICINE?

It arguably should be. Medicine remains hierarchical, according to an op-ed article in *JAMA*. Millennials are characterised negatively as "impatient, distracted, overly socialised, and entitled" or positively as "deeply empowered, collaborative, and innovative." Little wonder that "mismatched expectations" between seniors and their trainees can arise, the authors say.

DO I HAVE TO TAKE UP HOT YOGA?

Come on, Grandad, YOLO (you only live once). At the very least, a junior mentor might persuade an experienced colleague to ditch PowerPoint and embrace Prezi. No one's asking Boomers to be "woke" (aware of injustice), just to be aware enough not to cause offence.

WHAT'S IN IT FOR THE "JUNIORS"?

There's a happier workplace for a start. Mutual respect also helps create an environment where concerns can be raised and learning can thrive.

WHO'S ROCKING IT?

Industry giants IBM have been at it for years and law firm Linklaters recently got on board. Even the former health secretary Jeremy Hunt has gone for it at the Foreign Office. There are examples popping up in medical circles, but it hasn't gone "extra" (excessive) just yet.

Ann Robinson, London

Cite this as: *BMJ* 2018;363:k4887

Pfizer may have to repay NHS £500m for extending pregabalin patent for pain

Company not entitled to a patent it used to discourage generic competition

The Supreme Court has thrown out an appeal by the drug company Pfizer over its blockbuster drug pregabalin (Lyrica).

The court ruled that Pfizer's subsidiary, Warner-Lambert, was not entitled to a patent that it used to discourage competition from generic manufacturers and to extend the life of branded pregabalin for two years. The ruling will have important implications for the drug industry and for the NHS, which may be able to claim back more than £500m it would have saved if Pfizer had not sought to obstruct the cheaper generic drugs.

Pregabalin was originally licensed for epilepsy, with the patent due to run out in 2013. Pfizer had meanwhile obtained a secondary patent, valid beyond the life of the original one, covering neuropathic pain. This represented a larger market, and the drug became a big success, with annual sales of $5bn.

As the expiry of the original patent drew close, the generic manufacturers Actavis (now Allergen) and Mylan produced versions of pregabalin. Warner-Lambert claimed patent infringement and won a ruling in February 2015 from the UK Patents Court that doctors prescribing the drug for neuropathic pain should do so only under its brand name Lyrica.

No further appeal

In September 2015 the Patents Court ruled in favour of the generic manufacturers. Pfizer's appeal was rejected in the appeal court, and it then took the case to the Supreme Court, which issued its ruling on 14 November. Pfizer has lost in the highest court in the land, and no further appeal is possible.

The case hung on data provided by Pfizer to gain its secondary use patent. At the time it was granted, the Supreme Court found, Pfizer had presented no experimental data or convincing earlier evidence that pregabalin would work for neuropathic pain.

"More than a bare assertion or mere possibility of therapeutic efficiency is required," a majority of the Supreme Court judges ruled, "though *a priori* reasoning (not necessarily only experimental data) may suffice. This respects the principle that the patentee cannot claim a monopoly of new use for an existing compound without real disclosure."

However, even had the evidence existed when the extended patent was granted, the generic manufacturers would not have infringed Pfizer's patent because

THE COST is likely to be disputed, but a study published in BMJ Open in June estimated that the the delay in introducing generic pricing amounted to £502m

GP at Hand: eligibility limits are lifted

Babylon's GP at Hand service is to remove restrictions on which patients can use it, after an NHS England review.

The service, which launched a year ago, has been accused of "cherry picking" healthy, younger patients after its website advised that it may not be appropriate for older people and patients with more complex health needs.

But Hammersmith and Fulham Clinical Commissioning Group, which hosts the service at an NHS GP surgery, lifted the restrictions after it received clinical assurance from NHS England at a board meeting on 20 November.

A paper presented to the CCG's primary care committee by Julie Sands, NHS England's head of primary care for northwest London, read, "Following discussion at the last clinical assurance meeting with the practice, the list of conditions where it may not be clinically appropriate for patients with them to register will be removed."

Growth of list

NHS England's report said that the host practice's list size had grown from 4700 to 36 555 (nearly 700%) since the service launched. To date, three quarters (73%) of patients joining the practice were aged between 20 and 34 years, with 18% aged 35-64. Just 5% of new patients and 11% of the current list (as at mid October 2018) live in Hammersmith and Fulham, while a quarter (26%) live in the wider NHS North West London area. Some 68% of new registrants live in other parts of London, and 5% live outside London.

An independent evaluation of GP at Hand is being conducted by the market research company Ipsos MORI. An interim report is expected to be published in December.

Gareth Iacobucci, *The BMJ*

Cite this as: *BMJ* 2018;363:k4903

Petition against "cruel" cannabis guidance gains 400 000 names

The parents of severely epileptic children have launched a campaign for strict new guidelines covering medicinal cannabis to be revised after some found that doctors were reluctant to prescribe the newly legalised medication.

In a letter to the *Times*, the families of 12 children said they still faced the "cruel and ridiculous" prospect of being forced to go abroad for treatment, even though cannabis based medication has been made legal in the UK.

One of the signatories, Hannah Deacon (right), the mother of 6 year old Alfie Dingley, has gathered around 400 000 signatures on a petition calling

they labelled their product according to the narrow definition and not for neuropathic pain. They were not, therefore, infringing the extended patent, even though they might have suspected that their generic products would be prescribed for neuropathic pain regardless of the label.

Compensate NHS

Pfizer declined to comment on the outcome of the case, but the ruling could prove costly to the company. The Patent Court ruling of 2015 contained a "cross-undertaking in damages" under which Pfizer agreed to compensate NHS England should the order requiring prescribing by brand turn out to be unjustified.

The cost is likely to be disputed, but a study published in *BMJ Open* in June estimated that the delay in introducing generic pricing amounted to £502m.

The ruling also has implications for the drug industry. Nick Sutcliffe, partner at the law firm Mewburn Ellis, specialists in intellectual property, said, "The ruling will make patents easier to avoid and more vulnerable to invalidation and thus weaken patent holders' rights and ability to innovate with confidence."

Nigel Hawkes, London

Cite this as: *BMJ* 2018;363:k4856

Protesters in March demand EU workers be allowed to stay in the UK after Brexit

"EU doctors need post-Brexit guarantee"

The BMA has urged the government to formally guarantee the rights of European citizens in the event of the UK leaving the EU without an agreement.

A BMA survey of more than 1500 UK based doctors from other European Economic Area countries showed only 22% were convinced by Theresa May's verbal commitment to protect their rights. More than a third (35%) said they were considering moving abroad.

Only 37% were aware of a government pilot scheme, starting later this month, that will allow them to apply for "settled status" if they wish to stay in the UK after Brexit. The scheme, which is due to open to all EU nationals from next March, is designed to grant settled status to those who have lived in Britain for five years and pre-settled status for those with fewer years residence.

The survey asked EEA doctors to list the main factors that might cause them to leave the UK. The top four were the UK's decision to leave the EU, the current negative attitude towards EU workers, uncertainty over personal immigration status, and the way the government treats EU workers.

Chaand Nagpaul, the BMA's chair of council, said, "While the government has offered to 'honour its commitments,' these results show that EU doctors are not at all convinced that their rights will be protected should we crash out of the bloc without a deal. We need a firm, formal guarantee from the prime minister outlining how their rights will be safeguarded in this scenario."

Gareth Iacobucci, *The BMJ*

Cite this as: *BMJ* 2018;363:k4881

for a review of the guidelines. She said she had been unable to get a doctor's prescription because the guidance was so restrictive. Since launching the petition she has clarified that Alfie will continue to receive his medication on the NHS. But she urged others to sign because "many hundreds of people still cannot get access to medical cannabis prescriptions as the guidelines remain unchanged."

The Home Office announced last month that doctors could prescribe the medication after a review prompted by the cases of Alfie and Billy Caldwell. But guidelines produced by the British Paediatric Neurology Association (BPNA) said it should be used only as a "treatment of last resort" for children whose epilepsy has proved intractable to conventional drugs; who have not responded to the ketogenic diet or for whom the diet is inappropriate; and who are not candidates for surgery.

Stress and trauma

The parents wrote: "We now face the stress and trauma of having to fundraise to undertake trips abroad to be able to access the very medical cannabis products that have just been made legal here, all the while caring for our extremely sick children. This outcome is as cruel as it is ridiculous."

"Many hundreds of people cannot get access to medical cannabis as the guidelines remain unchanged" Hannah Deacon, mother of Alfie Dingley

Finbar O'Callaghan, president of the BPNA, told *The BMJ* that the only cannabis based medicine that had undergone clinical trials for use in children with epilepsy was Epidiolex, which was pure cannabidiol. The trials showed modest efficacy, but products containing tetrahydrocannabinol had not gone through controlled trials, he said.

"We were asked for evidence based guidance," he said. "The guidelines have been through all the evidence and were developed after consultation with paediatric neurologists around the country. There is just no good evidence that those products work or are safe, and that's why we're not recommending them. If trials are done to prove these products are both efficacious and safe, we will embrace them."

The guidelines operate on an interim basis, with formal guidance expected to be issued by NICE by next October.

An NHS England spokesperson said, "The new guidance will help medical professionals to use the available evidence to prescribe what is most effective for their patients and will not stop anybody getting the treatment they need. A second opinion service will give people access to a second view if they disagree with their specialist's prescription."

Clare Dyer, *The BMJ*

Cite this as: *BMJ* 2018;363:k4833

NEWS ANALYSIS

Rising poverty is a "calamity" for UK's stability and health

The UN special rapporteur's report on the effects of the government's austerity policies should be a wake-up call to policy makers, commentators say, but are ministers listening? **Sophie Arie** reports

Austerity policies in the UK have unnecessarily inflicted "great misery" on people living in poverty, but ministers are in a state of denial and are "happy with the way in which things are playing out."

This was the damning conclusion of the UN's special rapporteur on extreme poverty and human rights, Philip Alston, after his tour of the country, during which he met some of its poorest citizens, as well as government officials and charities.

"Britain is capable of eliminating poverty, but it's clear it doesn't want to," he told reporters at a press conference to present a 12 page report that accused successive governments since 2010 of attempting "radical social re-engineering" under the guise of austerity.

"Government policies have inflicted great misery unnecessarily, especially on the working poor, on single mothers struggling against mighty odds, on people with disabilities who are already marginalised, and on millions of children," he wrote after meeting people in nine cities in England, Northern Ireland, Scotland, and Wales.

"Britain is capable of eliminating poverty, but it's clear it doesn't want to"
Philip Alston, UN special rapporteur

"British compassion for those who are suffering has been replaced by a punitive, mean-spirited and often callous approach" that has systematically dismantled the social safety net for which the country has long been admired, replacing it with a new benefits system and 49% cuts to local authority funding that have led to the closure of many local services.

HOMELESSNESS is up **60%** since 2010, and food banks are rapidly multiplying

His report said that 14 million people, a fifth of the population, were living in poverty and that, after years of progress on child poverty, the Institute for Fiscal Studies had predicted a rise of nearly seven percentage points from 2015 to 2022 in numbers of children in poverty (from 29.7% to 36.6%), with some sources predicting a rate as high as 40%. Homelessness is up 60% since 2010, and food banks are rapidly multiplying.

"In the fifth richest country in the world, this is not just a disgrace, but a social calamity and an economic disaster, all rolled into one," he said.

Brexit was likely to make things far worse, Alston said, because almost all studies showed that it would damage the UK economy.

If policies weren't changed, he warned, poor people would "take the biggest hit," and many more people

GMC must apologise for its handling of Bawa-Garba case

Andrew Goddard, president of RCP, speaks to **Abi Rimmer** about doctors' regulation and wellbeing

"We've really got to do something about retention"
Andrew Goddard, RCP president

The GMC should apologise for its actions in the case of the junior doctor Hadiza Bawa-Garba, the president of the Royal College of Physicians has said.

In an interview with *The BMJ*, Andrew Goddard, who became president on 26 September, said that the GMC had lost the confidence of doctors through its actions.

"One of the aims of the GMC should be to engage with all doctors, to help them avoid fitness to practise issues. The whole purpose of its Good Medical Practice [guidance] is to be a code of conduct for how doctors should be and act."

Lost the dressing room

He added, "If you want people to believe in that code of conduct you've got to have them—the team—behind you, but at the moment because of Bawa-Garba the GMC has 'lost the dressing room,' in sports speak."

Bawa-Garba was convicted of manslaughter after the death of 6 year old Jack Adcock from sepsis and was suspended by a medical practitioners tribunal. But the GMC appealed, and the High Court ruled that she should be struck off. The Court of Appeal overturned that ruling and decided that the tribunal was correct to take account of systems failures at the Leicester hospital where she worked.

The "disempowerment and disenfranchisement" in the wake of the GMC's actions "is going to take a lot of coming back from," Goddard said.

But despite its failings he said it was important that medical regulation was not taken out of the GMC's hands. "We need a medical regulator. The risk of all of this is that regulation is taken away from the profession and we are regulated by lawyers, for example. And that would be a huge retrograde step," he warned.

"While I think the GMC has lost the dressing room, I think they need

Philip Alston meets users of a food bank in Newcastle upon Tyne

would be pushed into poverty, which could lead to "significant public discontent, further division, and even instability," he warned.

Yet, he said, "in my many meetings with the government, it was clear to me that the impact of Brexit on people in poverty is an afterthought."

He told the press conference that the country was in breach of four UN human rights agreements relating to women, children, and disabled people and that some of the most damaging policies could be reversed overnight.

Government disagrees

But the government, which had invited Alston to the UK, rejected his findings.

A government spokesperson said, "We completely disagree with this analysis. With this government's changes, household incomes have never been higher, income inequality has fallen, the number of children living in workless households is at a record low, and there are now one million fewer people living in absolute poverty compared with 2010."

Charities and campaign groups have said that they hope the UN's findings will be a wake-up call to the government.

Mental health

Alston warned of dangerous effects on people's health of the new benefits system, which expects people who may not be computer literate to submit claims online, punishes them severely for any delays or other failures to meet requirements, and forces them to wait five weeks to receive funds when they are awarded.

"I was surprised by the talk of suicide, by the people I met who said they had considered suicide . . . There are some pretty serious mental health dimensions."

While Alston was in the UK, a new study published by Gateshead council highlighted concerns about the effects of the new welfare system on vulnerable people's mental and physical health. But a spokesperson for the Department for Work and Pensions said that the study was too small to be representative.

Sophie Arie, London

Cite this as: *BMJ* 2018;363:k4897

"Disempowerment and disenfranchisement in the wake of the GMC's actions is going to take a lot of coming back from"

to say sorry for some of the things that have gone on."

He said he hoped that the outcome of a review of gross negligence manslaughter and culpable homicide being carried out by the cardiac surgeon Leslie Hamilton would force the GMC to re-engage with the profession.

Focus on wellbeing

Goddard said that his focus while RCP president would be on the medical workforce, doctors' wellbeing, and international issues.

Besides calling for a doubling in the number of medical school places, Goddard said that there needed to be more focus on retaining the current workforce and that this related to doctors' wellbeing.

"We have this real problem in that we train lots of people, and then they disappear," he said. "They either disappeared because they didn't want to work in the NHS—the job wasn't what they went into medicine for—or they retired early, maybe because of burnout or pension changes.

"We've really got to do something about retention and look at how we make our staff feel valued."

Although the RCP can lobby the government to increase the workforce, it was also up to the profession to tackle internal factors that affected doctors' wellbeing, he said.

Abi Rimmer, *The BMJ*

Cite this as: *BMJ* 2018;363:k4784

FIVE MINUTES WITH . . .

Matthew Shaw

The GOSH medical director shares his Brexit anxieties about the future of child treatment and research

"At Great Ormond Street Hospital we have real concerns over any future restriction of isotopes in the UK. Without them we wouldn't be making many diagnoses of cancer or vascular abnormalities in children. Without a plan, we'd be a slave to a system where we wouldn't know how long it would take for isotopes to go through the new borders.

"Drugs for children are very different from those for adults. Only in the past 10 years has the same regulatory system been applied to children's drugs as it has to adults—and this is mainly because of European drug regulation.

"The EU allows us potentially a much broader array of drugs—particularly important for our patients with rare diseases—than we would have on our own, and it allows frictionless access. Currently, legislation isn't in place in the UK to be able to approve drugs in the way that we need to.

"GOSH is the UK's biggest paediatric research hospital and one of the top three centres in the world. Some rare diseases we treat happen in only one or two cases a year in the UK. To show a benefit from the treatments we're researching we need partners, and we currently collaborate with more than 400 centres in Europe. The European scheme for research, Horizon 2020, has 40 child health projects, and the UK is involved in 32 of these. All these programmes are at risk. Even before transition, world leading clinicians at GOSH are being excluded from European programmes after years of being at the forefront of them.

"There's a question over whether we'll have the workforce we need: 20% of our doctors and 23% of our researchers are from Europe. They are feeling alone and undervalued and uncertain about their future. This is not scaremongering. This is what's happening now in the UK."

Matthew Shaw is medical director at Great Ormond Street Hospital. He was talking at Negotiating Brexit, a BMA and *BMJ* event on 16 November

Rebecca Coombes, *The BMJ*

Cite this as: *BMJ* 2018;363:k4902

"THE UK IS INVOLVED IN 32 OF 40 CHILD HEALTH PROJECTS IN HORIZON 2020. ALL THESE PROGRAMMES ARE AT RISK"


GMC

THE BIG PICTURE

Rebirth of a controversy

A Qatari hospital is braced for an outcry after the second unveiling of a series of giant sculptures depicting a fetus growing inside a uterus, created by the British artist Damien Hirst.

The Miraculous Journey, which features 14 bronzes and culminates with a 14 m (46 ft) newborn, was originally revealed to the public outside the women's and children's hospital in 2013 but was covered again after a social media uproar.

The monumental work is the centrepiece of a modern art collection at the Sidra Medicine Hospital, Doha, which also includes a Tracey Emin neon installation in an outpatient clinic, entitled *I Listen To The Ocean And All I Hear Is You*.

Layla Ibrahim Bacha, an art specialist with the government supported Qatar Foundation, which owns most of the works of art, told AFP news agency, "We are not expecting everyone to like them. We are not expecting everyone to understand them. This is why they are there: to create this element of debate, this element of thinking."

Alison Shepherd, *The BMJ*

Cite this as: *BMJ* 2018;363:k4918

AFP/GETTY

EDITORIAL

Medical cannabis in the UK

Patients should not be criminalised for seeking the drug's benefits

In the UK, "cannabis based products for medical use in humans" were rescheduled on 1 November 2018. They were placed in schedule 2 of the Misuse of Drugs Regulations, alongside several opioid analgesics. In theory, this means they can now be prescribed. In practice, the NHS has warned that "very few people in England are likely to get a prescription for medical cannabis,"[1] because of the tight restrictions that have been put in place.[2-6]

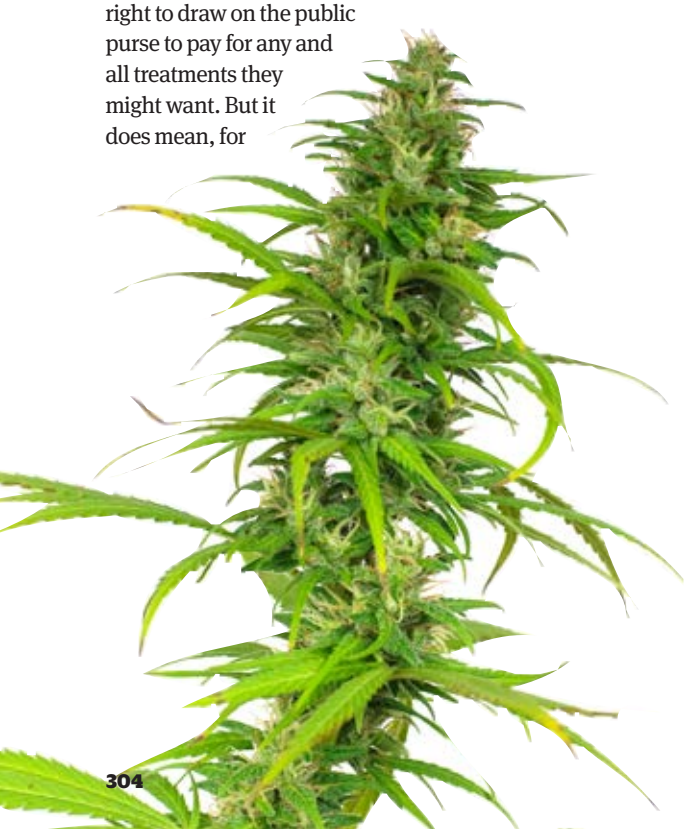
Even eligible patients are now struggling to get essential (and previously accessible) treatment

Alex Stevens, professor in criminal justice, University of Kent, Chatham Maritime
A.W.Stevens@kent.ac.uk

The right to decide

Under the Misuse of Drugs Act, people face criminal prosecution for possession of schedule 2 substances without a prescription. According to some ethical arguments, this breaches their right to decide autonomously on their wellbeing.[7] As patients have the right to refuse treatment under the doctrine of informed consent, they also—it is argued—have the right to decide on the treatments they want to use.

This does not mean they have the right to draw on the public purse to pay for any and all treatments they might want. But it does mean, for example, that they should not be criminalised for growing cannabis to treat themselves.



In the case of cannabis, evidence of varying strength shows some benefit in a wide range of conditions, including chronic pain, chemotherapy induced nausea, some forms of epilepsy, spasticity in multiple sclerosis, sleep disorders, weight loss or gain associated with HIV, Tourette's syndrome, anxiety disorder, and post-traumatic stress disorder.[8-11]

People with other conditions—including glaucoma[12] and inflammatory bowel disease[13]—also report benefits. Preclinical evidence suggests that cannabis based medicines may have a role in treating some forms of cancer.[14 15]

The clinical evidence of benefits is very weak and patchy for some conditions. An advantage of rescheduling cannabis is that it will make it easier to research its harms and benefits (although leaving in schedule 1 cannabis that is not prepared as a medicine—as the government has done—weakens this advantage). The research may eventually confirm that the harms of cannabis outweigh benefits. But there are good arguments against criminalising patients for making their own judgments while we all wait for better evidence.

The argument to maintain tight control of prescriptions is based on fear of the potential consequences of a more liberal approach.[16] Patient safety is an important concern. Use of cannabis is associated with general risks, including cardiovascular and mental health problems, as well as dependence.[9 11] As the evidence develops, we should ensure that patients have the best available information on harms, benefits, and uncertainties. They can then decide for themselves whether they wish to run these risks.

Another concern is that cannabis will be diverted from medical use to fuel the black market for recreational use. This fear was raised by 166 pain specialists in a recent letter to the *Times* newspaper.[17] They argued that prescribing cannabis may cause problems similar to an opioid crisis. These fears are probably overblown, and not just because cannabis is far less lethal than opioids.[18]

Legalising medical marijuana, with relatively liberal access, has not caused major increases in cannabis use in the US.[19] Indeed, there are indications it has reduced harms associated with opioid analgesics, including deaths from overdose and workplace or traffic injuries.[20-22]

Access denied

The potential demand for medical cannabis in the UK is large. The NHS, however, plans to limit prescriptions to children with rare forms of epilepsy and patients with chemotherapy induced nausea, and only after other treatments fail.[1] Even eligible patients are now struggling to get essential (and previously accessible) treatment.[24]

The predictable consequence is that many patients will continue to get cannabis from the illegal market, as they have done under Australia's similarly restrictive regime.[25] So they will continue to fund the harms of organised crime, to use products of uncertain content, quality, and consistency, and to be treated as criminals for seeking to relieve their suffering.

In the short term, we should relax restrictions on prescription and reduce the harms of criminalisation by moving all plant based cannabis products to schedule 4(ii), alongside anabolic steroids. As with steroids, people should not be prosecuted for possessing cannabis for personal use. In the longer term, we will need to consider more ethical and effective ways to regulate the supply of currently controlled drugs.[28]

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EDITORIAL

Laughter isn't always the best medicine

Recreational use of nitrous oxide is an emerging public health problem

Recreational inhalation of nitrous oxide (N_2O) is under-recognised in the UK—adolescents and adults are now presenting regularly to east London emergency departments with the neurological complications of repeated use.

Inhalation of N_2O can produce a short lived, rapid onset euphoria and a dissociative effect. This is often accompanied by spontaneous laughter, hence the colloquial name "laughing gas." Historically, N_2O was inhaled as a recreational substance long before its use as an anaesthetic and analgesic agent.[2] Importantly, N_2O is always combined with oxygen in clinical settings to minimise the risk of hypoxia,[3] but it is inhaled neat by recreational users.

Although the clinical use of N_2O in anaesthesia is declining in the UK and elsewhere,[4 5] its popularity as a recreational drug has increased despite the UK's Psychoactive Substances Act 2016, prohibiting the sale of nitrous oxide for recreational consumption.[6]

Cheap and easy to buy

The gas is sold legally for use outside healthcare, as an engine accelerant in the motor industry and as a propellant in the production of whipped cream.

Small metal whipped cream chargers ("whippits") or canisters, each containing 8 g of compressed gas, are a common source of N_2O for recreational use. Boxes of N_2O canisters are cheap and easy to buy from shops, street dealers, and social media or mainstream websites.[6]

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Ian Basnett, public health director, Public Health Department
Charles Gutteridge, chief clinical information officer, Department of Clinical Informatics, Barts Health NHS Trust
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Prolonged exposure can lead to sensorimotor peripheral neuropathy and subacute combined degeneration of the spinal cord

Pre-filled balloons of the gas can also be purchased.

Users of N_2O may experience dizziness, vomiting, and fainting soon after consumption. Inhalation particularly in enclosed environments, can lead to hypoxia and asphyxiation.[9 10] At least three deaths have been attributed to N_2O in the UK in each of the past five years, with eight cases in 2016.[11]

Prolonged exposure to the gas can lead to neurological impairment from sensorimotor peripheral neuropathy and subacute combined degeneration of the spinal cord.[1-13] N_2O oxidises the cobalt ion in vitamin B_{12} (cobalamin), impairing its function. The mechanism of subsequent neuronal injury is not known, but one theory is that cobalamin inactivation reduces the generation of methionine, which is necessary for the methylation of myelin sheath proteins.[10 12]

Patients with peripheral neuropathy or spinal cord degeneration can present with paraesthesia, numbness, or sensory ataxia.[1-14] Serum vitamin B_{12} levels can be low or normal, but raised methylmalonic acid or homocysteine concentrations indicate a functional B_{12} deficiency.[1 12] Patients presenting with neurological deficits have reported inhaling N_2O on average two to three times a week, and in large quantities (sometimes more than 100 canisters a day).[1 12]

We do not know if there is a safe level of N_2O use, but prescribing guidelines exist in the UK to limit the frequency and duration of patients' exposure to N_2O in clinical settings.[3] Nonetheless, cases have been reported of patients developing neurological problems after repeated clinical administration of N_2O for analgesia.[12 14] Neurological recovery after N_2O cessation and high dose vitamin B_{12} replacement is variable.[1-14]

Prolonged N_2O use can precipitate megaloblastic changes in the bone marrow,[15] although many patients with neurological symptoms have normal mean corpuscular volume and haemoglobin levels.[1 12] Mood changes, bladder and bowel disturbance, and erectile dysfunction have also been reported after habitual use.[13]

Public education

To reduce harm local authorities must publicise the adverse effects associated with frequent N_2O use and encourage users with neurological symptoms to seek early medical help. The No Laughing Matter campaign in the London Borough of Tower Hamlets is targeting antisocial behaviour and littering associated with recreational N_2O use as well as its illegal sale.[16 17]

Clinical coding and documentation of N_2O use and related symptoms in both primary and secondary care are currently inconsistent and must be improved. Systematic coding using either SNOMED CT or ICD-10 will aid patient follow-up, population health planning, and early detection of symptoms that may precede serious neurological impairment. Equally important is further research to better understand the mechanisms underlying neurological damage linked to N_2O and to quantify any potential dose threshold for harm.

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DATA BRIEFING

This is what's happening to NHS spending on public health

Cuts to preventive health budgets have affected some local authority activities more than others, finds **John Appleby**

There was a time—perhaps hard to believe now—when the NHS was awash with money. At the turn of the century, with gross domestic product (GDP) growing at more than 3% in real terms (also hard to believe now), decisions were taken to substantially boost spending on the NHS.

To put some analytical backbone into these political decisions the then chancellor, Gordon Brown, commissioned Derek Wanless to plot a long term course for NHS spending. The result, published in 2002, was three scenarios for future spending, differentiated by assumptions about NHS productivity and the state of the public's health and health seeking behaviour. Higher productivity and a public supported to be fully engaged with its health meant a slower growth in NHS spending would be needed.

But the future turned out differently. Overall spending on the NHS across the UK did not keep pace with the Wanless projections and is likely to fall short of his most optimistic "fully engaged" scenario—with spending around two percentage points of GDP lower than he envisaged by 2022-23 (fig 1).

And what of investment in public health to support Wanless's aspiration that, "an NHS capable of facilitating a 'fully engaged' population will need to shift its focus from a national sickness service, which treats disease, to a national health service, which focuses on preventing it"?

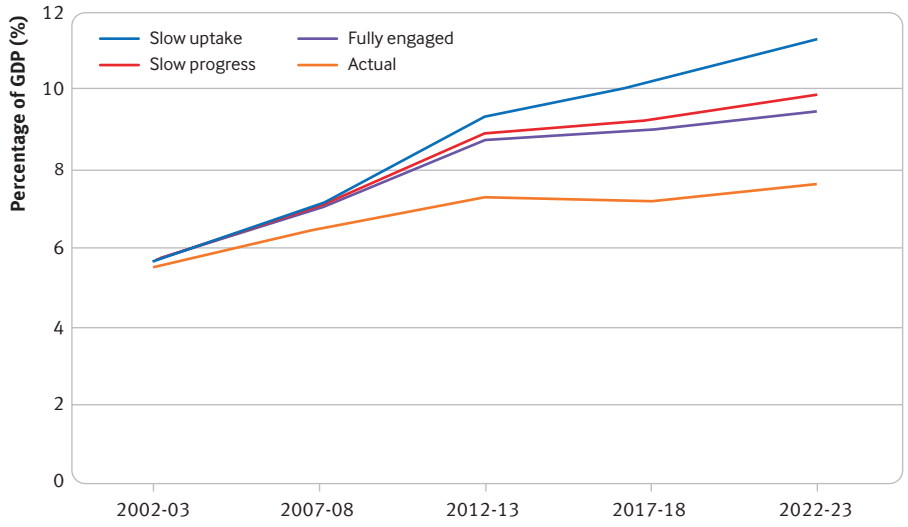

Fig 1 | Actual UK NHS spending versus the Wanless projected spending for each of three scenarios, as a percentage of GDP

It is hard to tell what has happened to public health spending since the Wanless reviews, partly because of organisational changes in the way public health is now delivered and the difficulty in defining and capturing the resources used to deliver public health.

Public health, in its broadest sense, is not just an activity provided by public health specialists under the auspices of designated public health budgets. Since 2003 the programme budget initiative has tried to capture this broad notion of spending on public health. As figure 2 shows, for what the programme called "healthy individuals" (essentially, public health activities), spending in England from 2003-04 to 2009-10 rose steeply—by nearly 50% in real terms. But from 2009-10 to 2012-13 it fell by 18%, reducing its share of total NHS spending. And there the programme budget data end.

The government created Public Health England in 2013 and transferred public health functions and staff to local authorities. Although the data are not directly comparable, figures suggest spending initially rose, but between 2014-15 and the planned budget for 2019-20, spending (on a like for like basis) fell in real terms by around 25% (fig 2). With overall NHS spending in England growing by nearly 7% over this period, once again public health spending as a share of all NHS spending fell—from around 2.3% in 2014 to 1.8% projected in 2019.

These real cuts have not been shared equally across all local authority public health activities, however. Between 2016 (when detailed budgets were first published) and 2018, there have been limited increases in some areas, including mental health. However, spending on public health programmes aimed at children under the age of 16 have been cut by £110m (a 9% real reduction), substance misuse by £81m (11%), and sexual health services by £55m (9%) (fig 3).

Such cuts in spending do not necessarily translate into a one-to-one cut in services or outcomes (unless it is assumed that every public health pound spent previously produced the maximum output or outcome possible, which seems unlikely). Nevertheless, given the scale of the cuts it is hard to see the funding gap completely filled with more productive use of budgets.

Despite all this, internationally the UK seems to do rather well in terms of the public resource it devotes to preventive services. Though caveats apply to the quality of the data (and with differences in definitions of prevention and public health), the UK is second only to Canada in the proportion of publicly funded healthcare spent on prevention (fig 4).

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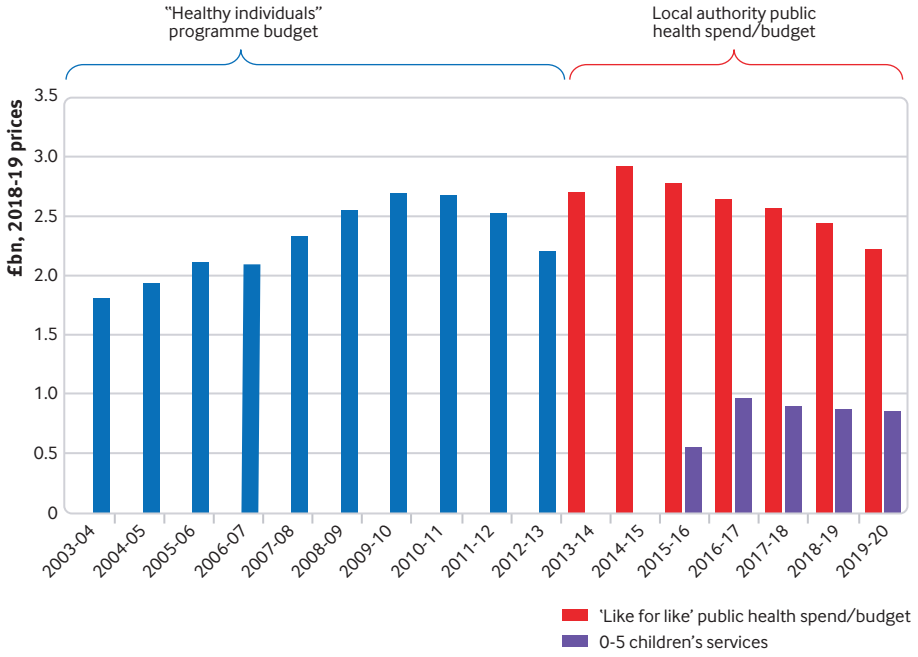

Fig 2 | Trends in public health spending in England: 2003-04 to 2019-20 (2018-19 prices)

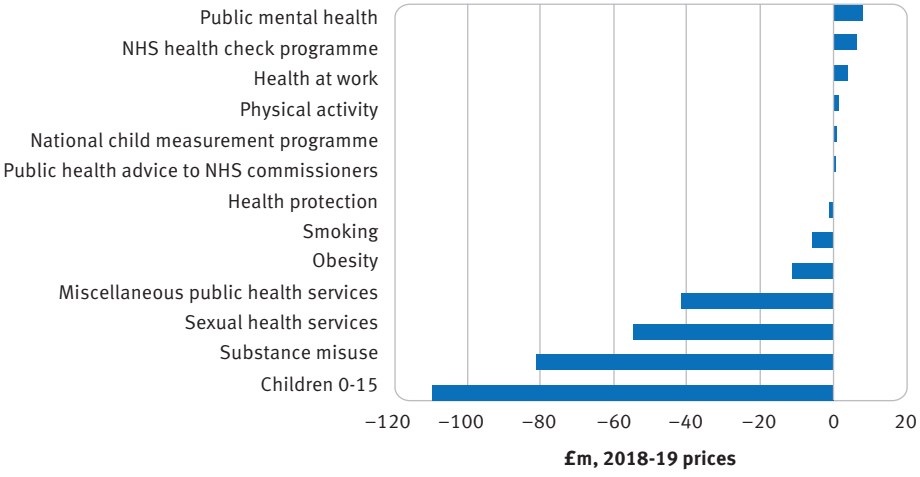

Fig 3 | Changes in English local authority public health spending: 2016-17 to 2018-19

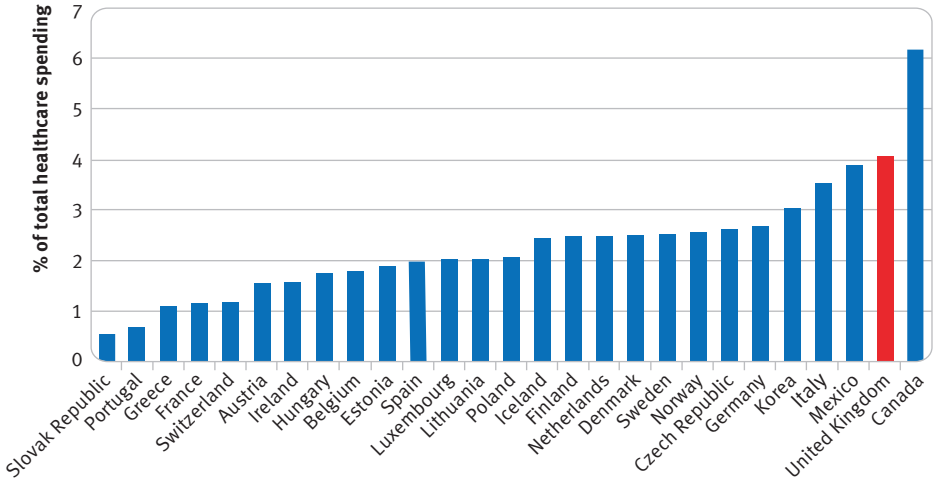

Fig 4 | Proportion of publicly funded healthcare spent on preventive services in OECD countries, 2016

SOCIAL PRESCRIBING

The drive for coffee mornings, choirs, and dance clubs on the NHS

The government wants to formalise GPs' use of community referrals and is setting up an academy to advance the practice. **Ann Robinson** asks whether the move can improve patient outcomes and cut costs

"Dance lessons for the lonely on NHS," led the *Daily Mail* in October. "GPs should prescribe hobbies like ballroom dancing, gardening and art classes to millions of people, because it is often better than drugs," said the *Telegraph*.

This "social prescribing" is being touted widely as a panacea, including for loneliness, obesity, depression, and osteoarthritis. The health and social care secretary, Matt Hancock, is a fan: he wants it to relieve pressure on the NHS and improve patients' outcomes.

"It's what good general practice has always been about. It is the art rather than the science of medicine"
Helen Kingston, GP

At an event at the King's Fund on 6 November, Hancock, a former culture secretary, said, "For too long we've been fostering a culture that's popping pills and Prozac . . . Arts and social activities can help us move to more person centred care and increase focus on prevention.

"I see social prescribing growing in importance, becoming an indispensable tool for GPs, just like a thermometer or a stethoscope may be seen today." He gave as an example the Alchemy Project in Lambeth, south London, which uses dance as part of an integrated recovery model in early intervention in psychosis. And he mentioned hospitals in Gloucestershire that offer singing groups for people with chronic lung conditions to teach them a better understanding of breath control while aiming to improve self esteem and reduce social isolation.

Hancock also announced the government would create a National Academy for Social Prescribing—"an online platform where training, guidance, research, and evidence based practice can be shared and discussed."

The King's Fund event was held in collaboration with the College of Medicine, which advocates for a more holistic approach to healthcare, and the Social Prescribing Network, which is building an evidence base, sharing best practice, and setting up regional networks.

Alternative or addition to drugs

According to the King's Fund, social prescribing, or "community referral," offers a practical alternative to drug treatment. Primary and secondary care professionals can refer people to a range of local, non-clinical services to "address people's needs in a holistic way" and "to support individuals to take greater control of their own health."

HOW DO SOCIAL PRESCRIPTIONS WORK?

Generally, GPs refer patients to link workers, who work with individual patients to find activities tailored to their preferences and needs, explore challenges to attending, and encourage ongoing participation.

One established scheme is at the Bromley by Bow Centre in east London, where, often over several sessions, staff help patients access more than 30 local services, from swimming lessons to legal advice. (Services are usually free or low cost, funded by charities or local authorities.)

Another is My Script, available in 27 GP surgeries in Bath and north east Somerset and funded by the charity Developing Health and Independence.

Arabella Tresilian, who has benefited from this scheme, said: "Of all the many services I saw after my mental health breakdown My Script was the one that made by far the most tangible difference to my ability to get my health and life back in order." Through the scheme she joined a choir, which she says she continues to find a sustainable, positive part of her life, and she retrained as a mediator, having previously worked as a management consultant.

When Dan became homeless, his GP referred him to a link worker for help

Weekly coffee groups take place at a Talking Cafes in Mendip, a beacon for social prescribing

ARE COMPASSIONATE COMMUNITIES EFFECTIVE?

Critics of the drive to formalise social prescribing say that the current evidence base is inadequate to assess its success at promoting health or reducing demand for healthcare—or its value for money.

A systematic review of 15 evaluations of UK programmes in 2000-16 that referred patients from primary care to a facilitator found that most evaluations were of poor quality and likely to be biased. The researchers found no evidence that schemes were ineffective but said that they could not judge whether any of the schemes showed promise.

"The use of a link worker is the key feature of social prescribing," they wrote. "How this link worker role was fulfilled varied significantly between projects. So we are not able to reliably judge the type of skills set or level of training and knowledge people require to effectively fulfil this role."

Julian Abel (above) from Compassionate Communities UK says that the evidence base is growing. His and colleagues' recent research, for example, found a significant fall of 14% in unplanned hospital admissions in the Frome region in the 44 month study period, compared with a 28.5% rise in admissions in the Somerset area in the same period.

Abel estimates that implementing the Frome model nationally could save 5% of NHS budgets in fewer unplanned hospital admissions.

It's part of a bigger vision for the NHS, going beyond integrated care to population health, joining up the NHS, local authorities, and third sector and private services, in which communities have a key role in improving health.

Helen Kingston, a Somerset GP, points out that social prescribing can complement drug prescribing. As the founder of the Compassionate Frome Project, which connects isolated patients with community groups, she tells *The BMJ*, "The term 'social prescribing' has a rather passive connotation and implies that the doctor knows best.

"But it's much more about active listening, understanding what is most important to the individual, and working together to consider a broad range of options to enhance connectedness and community.

"It's what good general practice has always been about. It's the art rather than the science of medicine, and acknowledging the complexity of the human condition. It's knowing when to use each and sometimes using them together rather than simply an alternative to a prescription for pills."

Informally, many GPs already advise patients to access community resources, from Citizens Advice to pilates classes, choirs, and gardening clubs. Last year a fifth of GPs responding to a survey said they already regularly referred patients to community activities, and 40% said they would if they knew what services were available. But the most vulnerable patients are often the least empowered or motivated to take up the suggestions and may live in areas where accessing community activities is hard without guidance.

More formal schemes already exist: nearly half of all English clinical commissioning groups are investing in social prescribing programmes.

For practices that want to develop a programme, the General Practice Forward View has identified "10 high impact actions" to help.

Power of social connection

Primary care professionals already know that physical, psychological, and social factors play a huge part in wellbeing and that tackling problems such as loneliness is essential. And, as the 2010 Marmot review of health equity found, some 70% of health outcomes are determined by social factors. In addition, at least a fifth of GP consultations concern psychosocial problems such as housing, employment, and personal relationships, which the conventional medical model is ill equipped to tackle.

"We know the most powerful therapeutic tools are social relationships," the palliative care consultant Julian Abel says.

He is a founder member of the charity Compassionate Communities UK and has helped roll out the Frome project.

Research shows that poor social connection is associated with as much effect on mortality as smoking, exceeding factors such as obesity and physical inactivity.

Abel sees "compassionate communities"—a term he prefers to social prescribing—as developing and utilising people's naturally occurring supportive networks, such as family and work colleagues: "It's about community development, which is much more than being solely healthcare related or GP surgery dependent."

Hancock sees social prescribing as "becoming an indispensable tool for GPs . . . to help the NHS cut waste." He also thinks social prescribing could help to prevent ill health and unnecessarily medicalising people, reducing drug prescribing.

But it would be wrong to characterise social prescribing as anti-pharma. James Szymankiewicz, a GP in Devon, says it is "part of a management plan that includes medication. It's not a substitute." Or, as Hancock says, "It's the Goldilocks approach to medication: the right amount at the right time. No more, no less."

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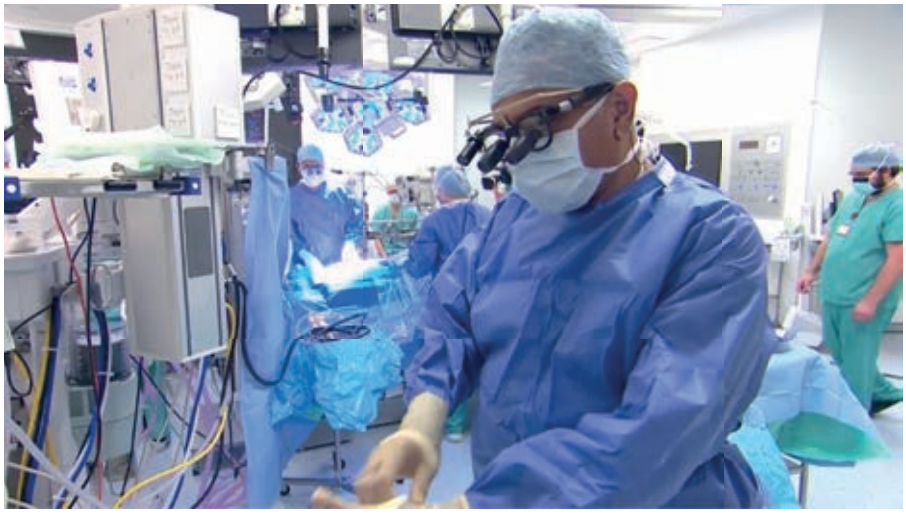
MEDICINE AND THE MEDIA

Demystifying surgery live on television

Ethical and patient safety concerns can be managed, finds **Greta McLachlan**, and it's good for the public to see exactly what goes on in NHS operating theatres



On the three evenings of 13-15 November, Channel 5 broadcast live operations from Barts Health NHS Trust in London. Kemal had an aortic valve replacement, Howard a total knee replacement, and Tim a right hemicolectomy.

Live surgical broadcasts are nothing new, but they continue to raise concerns about patient safety and ethics. We've been treated to tweeted operations, as well as live dissemination by Snapchat, radio, and virtual reality—and Channel 4 showed a live colonoscopy for Cancer Research UK.

Best interests

Ben Challacombe, a consultant urological surgeon at Guy's and St Thomas's Hospital in London, sits on the committee of the European Association of Urology, which has published guidelines for live broadcasts. "At conferences these operations play to packed houses," he told *The BMJ*, talking about live surgery as a teaching aid for clinicians—"but it is an ethical dilemma whether it is in the best interests of the individual."

In a survey of 106 European urologists who had performed live broadcasts 7% reported "significant anxiety" during the broadcast, and 16% thought that their performance had been "slightly worse," although research indicates that complication rates were consistent. Still, at least two patients have died in association with live broadcasts, and most Japanese and US surgical societies have banned the practice. The Royal College of Surgeons of England does not advocate live surgical broadcasting.

The consultant orthopaedic surgeon Steven Millington, who operated live on Channel 5, told *The BMJ* that he had worked closely with the production team to ensure that infection control and patient safety were paramount: the camera crew "were told where they could and couldn't be."

Ninder Billing, executive producer at the production company The Garden, personally wrote "reams of protocol documents," she said. "We spent almost more time doing these documents than any other aspect—safeguarding the patients, the families, the audience, the surgical teams, and making sure we weren't manipulating a patient pathway or waiting list."

To minimise distractions while operating, a different consultant surgeon answered questions posed by the presenter. Contingency plans included a recorded operation to cut to if complications arose, and another consultant surgeon was ready to contact the patient's family. The surgeons who took part all told *The BMJ* that they would have stopped the broadcast if they had any concerns, because their patients came first.

Billing wanted to show the public procedures, step by step, that go on in hospitals near them, and the consultant colorectal surgeon Shafi Ahmed, who performed the hemicolectomy, thought that this could help to demystify surgery for people.

The Garden also produces *24 Hours in A&E*, which reassured Ahmed. "They had managed to create really good programmes but still maintain patient dignity," he told *The BMJ*. "They were thinking about the patient foremost." He added that such programmes could help to reduce patients' anxiety of having surgery: "We are too paternalistic about what the public may or may not wish to see; we should ask them the question."

> We are too paternalistic about what the public may or may not wish to see; we should ask them the question"
> Shafi Ahmed

And it seems that the public wants to see live surgery. The programmes had a reported one million viewers each night and largely positive responses on Twitter.

Broadcast at 10 pm, with a delay of 20 minutes, these were not normal elective hours. But Kulvinder Lall (pictured above), the consultant cardiothoracic surgeon who did the live valve replacement, explained that, because of the post-watershed screening time, staff had started their shifts "later, to ensure everyone was fresh."

Teamwork

These shows emphasised teamwork, rather than a "top surgeon saving lives," and were a great advert for the NHS, said Millington. They showed interviews with Pamela the scrub nurse, Sophie the perfusionist, and George the senior house officer, as well as the patients and their families. The programmes may also have been an education for clinical team members who look after patients outside the theatre, said Lall.

And, in these days of low morale, it showed what a privilege it is to work in the NHS. Chhaya Sharma, consultant anaesthetist, said on the show, "I love what I do. I've had a lot of hard days—we all have—but I've never wanted to do something else."

Operation Live was on Channel 5 on 13-15 November and is available at www.channel5.com/show/operation-live

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