

inside medicine

GERIATRIC BMI page 115 • **CATARACT CARE** page 116 • **PATIENT DATA SHARING** page 120



GMC criticised for PA supervision advice

The Royal College of Physicians has said it is “disappointing” that new GMC guidance does not state that physician associates (PAs) must be supervised by a senior doctor. The BMA has also criticised the GMC’s “unhelpful” good practice advice for doctors who supervise and work with PAs and anaesthesia associates (AAs).

The RCP and BMA argue that PAs should be supervised only by senior doctors and never by doctors in training. But the GMC’s guidance suggests other healthcare professionals or resident doctors could take on this responsibility. Last December the RCP published interim guidance making it clear resident doctors should never be made responsible for the supervision of PAs.

Hilary Williams, RCP clinical vice president elect and chair of the college’s PA oversight group, said, “It is disappointing this new resource from the GMC allows for the supervision of PAs by other healthcare professionals and doctors in training—we drew a firm boundary to protect the training opportunities and role of resident doctors.

“Patient safety is our priority. This is why we’ve repeatedly called for a national scope of practice for PAs. They should not work autonomously, prescribe medications, or request ionising radiation.” Williams also

called on trusts and health boards to follow the RCP’s interim guidance, as it was “more detailed, structured, and explicit about scope of practice, supervision, and how PAs should explain their role and responsibilities.”

Philip Banfield, BMA chair of council, said of the GMC guidance: “Doctors have indicated they are unwilling to take on the professional risk and liability to supervise PAs and AAs while there is no clarity on scope or on what supervision practically means.

“Once again, the GMC has declared that AAs and PAs must be supervised on the one hand but that ‘experienced PAs are able to work autonomously’ on the other and has told associates, doctors, and employers that it is up to them locally to decide on what PAs can and can’t do. The practical implications of this confusion are dangerous.”

A GMC spokesperson said the new resource reflected existing guidance developed after engagement with royal colleges, supervising doctors, and PAs and AAs.

An independent review of PAs and AAs by Gillian Leng is expected to report shortly. Her conclusions will help inform the refreshed workforce plan the government has committed to publish this summer.

Jacqui Wise, Kent

Cite this as: *BMJ* 2025;389:r849

Philip Banfield, of the BMA, and Hilary Williams (centre), of the RCP, are unhappy with GMC guidance. Gillian Leng’s review of PAs is expected soon

LATEST ONLINE

- FGM: healthcare workers must end medicalisation by refraining from practice, says WHO
- Training places: resident doctors push for UK graduates to be prioritised at annual conference
- Public campaign is launched to “save” general practice in Scotland



MEDICAL NEWS

BMA loses case over GMC's use of "medical professional" to describe associates



The GMC did not act unlawfully in referring to physician associates and anaesthesia associates as "medical professionals" and in applying a common set of professional standards both to doctors and to associates, a High Court judge has ruled.

Mrs Justice Lambert (left) rejected a BMA challenge that argued those decisions blurred the distinction between doctors and associates and posed a significant risk to public safety, particularly given the lack of an agreed scope of practice for associates.

The BMA cited instances where patients treated by an associate had been harmed and where some had been unaware that the professional they were seeing was not a doctor.

The judge said, "The challenge here is not to the existence, use, training, or scope of practice of associates . . . but to two aspects of the defendant's decision making in respect of how associates are referred to and regulated. There is no evidence that serious patient safety concerns are the result of the decisions under challenge."

She said the guidance was "clear that all medical professionals have a clear ethical duty to be honest about their experience and role" and that associates "should not misdescribe themselves as a medically qualified person."

Clare Dyer, *The BMJ* | Cite this as: *BMJ* 2025;389:r800

Patient safety

Risk from doctor fatigue is often misunderstood

The Health Services Safety Investigations Body said fatigue among healthcare staff contributed directly and indirectly to patient harm but was not routinely captured or considered in patient safety event reporting or learning reviews. The report warned that fatigue was often misunderstood and viewed as a staff wellbeing issue rather than a critical risk to safety. A "culture of blame" meant that healthcare staff were wary of speaking up for fear of disciplinary action, it said.

RCP

College surveys members on widening voting rights

The Royal College of Physicians launched a survey of its members on whether to change its election processes. Currently, only fellows can vote for the president and other senior roles. In September 2024 a King's Fund review highlighted the need for improvements in the college's culture, governance, and processes. The newly elected RCP president, Mumtaz Patel (right), said it was clear the college needed to do things differently. She said, "The RCP

must modernise its ways of working to stay relevant to our global community of physicians and the next generation of doctors."

End of life

Children's case doctors can be named, judge rules

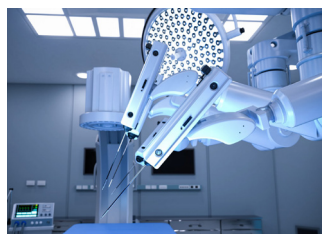
The UK Supreme Court ruled that doctors in two children's end-of-life cases may be named, to allow the parents to tell their stories about what happened in hospital and in court. The court lifted High Court injunctions barring anyone for an indefinite period from naming the doctors involved in the cases of Zainab Abbasi and Isaiah Haastrup. The children were at the centre of High Court disputes between their parents and NHS trusts over whether it would be in their best interests to receive life sustaining treatment.

Surgery

NICE approves use of robotic tools

NICE gave conditional approval for 11 robotic systems to be used for a range of orthopaedic and soft tissue procedures.

The machines are capable of movements more precise than the human hand and could improve



recovery times and reduce complications among patients undergoing operations at specialist NHS centres, said NICE. Five systems have been approved for orthopaedic surgery—including full and partial hip and knee replacement—and six to carry out soft tissue procedures such as hernia repair, removal of tumours, and gallbladder removal.

Men's health

Call for evidence is launched

The government called for evidence to inform England's first ever men's health strategy. Members of the public, doctors, academics, and employers are invited to give their views on what needs to be done to tackle the life expectancy gap between men and women. The health and social care secretary, Wes Streeting, said, "Every day, men across England are dying early from preventable causes. Men are hit harder by a range of conditions, while tragically suicide is the leading cause of death for men under 50."

Audiology

Report accuses NHS of failing deaf people

A report from the Royal National Institute for Deaf People said the NHS was flouting equality law by failing to make reasonable adjustments to remove barriers to care faced by people who are deaf or have hearing loss. In a survey of 1378 people, a quarter said they were unable to contact their GP in a way that was accessible to them, rising to 49% among sign language users. Only 56% of respondents reported leaving NHS appointments having fully understood the information given.

Knee arthritis

Metformin may reduce pain, small study finds

A study in *JAMA* of 107 participants with knee pain found that 2000 mg metformin a day reduced pain in comparison with placebo, a between-group difference of 11.4 (31.3 versus 18.9). Although this was below the 15 which was to produce a minimum clinically important difference, the authors said the effect size was higher than reported for non-steroidal anti-inflammatory drugs in patients with hip and knee osteoarthritis. They added that metformin could delay the need for knee replacements and called for more research.



IN BRIEF

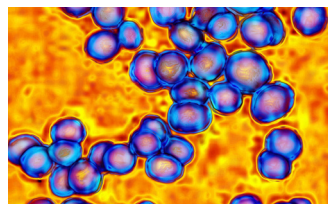
Vaccines

Hajj pilgrims are urged to get vaccinated

The UK Health Security Agency said people planning to travel to Saudi Arabia for Umrah and the Hajj pilgrimages should ensure they are vaccinated against meningococcal disease with the MenACWY vaccine, owing to outbreaks of serogroup W (MenW) disease in the country. Five cases of MenW were confirmed in England and Wales from February to March in people who had recently returned from Saudi Arabia or among close contacts. In the two weeks after returning, travellers should monitor themselves for symptoms such as fever, severe headache, stiff neck, and rash.

Preventable diseases make "dangerous comeback"

Diseases that can be prevented through vaccination, such as measles, meningitis (below), and yellow fever, are re-emerging as millions of children miss vaccinations and funding cuts disrupt programmes and disease surveillance, health leaders have

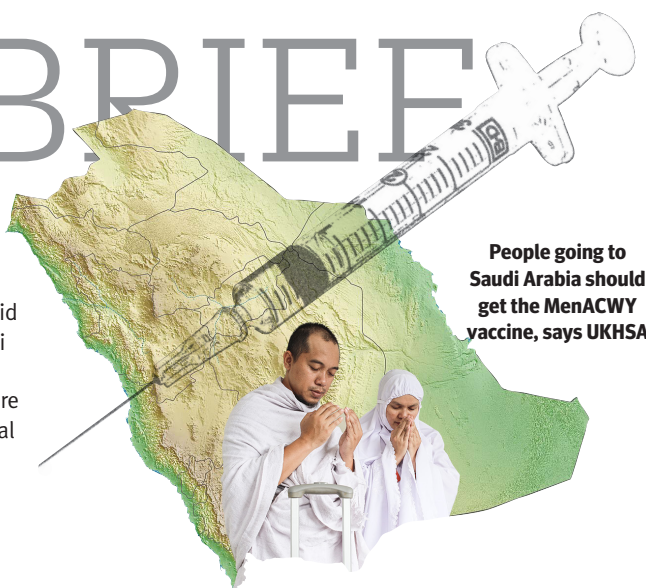


warned. A joint statement from the World Health Organization, Unicef, and Gavi said immunisation efforts were also being threatened by widespread misinformation, population growth, and humanitarian crises. They urged world leaders to strengthen vaccination programmes and to give the problem their "urgent and sustained political attention."

US news

Trump plan to halve NIH budget is leaked

A leaked proposal reported by *Politico* shows Donald Trump's administration is planning to



People going to Saudi Arabia should get the MenACWY vaccine, says UKHSA

overhaul the Department of Health and Human Services, including the National Institutes of Health (NIH). The plan includes cutting HIV/AIDS prevention initiatives and threatens programmes on autism, chronic disease, drug misuse, and mental health. The plan also involves cutting the NIH's budget from \$48.5bn (£36.3bn) to \$27.3bn and creating a new entity, the Administration for a Healthy America, the *Washington Post* said.

Food scientist resigns over agency censorship

Kevin Hall, a leading NIH nutrition scientist, resigned, alleging censorship of his research on ultraprocessed foods, CNN reported. Hall claimed that his research "did not appear to fully support preconceived narratives of my agency's leadership about ultraprocessed food addiction." The Department of Health and Human Services denied Hall's allegations.

Administration shuts STI lab amid syphilis surge

The Trump administration closed a key CDC laboratory responsible for monitoring and researching sexually transmitted infections, including syphilis and drug resistant gonorrhoea, which have risen sharply in recent years. The lab was also one of only three collaborating with WHO to track antimicrobial resistant gonorrhoea worldwide.

Cite this as: *BMJ* 2025;389:r838

SIXTY SECONDS ON... GERIATRIC BMI



MORE WEIGHT LOSS DRUG PRESSURE?

No—the opposite, in fact. Doctors aren't being told that older people who are underweight risk fragility and ill health, says the former health secretary Patricia Hewitt (below). She told the *Times* that being underweight can be as dangerous as being obese. "What is a healthy weight for you as you grow older, particularly if you're a woman, is almost certainly higher than you think it is," she said.

PLEASE CAN I HAVE SOME MORE?

Hewitt speaks from experience. Her weight fell from 7 st 11 lbs (50 kg) to below 7 st when she was admitted to hospital for six weeks in Australia after becoming seriously ill with dehydration while hiking. Doctors taught her about geriatric BMI—the optimal weight of people aged over 65 being higher than that of younger people—and the longevity paradox, which is that overweight older people outlive those who are underweight. They advised her to get her weight up to 9 st 5 lbs.

HAS NICE WEIGHED IN?

Hewitt says not. In a letter to the *Times* she gave NICE a mouthful, describing the institution's draft guidance on managing overweight and obesity as "wholly inadequate" for older people. She wrote, "In treating 'age' (a protected characteristic) as synonymous with frailty, falls, and comorbidities, NICE reinforces out-of-date and misleading stereotypes."

WHAT'S HER ORDER?

Hewitt wants NICE to urgently rewrite its draft standard and "marshal the evidence and tell truth to power." The terms "geriatric BMI" and "longevity paradox" don't appear in the standard, she says, and she's now chewing over the fact with her friends that "what we need to lose isn't our weight, but our waists."

IS THERE A TRUTH PARADOX?

I'm afraid so—it seems Hewitt hasn't fully digested NICE's guideline. A NICE spokesperson said the guideline "recognises that age related changes are not well captured by BMI" and recommends healthcare professionals should "interpret BMI with caution in people aged 65 and over, taking into account comorbidities and the possible protective effect of having a slightly higher BMI."

TRIALS

Médecins Sans Frontières said its TB-Practecal clinical trial into novel TB regimens cost €33.9m

(£29m),

and the average cost per patient was €61 460. This is the first time the cost of an individual trial has been documented in detail, and MSF urges others to do the same

[*PLOS Global Public Health*]



Zosia Kmietowicz, *The BMJ*
Cite this as: *BMJ* 2025;389:r786

Plans to cut elective surgery waiting lists favour rich patients, says NHS analyst

Government plans to speed up elective surgery will favour the wealthiest people in UK society unless explicit rationing is introduced to enable the poorest to get faster treatment, a Nuffield Trust analyst has warned.

In January the health and social care secretary, Wes Streeting, announced several measures to cut waiting times for NHS elective treatment in England, including expanding community diagnostic centres, creating 14 new surgical hubs, and increasing the use of remote monitoring technology.

But Sally Gainsbury, senior policy analyst at the Nuffield Trust, told a symposium on health inequality organised by the Medical Journalists' Association and the Health Foundation the plans ignored the fact that more affluent groups were already "over-represented in elective activity."

A recent analysis of English hospital data by health economists at York University found a "larger share of less deprived groups among the elective surgery patient population."

Gainsbury told the meeting on 25 April, "It means that wealthier patients are more likely to undergo elective procedures, with a range of 'access inequalities'—including struggling to access appointments—causing deprived patients to be added to the waiting list later."

Healthy life expectancy

Furthermore, recent data showed that differences in life circumstances resulted in a 19 year gap in healthy life expectancy between the wealthiest and the most deprived people in the UK. Gainsbury said, "It means that the poorest patients have healthcare needs such as requiring hip replacement at 57 that might be more akin to a 76



Wealthier patients are more likely to undergo elective procedures
Sally Gainsbury

year old in wealthier neighbourhoods. And if they do manage to get surgery, they will still have lost 19 years of living in good health, compared with the affluent patient.

"The current approach—providing equal access for equal need—does not address the earlier onset of need in deprived groups, making their healthcare more urgent than disease acquired much later in life."

Growing reliance on private companies for NHS services was also benefiting richer patients, concluded an analysis by the campaign group Keep Our NHS Public of NHS hip and knee operations. This showed that waiting times grew after 2008, when private provision was expanded, and highlighted a widening inequality—with the poorest 20% of patients significantly less likely to be treated in the private sector and facing longer waiting times than the richest 20%.

Ruling that woman refers to biological sex "brings clarity"



MARK THOMAS

The legal definition of a woman in equalities law is based on biological sex, the UK's Supreme Court has ruled unanimously, ending a long running controversy over whether the term could include a person who had changed gender from male to female.

"The terms woman and sex in the Equality Act

Campaigners from For Women Scotland celebrate outside the Supreme Court in London after the judges' ruling

2010 refer to a biological woman and biological sex," said Lord Hodge, Lady Rose, and Lady Simler in an 88 page judgment with which the other two justices agreed.

The appeal was brought by For Women Scotland over Scottish legislation to establish gender quotas for public boards, which allowed trans women with a gender recognition certificate to be included as female. It will have repercussions for the NHS, including the use of single sex wards and changing rooms in hospitals.

The "plain intention" of provisions in the act providing for single sex services "is to allow for the provision of separate or single sex services for

women which exclude all (biological) men (or vice versa)," the justices said. "Applying a biological meaning of sex achieves that purpose."

"Not disadvantage"

The justices concluded that a "biological sex interpretation would not have the effect of disadvantaging or removing important protection under the Equality Act 2010 from trans people (whether with or without a gender recognition certificate)."

A UK government spokesperson said, "We have always supported the protection of single sex spaces based on biological sex. This ruling brings clarity and confidence

for women and service providers such as hospitals, refuges, and sports clubs. Single sex spaces are protected in law and will always be protected by this government."

A Scottish government spokesperson said it accepted the judgment, adding it had "acted in good faith" in interpreting both the Gender Recognition Act 2004 and the Equality Act and noting that its approach had been guided by the published guidance of the Equality and Human Rights Commission.

"We will be engaging with the UK government to understand the full implication of this ruling."

Clare Dyer, *The BMJ*

Cite this as: *BMJ* 2025;389:r780



Allyson Pollock, a report coauthor and consultant in public health medicine at Newcastle University, said the NHS was “skewed in favour of those able to access private facilities with NHS funding.”

Waiting lists

Gainsbury urged the government to take account of further findings of the York research showing that a strategy of targeting policies to speed up reduction in elective treatment waiting lists for people in deprived communities would lower health inequalities, when compared with a universal policy, while maintaining

a similar level of overall health gain across the entire population.

“The finding is significant and should embolden the NHS to ‘tweak’ existing mechanisms for rationing healthcare to prioritise the largest improvements for groups with the lowest healthy life expectancy,” she said.

“To be effective, this would need to involve not just removing inequalities in access to healthcare but also recognising a higher level of urgency for treating disease and ill health acquired earlier in life.”

Jane Feinmann, London
Cite this as: *BMJ* 2025;389:r861

LECANEMAB: Experts criticise approval of Alzheimer’s drug

EXCLUSIVE Expert advisers have expressed concern at the European Commission’s decision to approve the Alzheimer’s disease drug lecanemab (Leqembi) despite uncertain benefits.

Lecanemab, manufactured by Eisai, is the first disease modifying drug to treat Alzheimer’s to be approved in Europe. It is a monoclonal antibody that binds to aggregate forms of amyloid β and, by doing so, reduces β plaques.

Last July the European Medicines Agency rejected a marketing authorisation request for the drug on the grounds that its small effect in delaying cognitive decline “does not counterbalance the risk of serious adverse events.” The EMA reversed this decision after an appeal by the manufacturer and last month upheld its decision to recommend the drug.

On 15 April the EC formally granted authorisation for lecanemab to treat mild cognitive impairment in the early

stages of Alzheimer’s disease, under “strict conditions.”

In England and Wales NICE is currently reconsulting on its draft guidance for lecanemab and another Alzheimer’s treatment, donanemab, after initially rejecting them.

In a letter published in *The BMJ* a group of neurologists and patient representatives wrote, “Approving drugs with uncertain benefits may contribute to a net loss of population health.”

The experts said there was a lack of evidence to support a clinical difference to patients, uncertain safety, and some methodological problems with trials.

An EC spokesperson said it had authorised the drug “in line with the EMA scientific opinion” and that the measures to minimise risk were an “integral part” of the decision to authorise lecanemab.

Gareth Iacobucci, *The BMJ*
Cite this as: *BMJ* 2025;389:r796

Outsourcing cataract care has “delivered big profits to private firms”

Rules on patient choice that govern cataract care in England are allowing private companies to make millions of pounds in profits from treating NHS patients and should be scrapped, campaigners have said.

The regulations also mean that treatment for patients at risk of losing their sight is delayed as profit margins are prioritised over clinical need, a leading ophthalmologist has warned.

A report from the Centre for Health and the Public Interest (CHPI) think tank found that £526m was paid by England’s 42 NHS integrated care boards (ICBs) to five companies for cataract surgery in 2023-24. Of this, £169m was profit, while £68m went towards paying interest on high cost loans taken out by some private equity owned companies, the analysis found.

The government should consider capping the profits of companies providing NHS funded care and specifically review the price paid for delivering cataract surgery, said the report, written by CHPI director David Rowland.

Rapid growth

Cataract surgery is the most common operation in the NHS. More than 600 000 NHS funded procedures were delivered in 2022-23, a 40% rise from 2018-19. With capacity stretched, the NHS has increasingly sought to outsource the procedure to the private sector.

The report noted 131 clinics owned by five major companies had opened in the past six years. But this rapid growth has been driven by patient choice regulations rather than the NHS planning for it, it said. The regulations state that, where a company can meet qualifying criteria and deliver the service, the commissioner “must offer the provider” an NHS contract. These regulations, in effect, “allow private companies to demand a contract from their local ICB even if there is no identified need for them, and ICBs are unable to refuse,” the report said.

Ben Burton, president of the Royal College of Ophthalmologists, said, “The focus on using the independent sector to reduce headline grabbing NHS waiting list statistics means vital resources are being diverted from conditions that can cause irreversible sight loss if not treated promptly.”

The report called for the Department of Health and Social Care (DHSC) and NHS England to review the patient choice regulations to give ICBs more powers to plan the provision of healthcare to meet the needs of their populations.

A DHSC spokesperson said, “We will not tolerate any distortion of patient choice, and the recently published partnership agreement with the Independent Healthcare Providers Network commits to ending incentives that can lead to this, supporting equal access and genuine choice for all patients. We are working together to deliver on this.”

Gareth Iacobucci, *The BMJ* Cite this as: *BMJ* 2025;389:r855



Vital resources are being diverted from conditions that can cause irreversible sight loss Ben Burton

Fall in patient satisfaction is linked to fewer GPs and less face-to-face contact



STEPAN ROUSSEAU/PALAWY

Boosting access to general practice through tools such as remote consultations is likely to reduce continuity of care and satisfaction among patients, researchers have concluded.

A report published by the Institute for Government looked at the factors behind waning satisfaction among patients with general practice services in England. Results from the national GP patient survey show that the proportion of patients reporting a “fairly good” or “very good” experience of general practice fell by 17.1 percentage points, from 88.4% in 2012 to 71.3% in 2023.

It concluded that more GPs per patient (particularly GP partners), a higher proportion of face-to-face appointments, and smaller patient list sizes were most likely to improve patients’ experience of general practice. But it said all three of these trends had been going in “the wrong direction” nationally.

Conversely, it said, the previous government’s flagship policy of massively expanding the number of additional roles in the primary care workforce beyond GPs and nurses “has coincided with the largest drop in patient satisfaction on record.”

Face-to-face appointments

The institute noted that much of the decline in patient satisfaction had happened from 2021 to 2022, which coincided with an increase in remote



Research like this highlights the urgent need for a wholesale new GP contract
Katie Bramall

consultations during the covid pandemic. The fall in the proportion of appointments being delivered face to face (from 81% in 2019 to 66% in 2024) was a likely contributor to worsening satisfaction, it said.

Patient satisfaction was higher at GP surgeries that provided more face-to-face appointments, the analysis showed. The link, though moderate, was statistically significant: a 10 percentage point (ppt) rise in the proportion of appointments delivered face to face was associated with a 0.9 ppt increase in satisfaction.

General practices that delivered more appointments face to face also achieved higher QOF scores. The relation was again moderately statistically significant: an additional percentage point of appointments delivered face to face was associated with a 0.013 ppt increase in QOF achievement.

While remote appointments allow staff to deliver more appointments overall, the “added patient satisfaction from additional appointments does not offset the decline in satisfaction from fewer face-to-face appointments,” the analysis concluded.

The report highlighted that the number of fully qualified GPs per patient in England had fallen by 13.8%, from 50.2 per 100 000 in September 2015 to 43.3 per 100 000 by December 2024. Of the different staffing groups, a higher number

of GPs (especially GP partners) was most closely associated with both higher patient satisfaction and QOF scores.

One additional GP partner per practice was associated with a 1.4 ppt increase in satisfaction, which compared with a 0.9 ppt increase for a salaried GP, 0.3 ppt for a GP trainee, and 0.2 ppt for a nurse. An additional staff member providing direct patient care other than a doctor or nurse had no statistically significant effect on satisfaction.

The report said, “The government should be concerned that the staff group into which the most additional resources have been poured over the last five years is not associated with higher patient satisfaction.”

An additional 1000 appointments delivered by a GP was associated with patient satisfaction increasing by 0.14 ppt. But satisfaction did not significantly rise with appointments delivered by other healthcare staff.

Access versus continuity

The median general practice list size rose from 6199 weighted patients in 2013-14 to 8262 in 2022-23, up 33.3%. The research found that an increase of 1000 weighted patients was associated with a 0.3 ppt reduction in patient satisfaction.

The Institute for Government said its overall analysis showed that “there is likely a trade-off between increasing access to general practice through expanded use of remote appointments and a decline in some indicators of service performance such as patient satisfaction and continuity of care.”

It added, “If the government does choose to prioritise access, it must

The proportion of patients reporting a “fairly good” or “very good” experience of general practice fell by **17.1** percentage points—from **88.4%** in 2012 to **71.3%** in 2023—showed results from the national survey of general practice patients in England

communicate its reasons for doing so and attempt to mitigate some of the negative consequences.”

The institute also said that the government should urgently tackle factors that make being a GP partner less attractive, including workload and financial liabilities, and to assess whether the partnership model remained a feasible way to deliver general practice.

The NHS must also make better use of support staff and collect better quality data about their activity, it said, and work should be undertaken to understand why more GP trainees were not joining the fully qualified workforce.

Katie Bramall, chair of the BMA's General Practitioners Committee for England, said the report showed that investing in more GPs and valuing continuity of care would boost patient satisfaction. “Research like this highlights the urgent need for a wholesale new contract,” she added.

Kamila Hawthorne, chair of the Royal College of General Practitioners, said that general practice was “totally overstretched” and that the government's forthcoming 10 year health plan “must be used as an opportunity to allocate a much greater portion of the NHS budget to primary care so we can provide the care and services that our patients need and deserve.”

A Department of Health and Social Care spokesperson said, “GP services are buckling after years of neglect, but through our Plan for Change we are working with them to fix the front door of the NHS.”

Gareth Iacobucci, *The BMJ*
Cite this as: *BMJ* 2025;389:r808

The government's 10 year health plan must be an opportunity to allocate a much greater portion of the NHS budget to primary care

Kamila Hawthorne

TRUMP WATCH: What are the US government's plans for autism?

On 4 March Donald Trump told the US Congress, “Not long ago—one in 10 000 children had autism . . . And now it's one in 36. There's something wrong.” Since he took office for the second time in January autism has been on the agenda for both Trump and his health secretary Robert F Kennedy Jr, who has controversially linked childhood vaccines to autism and who advocates alternative, often unproved, treatments.

? What has been announced?

In March Kennedy's Department for Health and Human Services (HHS) announced that the Centers for Disease Control and Prevention (CDC) will conduct a large study to investigate a possible link between vaccines and autism, even though many studies have debunked such a link.

Controversially, reported to be heading the study is David Geier, who is not a doctor and who was disciplined by Maryland's Board of Physicians for practising medicine without a licence. He and his physician father have many times claimed that vaccines cause autism.

In April the *Washington Post* reported that the National Institutes of Health (NIH) was preparing a new research programme to explore the causes of autism. Kennedy and Jay Bhattacharya, the NIH's new director, shed some light on the programme in separate speeches. Describing the condition as a “preventable epidemic,” the health secretary said, “One of the things that I think we need to move away from today is this ideology that the autism prevalence increases—the relentless increases—are simply artefacts of better diagnoses, better recognition, or changing diagnostic criteria.” He said he expected the HHS to announce a series of new studies investigating the disorder's rising numbers within weeks.

Bhattacharya said the programme will involve grants to “10 to 20 groups of researchers” on a “rapid timeline” that will nevertheless go through a “normal review process.”

? When will we see results?

“We're going to get, hopefully, grants out the door by the end of the summer,” Bhattacharya said on 22 April, adding, “We'll have a major conference, with updates, within the next year.”

? Is Kennedy launching an autism registry?

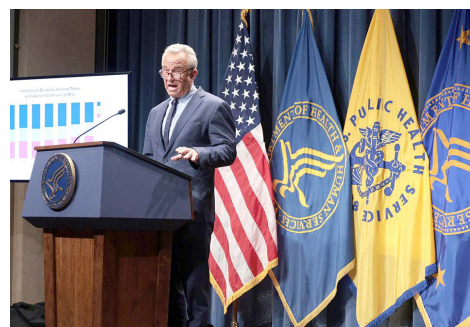
Not quite. Bhattacharya had told the NIH's Council of Councils that researchers will harness a newly created “real world data initiative” that will compile data from a wide range of sources, including Medicare and Medicaid insurance claims, NIH genetics data, drug records for

individuals, private insurance claims, smartwatch data, and information on environmental exposures. This secure, confidential database would also be used to study a “whole range of conditions,” he said, with a pilot database produced within six months of the initiative's launch. But on 24 April HHS said it was not creating a new autism registry, though it confirmed the research effort.

The new initiative's focus on environmental causes, despite limited evidence, has raised concerns among autism researchers about diverting attention from established investigations into genetic and neurodevelopmental factors.

? Are autism rates really rising in the US?

A biennial CDC report on autism in the US



ROBERT F KENNEDY JR HAS DESCRIBED AUTISM AS A “PREVENTABLE EPIDEMIC”

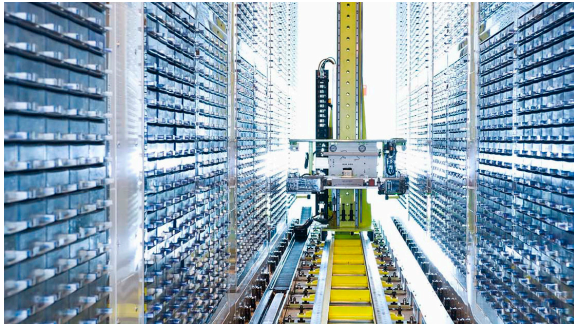
confirmed that diagnosis rates were rising but that the increase was due to better screening. In a sample of communities the autism surveillance report found that 1 in 31 children aged 8 years old had the condition.

? Is anyone speaking out on the issue?

On 17 April six groups and 11 organisations, including the Autism Society of America, issued a statement saying vaccines didn't cause autism, autistic people “deserve respect and support,” and policies affecting people with autism needed to be “grounded in science.”

The statement continued, “We urge public leaders, institutions, and media to uphold scientific integrity and work together to strengthen—not weaken—the infrastructure of support for the entire autism community,” adding that federal proposals to cut Medicaid, the Department of Education, and the Administration for Community Living “threaten the very services that autistic individuals and their families rely on.”

Mun-Keat Looi, *The BMJ*
Cite this as: *BMJ* 2025;389:r820



NEWS ANALYSIS

GP PATIENT RECORDS Why concerns are being raised about the security of data

Proposals for a new centralised care record are under the spotlight, amid worries about China gaining access to GP records through UK Biobank. **Stephen Armstrong** reports

On 15 April the *Guardian* published a story headlined “Revealed: Chinese researchers can access half a million UK records.” It quoted “intelligence sources” who warned that “health data can be useful in espionage if anonymisation can be broken.”

A week later the *Daily Mail* ran a piece headlined “Why 500 000 Britons including my wife who signed up to this medical research trial MUST leave it now.” As the government progresses plans for its new Health Data Research Service, partly modelled on UK Biobank, what is the state of play?

? What is UK Biobank?

This is a database based on half a million British volunteers recruited 15-20 years ago who have provided lifestyle information, biological samples, and physical measurements. Funded by Wellcome and the Medical Research Council, UK Biobank has followed volunteers’ health through “linkage to healthcare records,” its chief scientist, Naomi Allen, told *The BMJ*.

The dataset is available to researchers around the world “to undertake scientific discoveries to advance our understanding of human health, and that was what all half million participants consented to when they joined the study,” Allen said.

Recent published papers that used the data include those from a team at University College London who used eye scans to look for early markers of Parkinson’s Disease and from researchers at Queen Mary University London



Rory Collins, UK Biobank’s principal investigator, told doctors it had BMA backing “in error”

GPs are overburdened, but also they are the data controllers, and most have never heard of UK Biobank
Naomi Allen



who identified proteins able to help predict individuals’ risk of more than 60 diseases.

? Does it sell GP data?

“We are a charity,” said Allen. “The data is a resource available for approved researchers who pay £3000 per year to access the data for each project, which covers the costs of making these data available.” Until 2016 UK Biobank provided access to around half of the GP records in its cohort through the systems supplier TPP. TPP’s SystmOne eDSM (enhanced data sharing model) is an electronic patient record system used by 3000 general practices in England.

However, in 2016 the Office of the Information Commissioner criticised the system’s enhanced data sharing function over “adequate security of the patient data on the system.” Since 2016 UK Biobank has had to ask each volunteer’s individual practice for access to health records, but few have given this access.

“Less than 20% of GPs will approve the release of the data,” says Allen. “When you talk to GPs, they’re busy, they’re overburdened, but also they’re the data controllers, they have liability for the data, and most have never heard of UK Biobank. It’s much easier for them to simply not do anything.”

? Does UK Biobank allow access to the Chinese and, as has been alleged, eugenicist groups?

“All researchers and all institutes are carefully vetted, and we conform to government and MI5 advice about sanctions and who should and who shouldn’t be getting the data,” said

Allen. “We keep that under review. The US research group Heliospect uses genetic data for risk prediction. That was approved. There had been concerns that this company has links with the Human Diversity Foundation [a far right body linked with “race science”], but there are no researchers on the research application who are from the foundation.”

Recently published research papers that used UK Biobank data include work on a blood test for dementia by a team at Fudan University, Shanghai. The data have also been used in a collaboration between Central South University, Changsha, Hunan province, and King’s College London that uncovered 54 metabolites linked to ageing that predicted people’s risk of health conditions, including type 2 diabetes and chronic kidney disease.

? Why does Biobank not have access to GP data today?

In September 2023 UK Biobank’s principal investigator, Rory Collins, wrote to general practices asking them to enable patient data sharing with UK Biobank, saying his call was backed by NHS England, the RCGP, and the BMA. The BMA told doctors it did not back the request, and Collins said the endorsement had been added “in error.”

“I was well aware of concerns around consent,” Katie Bramall, chair of the BMA’s General Practitioners Committee, told *The BMJ*. “The consent process had taken place 20 years ago, before the creation of NHS England, and life as we live it today in terms of data sharing. And so I felt that those subjects who were still alive deserved the opportunity to be

asked again, because the remit for sharing had changed so markedly. I would argue that consent needs to be contemporaneous.”

? Will it ever regain widespread access to GP data?

Yes. The health secretary, Wes Streeting, intends to make it happen. In a speech at the RCGP conference last October he cited “world leading studies like the UK Biobank” not gaining access to GP records after patients agreed to share them. “I am directing NHS England to take away this burden from you,” he announced.

Bramall explained that the ensuing legislation means that, in the case of UK Biobank, the responsibility for data shared from within GP records now sits with the health secretary rather than individual GPs. “GPs were not given a choice over whether or not they could share this information with UK Biobank,” she said. UK Biobank is currently clearing a series of assessments by NHS England before it can access that data.

? Are patients’ data safer now?

Since last year, if researchers want to access the data they have to use an online research environment in the cloud. Before 2024 researchers could download the data.

? Why is UK Biobank suddenly under scrutiny?

The Sudlow review, published last November, examined the benefits and potential methods of using UK health data for research and used UK Biobank as an exemplar. On 7 April this year the government and the health research charity Wellcome announced a fund of £600m to create the new Health Data Research Service, using the Sudlow review as guidance. It is not clear whether the £600m is additional funding or a reallocation; currently the NHS spends £500m a year on health data research.

The government said the new service would provide a secure, single access point to national scale datasets from the end of 2026 to “improve patient outcomes and help turbocharge the economy.”

? Will the new service include GP data, and how?

Bramall said that the BMA’s GP Committee had not been formally approached on this matter. She said, “It is absolutely possible to have good research, good ethical frameworks, and good medical care. It’s absolutely possible to use data in ways that will create monetary value for the NHS and in ways that patients and GPs would feel comfortable with.

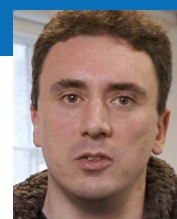
“My worry about a data ‘power grab’ is that it could call into question future promises made to the electorate. Trust is very fragile—there is good trust at the moment, and I would be worried if that were jeopardised.”

? What happens next?

The government intends to create a single care record for patients and is proposing to make NHS England or the health secretary the data controller for all patient data. This has prompted concerns about the potential for political influence. Sam Smith, from the patient privacy group MedConfidential, warned, “This will be a politically controlled care record. What is done with Biobank is a sign of what will happen to the central patient record. This would make individual patient health as much a political decision by politicians as a medical decision by doctors.

“Look at Wes Streeting deciding on gender reassignment. The next stage may be ADHD. It opens the doors to an RFK Jr style autism registry.”

Stephen Armstrong, London
Cite this as: *BMJ* 2025;389:r837



This will be a politically controlled care record
Sam Smith

CURRENTLY the NHS spends
£500m a year on health data research



A UK Biobank freezer in Greater Manchester, which holds biological samples from the past 15 years

UK BIOBANK

1

1 The hanging sculpture “Look Up My Nose” is designed to produce as little audible sound as possible, while maximising the vibrations felt by anyone standing beneath it



THE BIG PICTURE

Art, language, and living with deafness

A new art exhibition at the Wellcome Collection aims to challenge a medical perspective of deafness as something that needs to be cured and will invite visitors to imagine new possibilities for understanding between signed and spoken language.

1880 THAT is the first major London exhibition by the Berlin based artists Christine Sun Kim and Thomas Mader, who use humour and word games to reveal the complexities of communication and highlight the intersections between social interaction and exclusion.

The exhibition, accompanied by British Sign Language interpretation, runs at the Wellcome Collection, London NW1 2BE, until 16 November

Alison Shepherd, *The BMJ*

Cite this as: *BMJ* 2025;389:r853

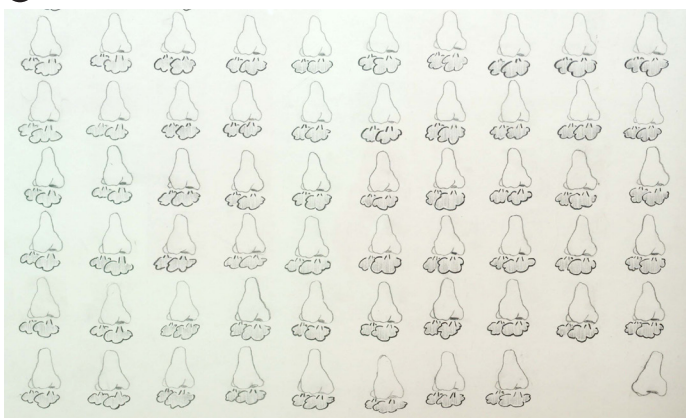


2

- 2 A still from "Eye Spy," a short animation of the American Sign Language expression "If only you could see things with my eyes," in which two transparent avatars pass a set of eyeballs between them
- 3 "Running Gag" depicts 164 noses that change into a hospital green hue, symbolising the medicalisation and stigmatisation of deafness
- 4 "NOT CROSS," a wall work depicting the words "I am not cross" in giant brick lettering, referring to the disconnect between words and body language

PHOTOS: STEVEN POCOCCO

3



4



Medical data should not conflate sex and gender

The target of any sex question should be sex

Accurate data are essential to clinical care, research, and health service planning. But in some data sets, the NHS and the wider medical profession have conflated the key demographic variables of sex and gender.^{1,2} This can decrease the integrity and reliability of data³ and potentially compromise healthcare.⁴⁻⁷ A government commissioned independent review led by Alice Sullivan, professor of sociology at University College London, was published in March 2025. It concluded that, for good practice, the “default target of any sex question should be sex”; and questions about gender identity should be asked separately.¹

Sex (male or female) is determined by gametes at conception with phenotype influenced by chromosomes, hormones, and reproductive organs.⁸ A few people are found to have one of a small number of clinically recognised variations in sex development (VSDs) after expert investigation.⁹ These individuals nonetheless have a sex, either male or female.⁸⁻¹¹ Gender, by contrast, is a mutable social construct, defined as “the norms, behaviours, and roles associated with being a woman, man, girl, or boy... and varies from society to society and can change over time.”¹²

The Sullivan review set out to examine how data and statistics are gathered with respect to the recording of sex and gender. It found that sex, gender, and gender identity have become conflated in research and clinical datasets in recent years. This may have occurred because gender has been used as a synonym for sex, with some clinicians, researchers, or administrators misunderstanding the distinctions. But some individuals and organisations have lobbied for gender identity to be



Many symptoms, diagnoses, laboratory reference ranges, imaging, and clinical risk calculators are sex specific

collected instead of, not in addition to, sex with deliberate merging of categories.¹³⁻¹⁸

Risks of conflation

Conflation of sex and gender leads to reduced data integrity and reliability. The 2021 Census of England and Wales, for example, asked: “Is the gender you identify with the same as your sex registered at birth?” The intention was to capture data about people who, for example, identify as transgender or non-binary. But the survey did not ask a clear and specific question about sex and generated unreliable data about the gender identity in the surveyed population.^{3,19}

In the NHS, sex and gender have been recorded interchangeably in medical records for over 10 years.²⁰ Recorded sex is used for interpreting test results and screening invitations, but a person can change their NHS record on request and alter the original medical record marker of sex to that of their gender identity.²¹ The Sullivan review strongly recommends against this.¹ Many symptoms, differential diagnoses, laboratory reference ranges, imaging, and clinical risk calculators are sex specific, including haemoglobin, renal function, and cardiovascular risk calculations.⁴ Using the opposite sex to make clinical decisions is a patient safety issue; it produces erroneous test results and risk calculations, causes incorrect issuing of screening invitations, and increases the risk of wrong diagnoses.^{5,6}

Respectful approach

GPs have in some cases been instructed to alter records to remove information relating to a patient’s sex.²² Such interference with records assumes sex is irrelevant in a medical history, when it is not.⁴ It should be possible to note gender (among other identity markers) without changing the sex marker. This would maintain fidelity and accuracy, reduce risks, and also afford choice. Trans people might have understandable concerns about privacy but can be reassured that all staff and regulated professionals are bound by strict duties of confidentiality. The Royal College of General Practitioners already recommends recording both sex and gender.²³

Conflating sex and gender also has implications for policy making. Programmes intended to tackle health inequalities in LGBTQ+ people have led advocates to inappropriately advise clinicians on prescribing hormones.²⁴ A Royal College of Obstetricians and Gynaecologists guideline that assumes trans women become gynaecological patients remains stalled since consultation in 2022.²⁵ Medical literature and patient information materials that miss important information potentially lead to confusion (eg, replacing the word “women” with “people” may skew interpretation of medical research²⁶) and dehumanisation (for example, by referring to women as a function of their anatomy or physiology²⁶), both of which undermine inclusivity.^{19,27}

Disentangling sex from gender identity as recommended by the Sullivan report and using open, respectful discussions with patients would enable good medical practice approaches to solve these problems and put patient safety first. Both sex and gender can be recorded, but sex should always be included.

Cite this as: *BMJ* 2025;389:r797

Find the full version with references at <http://dx.doi.org/10.1136/bmj.r797>

Margaret McCartney,
senior lecturer,
University of St
Andrews, Edinburgh
mm494@
st-andrews.ac.uk

Susan Bewley,
emeritus professor
(honorary) in
obstetrics and
women’s health,
King’s College
London

Shifting to prevention in the NHS

Bold policy and better models of care are needed

The UK government has made reducing NHS waiting times its central priority while promoting a “strategic shift” from “treatment to prevention.”¹ Currently, around 64% of people are treated within 18 weeks of referral,² well below the 92% standard, and 7.4 million people were on the waiting list in February 2025.³

Healthcare services are critical for both treatment and prevention. But healthcare alone cannot restrain demand. This requires action on wider determinants of health, recognition of where money goes in the NHS, and evidence generation for cost effective models of care able to balance treatment and prevention.

No prevention without policy

Previous plans on prevention have centred on services.⁴ Likewise, the current NHS plan interprets prevention as “neighbourhood health services” and “vaccination and screening services.”⁵ However, preventive services struggle with uptake. Smoking cessation services improve successful quit rates, but of 6.4 million smokers nationally,⁶ only 1.5% (97 654) reported quitting through NHS services in 2022.⁷ Similarly, only 27% of those eligible have received an NHS health check in the past five years.⁸

While services proliferate, policies (laws, regulations, procedures, incentives⁹) addressing the determinants of health remain absent. For instance, general practice guidance on screening and referral for gambling¹⁰ pushes responsibility onto services and individuals, distracting from the need for taxation, regulation on marketing, and planning laws.¹¹

With a single NHS budget, the increasing cost of medicines threatens to undermine prevention. Despite welcome policies pushing investment in new directions—for instance, the mental health investment standard, which ensures that mental health



ROBERT MACDONALD / ALAMY

The NHS interprets prevention as services and vaccination, but the laws, regulations, and procedures to address health determinants are absent

investment grows in line with the NHS budget¹³—drug expenditure continues to account for the majority of growth in NHS spending.¹⁴

Expenditure on new drugs alone was £75bn from 2000 to 2020.¹⁵ The NHS introduced 165 new drugs in 2015–2020, compared with 14 in 2000–04.¹⁵ Many of these have limited clinical value over existing treatments,¹⁶ and a recent analysis found NHS investment in new drugs may have displaced more health benefits than they generated by diverting funds from existing treatments and services. If the NHS is to invest in holistic models of care and infrastructure, policies are needed to reduce the incremental cost effectiveness ratio threshold (currently £20 000–£30 000/quality adjusted life year) or set a maximum annual budget for new drugs.

Evidence based preventive services

Time spent on prevention, through managing risk factors or screening for disease, may take away from treating those with more severe and immediate healthcare needs.¹⁷ But without prevention, the same patients may present later, in worse health, and at a higher cost.^{18 19}

The UK has a regulatory architecture, led by the Medicines and Healthcare Products Regulatory Agency and National Institute for Health and Care Excellence, which evaluates individual clinical interventions. National committees on vaccination and screening decide

which programmes to roll out but do not advise on, or research, how best to deliver these. With methods like realist evaluation²⁰ and natural experimentation,²¹ the tools to understand which healthcare services work, for whom, when, and how, are increasingly available. In Sweden, the Agency for Health and Care Services Analysis evaluates the quality and efficiency of healthcare services.²²

In the UK, despite occasional guidance from government agencies, academics, and think tanks, there is a vacuum of regulatory leadership on the science of healthcare service delivery. This results in inconsistency in how preventive medicines and services are integrated into the NHS.

For example, the SGLT2 inhibitor empagliflozin was approved to prevent complications of chronic kidney disease in 2023 and embedded in general practice without new services.²⁴ Conversely, tirzepatide, approved to manage obesity, is being rolled out through both specialist weight management and primary care services, with wide regional variation.²⁵ In Wales, tirzepatide is available in specialist services only.²⁵

Billions are being invested in supplementary (wrap around) services²⁶—mandatory for access to tirzepatide—without good evidence to show that they are necessary or effective.^{27 28 9} General practice is well positioned to deliver new preventive services. But even those established in primary care, like social prescribing and immunisation, vary widely in implementation.^{30 31} There is no gold standard, and the cost effectiveness of different service delivery models remains unknown.

Despite record low public satisfaction³² and a financial deficit of £6.6bn,³³ the government's NHS 10 year plan provides an opportunity to shift the dial towards prevention.

Cite this as: *BMJ* 2025;389:r804

Find the full version with references at <http://dx.doi.org/10.1136/bmj.r804>

Vageesh Jain, consultant in public health medicine, NHS South West London Integrated Care Board, London
Vageesh.jain@swlondon.nhs.uk

Thomas Beaney, general practitioner, The George Institute for Global Health, Imperial College London

Is the dissection of cadavers a necessary part of medical education?

It was once a mainstay of training, but cadaver dissection relies on donors and poses ethical and other challenges. **Roshni Shastri and Crispin Wiles** argue that modern teaching has moved on, but **Oliver Sweeney, Lucy Easton, and Steven Jacques** say it would be foolish to dispense with the practice entirely

Cadaveric dissection has its place, but modern undergraduate medical teaching has moved on

Roshni Shastri, fourth year medical student
roshni.shastri@warwick.ac.uk

Crispin Wiles, assistant professor of clinical anatomy and imaging, University of Warwick

Traditionally, cadaveric dissection has been central to anatomy, and its historical significance in medical education is undeniable. But, as curriculums evolve, its role—particularly in undergraduate education—can be increasingly questioned.

We believe that high quality anatomy education depends not on any single type of

approach to learning (such as dissection) but on thoughtful and educationally principled curricular design. This requires meaningful learning outcomes that are supported by a range of educational resources that will support learners in achieving them. Prosected or plastinated specimens, 3D models, surface anatomy training, and interactive tools can all be used effectively to provide inclusive, time and cost efficient alternatives to dissection.

Cadaveric dissection poses three main challenges. First, cadaveric dissection

is resource heavy, requiring specialised laboratories, embalming chemicals such as formaldehyde, and rigorous safety protocols. Institutions often lack the financial and spatial resources to maintain dissection laboratories, leading many to shift to prosection, where students observe pre-dissected specimens.

Second, dissection (as opposed to prosection) is also time intensive, detracting from other aspects of increasingly packed medical curriculums. Although dissection is often romanticised for its perceived “hands-on” value, studies have shown that students spend a disproportionate amount of time identifying structures hidden under fat or connective tissue rather than understanding functional anatomy.

For non-surgical careers this skill is largely irrelevant, and the anatomical knowledge acquired can be achieved equally through other methods. Furthermore, most dissection at the undergraduate level uses embalmed cadavers, where tissue transformation caused by embalming chemicals creates artificial adherence across tissue planes, reducing the authenticity of the anatomical experience and relevance to surgical training.

Third, cadaveric dissection presents ethical challenges, particularly for people from cultural or religious backgrounds that discourage handling human remains. These issues are often common to all educational uses of human tissues, including



MAUROFERMARELLO/SPL

prosections and plastinates. However, alternatives such as 3D models can provide an inclusive alternative for students whose cultural or religious beliefs discourage interaction with cadavers.

These limitations underscore the need to reconsider cadaveric dissection's place in an undergraduate curriculum.

Alternatives

Modern anatomy education increasingly makes educational use of human tissue but without requiring dissection. Plastination, for instance, preserves human specimens (and their inherent anatomical variations) in a non-toxic and odour-free manner that allows for repeated use without the problems of decay associated with cadavers.

Just like dissection, educational use of plastinated (and prosected) human tissue specimens still confronts learners with some of the ethical and social challenges facing anatomy and medicine, prompting discussion of fundamental issues of patient dignity, respect, and consent.

Other resources such as digital 3D anatomy tools and interactive apps bring different advantages and facilitate flexible, self-paced learning with detailed structural visualisation. Evidence has shown that these methods can produce outcomes comparable to, or better than, cadaver based teaching.

Additionally, multimodal learning—combining visual, interactive, and kinaesthetic methods—aligns with educational best practices, fostering deeper engagement and knowledge retention among medical students. Drawing and constructing models further enhances learning by encouraging active exploration of anatomical relations. These approaches are adaptable to diverse needs among learners and remove some of the barriers faced by students uncomfortable with cadaveric dissection.

Although we argue that dissection has limited relevance for most undergraduate teaching, we acknowledge that it may retain value for postgraduates, particularly surgical trainees, who benefit from exploring tissue planes and practising incisions—for example, using fresh-frozen tissue. However, this should not justify its universal inclusion in an undergraduate curriculum, where most students don't require these skills in clinical practice.

Ultimately, the future of anatomy education lies in adopting adaptable approaches that reflect the needs and constraints of modern medical training.

Cadaveric dissection should be accompanied by, not replaced by, technology

Oliver Sweeney, fourth year medical student

oliver.sweeney@doctors.org.uk

Lucy Easton, fourth year medical student

Steven Jacques, associate professor,
University of Leicester

When we shop online, “life sized” depictions of day-to-day purchases never seem adequate. Scrolling for dimensions and then being surprised at an object's true size or shape is a common frustration we can all appreciate.

As students we've consistently struggled to engage with screen based resources, making us question their role in anatomy. The subconscious understanding of size, shape, and feel is invaluable when moving into the clinical environment. Having divided fascial planes and sutured real tissue in cadavers, we would argue that clinical skills and procedures are not blind motions but are highly visual and relatable actions, with positive effects on our confidence and safety when working with patients. Furthermore, becoming comfortable with appropriately handling, exposing, and learning from other people's bodies builds strong foundations of dignity and respect from day one, which is fundamental to ensuring that we're equipped for our future careers.

No matter how much the technology develops, it can't effectively replicate the tactile nature of dissection to give trainees the truly hands-on experience of learning anatomy that body donors kindly provide.

Our first patient

Our cadaveric donors form the centrepiece of our learning. With very few opportunities for extended patient interactions throughout medical school, meeting our first ever “patient” and looking after them for a year is a privilege.

At Leicester Medical School, body donors are accompanied by information on their age, occupation, and cause of death, giving us an opportunity to understand the person in front of us. At some moments we pause to consider the significance of human anatomy to each of our donors. Transecting the optic nerves stands out as a poignant moment, reminding us that everything our donor saw in life was transmitted through these delicate pathways.

Using only books or software arguably misses this important part of learning human anatomy. The real life feel when learning from a donor simply can't be replicated from brightly coloured, perfectly outlined, animated depictions or plastinates.

At Leicester we're also fortunate to have many donors each year, and with this naturally comes variation in both anatomy and pathology. Comparing findings between donors is a fascinating way to appreciate “normal” and how this is affected by disease, age, environment, and even occupation, all of which can be explored further to build a holistic picture of our first ever patient—something unique to the dissecting room.

Of course, there is merit in the use of technology. But this should be seen as a way of complementing work with cadavers: comparing “perfect” with real life specimens, guiding our dissections and anatomical understanding in a real human body. The ability to create and annotate digital photogrammetry based 3D models of our own donors, for example, allows us to “take the dissecting room home” before later dissecting the same anatomy. However, medicine remains a multifaceted, complex discipline, which isn't yet readily available in its entirety solely through our screens.

We acknowledge legitimate concerns about the use of dissection in anatomy education, including its great cost, the time required, and ethical issues. However, we believe that a well managed facility and careful curriculum planning can mitigate these concerns, such as by recouping costs through offering postgraduate training courses and by carefully designing dissection classes that maximise educational benefits for students.

Holding a donor's heart in your hands, appreciating life's fragility, gives us a unique insight into patient care. Putting the patient's story at the forefront emphasises the importance of respect, dignity, and empathy, providing us with a holistic understanding of anatomy—an honour that other methods simply can't provide.

[Cite this as: BMJ 2025;388:q2829](#)

Struggling to move the dial on ethnic differences in academic attainment

UK doctors from ethnic minority backgrounds and graduates from overseas still have poorer outcomes than their white peers, despite initiatives to reverse the trend. **Aisha Majid** explores why

Most medical graduates who come to work in the UK from India start their careers here without knowing anyone who has taken the same path before, says Nupur Chauhan, a first year specialty trainee in paediatrics who came to the UK from India in 2022. “I only knew one person from my university in India who had done this, and they were my only point of contact to understand how to navigate the system,” Chauhan says.

Despite several setbacks on arriving in the UK, Chauhan considers herself one of the fortunate international medical graduates (IMGs) working here. “From what I’ve seen, I don’t represent the majority of IMGs, as only a few of us are able to jump the hurdles and eventually get a specialty training post,” she says. “I know doctors who have the equivalent amount of knowledge and have passed all their exams, but they lose out when it comes to things that are very important in the UK like prior research publications, which are not that focused on in developing countries.”

As a result, she says, many IMGs are not able to get into specialty training. “That disparity is there, and it exists at every level—at the first entry level exam, then the training, then the subspecialty training. It even exists at the consultant level as well.”

Data show that UK trained ethnic

minority medical students and graduates have consistently poorer academic and job recruitment outcomes than their white peers. For IMGs, the gap is even larger (box).

Closing the gap between IMGs and UK graduates



IMGs lose out when it comes to things important in the UK like prior research

Nupur Chauhan

Katherine Woolf, professor of medical education research at University College London and a leading academic in this area, says that, although not enough progress has been made on differential attainment, interest and activity around closing the gap has picked up in recent years. She dates the change to the covid-19 pandemic, which abruptly thrust inequalities in health and the health workforce into the spotlight.

“It’s always going to be very challenging to meet GMC targets on [differential attainment], but having those targets and the commitment to ending inequalities is an important step,” says Woolf.

In its 2021 plan the GMC set a target to end all discrimination, disadvantage, and unfairness in medical education and training by 2031, effectively reducing the attainment difference to zero.

The progress that has been made has largely been at the postgraduate level, closing the attainment gap between IMGs and their UK trained counterparts in particular (box). Jane Cannon, education programme manager at the GMC, says that this is partly because

initiatives such as enhanced inductions and better exam preparation have targeted IMGs. “The gap is substantially wider at postgraduate level, so we’ve tried to focus our resources on where it feels far worse,” she says. “There’s some evidence that, as soon as you move from the perhaps slightly more protected world of academia into clinical placements, where you’re fully out there in the world, your experiences of bias, discrimination, and things that are beyond your control increase.”

According to Woolf, although there are multiple reasons for the attainment gap between IMGs and UK trained doctors, some of the gap could be closed through easily identifiable actions such as language support, cultural support, enhanced inductions, and better preparation for exams.

“We’ve probably got a slightly better understanding of what helps with IMGs,” says Woolf, when compared to closing the gap at both undergraduate and postgraduate level between UK trained white and ethnic minority students.

Ramesh Mehta, president of the British Association of Physicians of Indian Origin (BAPIO), says that, although the attainment gap between IMGs and UK trained doctors has reduced at postgraduate level, not enough has been done.

In 2014 BAPIO took court action against the Royal College of General Practitioners and the GMC, alleging unlawful racial discrimination in the clinical skills assessment (CSA). BAPIO lost the case, but the judge warned that, if the RCGP and GMC



The GMC’s commitment to end inequalities is an important step

Katherine Woolf



There needs to be enough resources for trusts to follow actions through

Ramesh Mehta



It’s clearly a problem of bias when so much depends on communication skills

Aneez Esmail



DATA ON DIFFERENCES IN ATTAINMENT

A General Medical Council report from 2024 found that, in 2019, **80%** of white UK graduates passed their postgraduate specialty exams, compared with **69%** of UK graduates from an ethnic minority background. In 2023, **82%** of white UK graduates passed their postgraduate specialty exams, compared with **72%** of UK graduates from an ethnic minority background. For international medical graduates (IMGs), the average pass rate in 2019 was **47%**, compared with **76%** for all UK trained doctors (difference of 29.2 percentage points). In 2023, the difference fell to 22 percentage points, with the average pass rate being **78%** for UK trained doctors and **56%** for IMGs.

Undergraduate level

The Educational Performance Measurement (EPM) is a measure of clinical and non-clinical skills, knowledge, and performance that is used in applications to foundation training. It is scored out of 10 (1 lowest and 10 highest). GMC data show that, in 2023, the mean EPM score for white graduates was **6.24**, compared with **5.02** for ethnic minority graduates—a slight improvement on 2019, when the mean score for white graduates was **6.05**, compared with **4.93** for ethnic minority graduates.

took no action, they could be subject to further challenge.

“The establishment knows the right steps to take, and we have given them a lot of advice,” says Mehta, who points to recommendations such as regular bias training, scrapping distinctions between doctors on a training path and trust doctors or locally employed doctors, and removing disadvantages for IMGs in summative assessments. He adds, “But it needs more than just saying we need to do something. There needs to be enough resources for trusts and hospitals to follow those actions through, and accountability needs to be established if things don’t happen.”

Aneez Esmail was the lead author of a 2014 review of the RCGP membership examination that showed that ethnic minority UK graduates and IMGs were more likely to fail their first CSA attempt, even after controlling for performance on the machine marked written exam. He thinks that IMGs

are being set up to fail. “In an exam where so much depends on communication skills, tone, intonation, and language, it is clearly a problem of bias,” says Esmail.

The RCGP told *The BMJ* it had taken several steps to narrow the gap in pass rates for its membership exam, including a return to using professional role players rather than real patients, recruitment and training of new examiners, training and standardisation, and contributing to work that the GMC and the Academy of Medical Royal Colleges have done on differential attainment in the simulated consultation assessment (SCA)—which has replaced the CSA.

Margaret Ikpoh, the RCGP’s vice chair for professional development, says that early data from the SCA indicate that things are moving in the right direction. The data show that pass rates are 3.47% higher for the SCA than the CSA for UK graduates and 8.49% higher for IMGs. But SCA pass rates for

ethnic minority doctors are 2.16% lower than CSA pass rates, while pass rates for white candidates have increased by 1.01%. Ikpoh says “it is becoming increasingly clear that addressing differential attainment will require a far wider focus than the examination itself.”

Focus on UK graduates

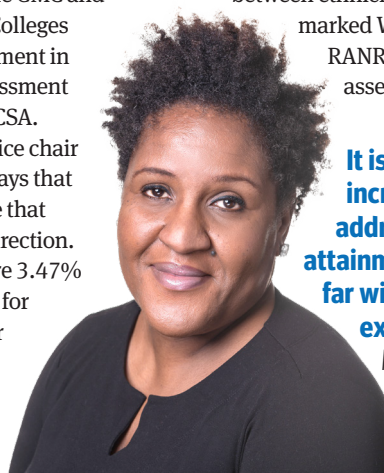
At the postgraduate level, the GMC’s 2024 National Training Survey found that 21% of ethnic minority trainees with a UK primary medical qualification said that they were not given the same training opportunities as their peers, compared with 16% of white trainees. Trainees from ethnic minority backgrounds were also less likely to feel confident about reporting discrimination without fear of consequences and more likely to say they felt ignored or excluded from conversations, groups, or meetings.

Fran Bury, a consultant and member of the UK Faculty of Public Health, has conducted research into the assessment process for entry into public health specialty training. She has found differences in pass rates

between ethnicities on the machine marked Watson Glaser and RANRA psychometric assessments that are

It is becoming increasingly clear that addressing differential attainment will require a far wider focus than the examination itself

Margaret Ikpoh



required to progress in training. In the cohort of candidates trained in the UK, 89.2% of candidates from white British backgrounds passed the test, compared with 75% of ethnic minority candidates. Bury says there has been little research into why a supposedly culturally non-specific, machine marked test could yield such different pass rates on the basis of ethnicity or place of study.

Her work for the Faculty of Public Health, however, indicates that the difference might arise from the fact that candidates from ethnic minority backgrounds tend to be less well networked and therefore have less access to people who could help them prepare for the test. They might also be less able to afford test preparation resources.

Structural racism might also be at play. The psychometric assessments were developed and tested on largely white cohorts, Bury says, and there is evidence that lifetime exposure to systemic racism affects test performance, especially when the candidate's minoritised identity is known to others taking the exam.

Systemic racism

For UK graduates, the GMC's Cannon says that systemic racism comes into play particularly strongly—because differences in attainment between white and ethnic minority undergraduates in the UK cannot be explained by language or culture. “It's easier for people to think of this as an IMG issue. When it is people who have come to work in another country, you can imagine what the barriers to that are—they're easier to describe to yourself than accepting that racism is part of the issue,” says Cannon.

Factors such as the learning environment and the ability to identify people's specific training needs early on can affect attainment at undergraduate and postgraduate levels, research has shown. Woolf says, “Teachers and supervisors need to be motivated, actively looking to try and include people, and trying to foster that trust that we know is so important for growth and development.”

Although differences in attainment between

white undergraduates and their ethnic minority counterparts are less stark than at the postgraduate level, progress has lagged. There has been very little improvement on mean Educational Performance Measure scores between white and ethnic minority undergraduates.

There has also been a decline in the proportion of UK ethnic minority undergraduates who feel prepared for the first year of foundation training (FY1) and widening in the gap between how prepared white and ethnic minority doctors feel. In 2019, 70% of white graduates felt prepared for FY1, compared with 62% of ethnic minority graduates. In 2023, 62% of white graduates felt prepared, compared with 50% of ethnic minority graduates.

James Galloway, head of the assessment board for the MBBS programme at King's College University, says that the university has sought to tackle the attainment gap at undergraduate level, resulting in a more inclusive medical curriculum that includes, for example, case scenarios that reflect different minority groups. Teaching methods have also been diversified, Galloway says, mixing didactic lectures, small group teaching, online teaching, and asynchronous learning. “There's no doubt that if you have teaching methods that are culturally incongruent to the student, you can alienate that student,” says Galloway.

Other universities have taken other approaches, such as improving the training they offer their trainers. Woolf tells *The BMJ* that, at University College London, for example, objective structured clinical examination trainers are now asked to undertake training on affinity bias—where an examiner might favour a candidate they see as similar to themselves—as well as confirmation bias training to tackle the tendency to interpret information in line with existing beliefs.

More to be done

Woolf speculates that insufficient progress in narrowing the attainment gap at all levels—for both UK trained undergraduates and graduates and IMGs—might be partly tackled by a better understanding of which interventions work. The GMC has invested some of its own resources in piloting



A really important learning point for medical schools is that isolation in learning is detrimental

James Galloway

several initiatives such as a two day exam preparation course run by the Royal College of Psychiatrists (the CASC Masterclass) aimed primarily at IMGs, which covers topics such as how exams are marked, time management, and how to structure exam answers. Evaluation of the pilot showed that the pass rate was 10 percentage points higher for IMG trainees who attended the course than for those who did not.

Woolf tells *The BMJ* that she welcomes the GMC's efforts but thinks that broad stakeholder engagement from universities, training organisations, and the government, as well as dedicated funding, is needed to build up the

required bank of evidence. “You need buy-in from throughout the continuum,” she says. “[This would be] a real step forward and actually might help us get the evidence that we need, because at the moment people are doing things but there's not enough evaluation and knowing what works.”

Galloway, meanwhile, underlines the importance of the learning environment, reflecting on lessons learnt from the cessation of group learning because of covid-19 pandemic restrictions. Studies have explored various effects of the pandemic on learning, from an abrupt end to the support that comes from face-to-face classes to missing out on professional and social experiences.

“A really important learning point for medical schools and for education in general is that isolation in learning is detrimental. But peer networks don't exist in some ethnic groups,” says Galloway. He concedes that, even though the university has sought to strengthen these networks, some people will fall through the cracks.

Obtaining the right data with the sufficient level of detail is the prerequisite for all other efforts to narrow the attainment gap, Galloway adds. He says that King's College has strengthened its data collection efforts in the past five years, asking exam boards for joined up data on students' characteristics to know where the gaps are.

“All the other bits about how you curriculum design, how you have an inclusive curriculum, cultural competency training for both staff and students, how you diversify teaching methods, how you have unbiased assessments—all of that is possible if you have the data,” Galloway says.

Aisha Majid, freelance journalist, Madrid

Cite this as: *BMJ* 2025;388:r314

Lifetime exposure to systemic racism affects test performance

Fran Bury



ROLE MODEL

Bryony Kendall

The GP talks to **Helen Jones** about her role on NICE women's and reproductive health guidelines committee

"I always wanted to be a doctor, and it's such a privilege and a joy to be a GP and to work for the NHS," says Bryony Kendall. "It allows you to be professionally kind, which is such a lovely thing to be able to do for people. It's also an intellectual challenge because you never know who is going to walk through the door."

Kendall was a partner in a GP surgery in north Liverpool for 20 years. Following the covid-19 pandemic she took on a safeguarding role for the NHS Cheshire and Merseyside integrated care board while continuing to do GP sessions.

During her career, Kendall has developed a special interest in maternity inequalities. She was an independent GP on the Maternity Disparities Taskforce, which was set up by the previous government to investigate poor outcomes for women from ethnic minorities and those living in deprived areas.

"Maternal disparities is a matter that is dear to my heart and when a colleague forwarded me an advert from the National Institute for Health and Care Excellence looking for someone to sit on their women's health committee I thought, 'Let's give it go'."

Kendall says the NICE role is demanding. "I was surprised by how hard it is. It's mentally challenging. The days are really long and because meetings are all online

NOMINATED BY SARAH FISHBURN

"Bryony is a huge asset to NICE's women's and reproductive health guidelines update committee. Her passion and enthusiasm for sharing insights to help equip health and care practitioners with the guidance they need to deliver the best care is inspiring. Having a representative like Bryony to speak on behalf of primary care on our committees is so valuable when developing guidance."

Sarah Fishburn is NICE committee chair and senior clinical quality improvement manager, NHS England Southeast Region.



ASADOUR GUZELIAN

I find I really have to concentrate. We don't meet in person but the chair, Sarah Fishburn, is brilliant."

Kendall adds, "The role involves a lot of maths and, although I did that for A level and enjoyed it, it all feels a bit new and I'm using my brain in a different way."

Despite the demands, she says the work is incredibly worthwhile and focuses on practicalities. "The great thing is that when I'm working with NICE on the guidelines, I can constantly bring it back to patients I've seen in real life and think, 'Is this pathway going to work for them? Is this going to work for my colleagues when they see someone? Is this just too abstract? What do we actually want to know? How do we make life better for the professionals in order to make life better for patients?'"

She adds, "NICE have been extraordinarily open to feedback about how it can work best with busy GPs and how it can channel the

When I work with NICE, I bring it back to patients I've seen and think 'Is this going to work for them?'

guidance in order to help patients."

She says that she highly recommends that doctors get involved with NICE and adds, "I now regularly look at the adverts and send them out to the people in my life and say, 'Have you thought about this?'"

"NICE is not looking for professors of general practice—it's looking for people who work on the ground, who have practical insights. You don't have to be hugely academic. I would never have considered it unless someone had suggested it to me. It's one of the best things I've done, and I'm meeting different people who really value general practice. I'm proud to represent my profession."

Helen Jones, London

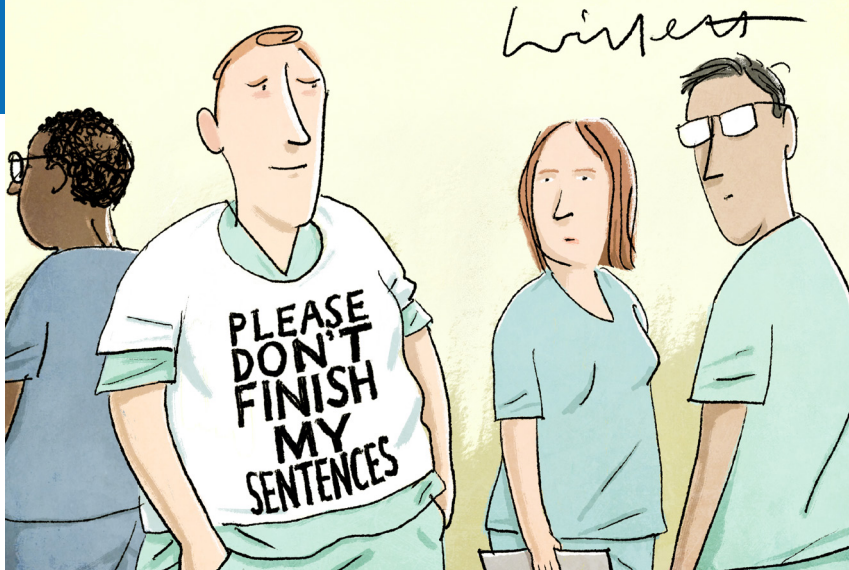
Cite this as: *BMJ* 2025;389:r684

NOMINATE A ROLE MODEL

To nominate someone who has been a role model during your medical career, send their name, job title, and the reason for your nomination to emahase@bmj.com

How you can support me with stammering

There are certain things you can do, and not do, to support a colleague with a stammer, **Abi Rimmer** hears



Make me feel safe to speak without pressure

Sophia Williams,
consultant child and
adolescent psychiatrist,
Brighton

“Stammering is a neurodevelopmental speech fluency disorder, usually with genetic and neurophysiological underpinnings.

“Contrary to popular belief, it is not caused by anxiety, although a high pressured clinical environment can increase the challenge to be fluent. Working in medicine with a stammer can be daunting, particularly in hierarchical teams where fluency is often equated with competence.

“In addition to having background knowledge about stammering, there are practical steps you can take to support me or anyone else with a stammer at work.

“Firstly, please don’t finish my sentences. Don’t ask me beforehand whether I’ll be fluent when giving a presentation, equally please don’t praise me for not stammering. Instead, focus on what I’m saying.

“If possible, offer a quiet space for phone calls—open plan offices can be tricky to navigate. Using the raised hand function in online meetings allows me to speak without interruption and without having to be fluent enough to ‘speak into the gap’ during a millisecond conversation pause.

“Avoid rapid fire questioning in ward rounds or teaching settings, which can be particularly difficult. Using door entry phones and calling patients from clinic waiting rooms can present challenges so alternatives like swipe cards or support from reception staff can help.

“Above all please remember that I, like other colleagues with stammers, work best when feeling safe to speak without pressure. We can bring insight, empathy, and resilience to our roles.



Never guess what someone is saying

David Goldmeier,
retired consultant
in sexual medicine,
Imperial College
Healthcare NHS Trust

“Stammering has little to do with dysfluency but everything to do with socially stigmatised speech that may not be accepted by colleagues. The stammerer may therefore be open to covert punishment or negative bias by colleagues for violating the concept of the doctor as a fluent speaker.

“It’s uncomfortable to listen to a stammerer so the listener should be as aware as possible that their own negative responses can exacerbate the stammer. Understand that beneath the dysfluency there is more than likely a doctor who understands emotional pain and compassion.

“Never guess what someone with a stammer is saying and never attempt to finish the sentence for them. Some parts of speech, such as nouns, verbs, and adverbs, are more difficult than the definite article. Some situations may be particularly difficult, such as saying one’s own name or talking on the phone. Formal interviews may make the stammer worse—so assess the candidate informally before the interview.

“Feedback on content of talks is always welcome. Not the diction. An educational supervisor’s one-to-one session is a good place to discuss a stammer and enquiring what can be done to make life easier for a resident doctor with a stammer is helpful.

“My own journey to being a consultant with an expertise helped me, because I knew that patients and colleagues wanted to hear the content of my talks. They disregarded the diction. Being a doctor with a stammer means you are brave, determined, and a very special person.”



Don’t tell me to take a breath

Ian Medlicott, radiology
nurse team leader,
Leeds Teaching Hospitals
NHS Trust

“Most of the time the non-stammerer will incorrectly guess the word the stammerer is struggling with, which then requires the stammerer to start the sentence again. This can be exasperating and add more pressure on the stammerer, which in turn makes it harder to pronounce the ‘difficult’ word.

“Please don’t offer advice to slow down, relax, or take a breath as this feels patronising regardless of the intention of the colleague. The stammerer has been dealing with their speech impediment for a number of years and is trying their best in the only way they know how. This advice can also create more pressure and anxiety and puts a spotlight on the stammerer, making them the centre of attention.

“Be patient. I’ve stuttered for 38 years and those that know me well understand that I’m trying my hardest to get a sentence out. Some days the stammer is worse than others and I have to remove myself from the interaction and come back when I’m ready to continue. Allowing the stammerer time to speak is essential for them to know they aren’t being rushed. If the stammerer goes silent they are not ignoring you, they’re trying to rejig words in their head before they speak to avoid a problematic word.

“It may come as a surprise to find out that a colleague has a stammer because they have found ways to avoid certain words. Unfortunately, if ‘difficult’ words are patient names or medical terminology they can’t be altered, and it’s at this point, often in front of other healthcare professionals, that a covert stammerer is revealed.”

[Cite this as: BMJ 2025;389:r736](#)