



Key figure taken off puberty blocker trial

A UK clinical trial of puberty blockers in young people with gender incongruence continues to be mired in controversy.

Shortly after the clinical trial was paused by MHRA on 20 February, the regulator announced it was excusing its chief medical and scientific officer, Jacob George, from any further involvement with the Pathways trial.

The move followed the surfacing of now deleted social media posts George made before his appointment in January. Although MHRA has not published the relevant posts, they have since circulated on social media.

In one George branded the International Olympic Committee a “disgrace” for allowing boxer Imane Khelif, who failed gender eligibility tests, to compete in women’s sport. “The denial of biological reality means women are being put at risk of brain injury,” he wrote. In another he posted, “Women’s rights are a hard fought right. Society should never allow a militant minority to undermine this.”

In a statement MHRA said George had been withdrawn “as a precaution.” The agency added that its “world class medical, scientific, and regulatory experts” would “work through the next steps constructively.”

The move received mixed reactions. Louise Irvine, co-chair of the Clinical Advisory Network on Sex and Gender, said,

“This decision does not appear to align with MHRA’s code of practice on declaring interests. If that is so, it may itself have demonstrated political bias. We urge them to look again at this decision.”

However, a spokesperson for the campaign group TransActual welcomed George’s removal. “The MHRA has a duty under the Equality Act to work to eliminate discrimination against people with protected characteristics, and it must now consider whether it is appropriate for Prof George to remain in post if he cannot do his job without his personal beliefs interfering.”

MHRA declined to comment further.

In another development health secretary Wes Streeting has ordered a gender linkage study on puberty blockers to go ahead. The study—a follow-up of 9000 children, now adults, who entered the Tavistock Gender Identity Development Service between 2009 and 2020—was due to take place during the Cass review. However, it was halted as some gender service clinics did not cooperate.

A BMA spokesperson said, “Safeguards, such as the anonymisation and strict data governance, are essential. Greater clarity is still needed on how these will be implemented.”

Adele Waters, *The BMJ*
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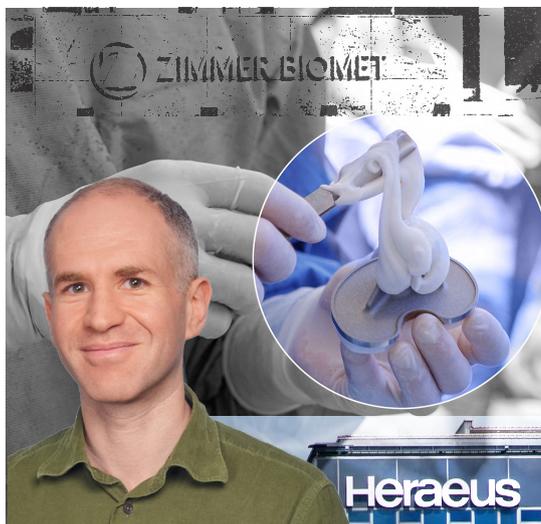
The withdrawal of Jacob George (left) as one of the regulators of the Pathway trial should be reconsidered, said Louise Irvine. Trans campaign groups disagree

LATEST ONLINE

- Women remain underrepresented as private surgeons
- CDC shakeup as medics leave vaccine committee
- “Shocking” price rises for infant formula



MEDICAL NEWS



NHS shortage of bone cement stemmed for now

After warning that knee and hip operations could be cancelled because of a world shortage of bone cement products, the NHS later said two providers had been secured.

Shortages were sparked by a fault at Heraeus Medical in Germany, which supplies around three quarters of bone cement used in the NHS. Disruption was expected to last at least two months. The NHS had estimated that only two weeks' supply remained in stock, and trusts were told to reserve seven days' supply for emergency cases.

But NHS England says it has now procured around 35 000 units—equivalent to around 10-12 weeks' supply—of an alternative cement product from a Dutch manufacturer, Zimmer Biomet. Additional stock from Johnson & Johnson has also been secured.

Mark Dayan (left), head of public affairs at the Nuffield Trust, said bone cement shortages were yet another example of supply chain problems disrupting patient care.

“Clinical consumables and devices do not get the same measures to stave off shortages compared to medicines,” he said. “Along with the blood tube shortages of 2021, this is one of two times in recent years where supply problems have caused widespread disruption, as serious as anything we have seen from a medicines shortage.”

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Jacqui Wise, Kent [Cite this as: BMJ 2026;392:s379](#)

Weight loss drugs

MHRA disrupts second manufacturing facility

UK law enforcement officers have raided two separate premises containing illegal weight loss medicines. Medicines and Healthcare Products Regulatory Agency officers searched two premises in Lincolnshire and Nottinghamshire believed to have been used for making and distributing unlicensed weight loss medicines, including retatrutide and tirzepatide, as well as peptide products. It follows a landmark raid in October 2025 in which officers dismantled an illicit weight loss medicine manufacturing facility in Northampton, thought to be the largest ever recovery of trafficked weight loss drugs worldwide.

Cancer

Mammography attendance is up, figures show

In 2024-25, 1.94 million women in England aged 50-70 attended breast cancer screening within six months of invitation, up by 193 745 from the previous year. NHS England said that 19 291 cancers were detected as a result, a 16% increase. Attendance by women invited for a first screening reached 63.6%, the highest proportion in a decade. Overall, around 71.8% of eligible women

are up to date with screening, up 1.8 percentage points on last year.

Ukraine

Healthcare attacks rose 20% in 2025

The World Health Organization said Ukraine saw the most attacks yet on its healthcare in 2025, up nearly 20% from 2024. Since war started on 24 February 2022 WHO has documented at least 2881 attacks on healthcare, affecting health workers, facilities, ambulances,



and medical warehouses. The third quarter of 2025 saw 184 attacks, killing 12 people and injuring 110 health workers and patients. Attacks on medical warehouses tripled in 2025, said WHO.

Prenatal care

US reports drop in first trimester

The proportion of pregnant US patients using prenatal care in the first trimester declined from 78.3% in 2021 to 75.5% in 2024, said the Centers for Disease

Control and Prevention (CDC).

This followed a rise from 77.1% to 78.3% from 2016 to 2021.

Prenatal care starting in the second trimester rose by 12% from 2021 to 2024 (from 15.4% to 17.3%), and patients receiving late or no care rose by 16% (from 6.3% to 7.3%). The CDC advised, “Early prenatal care can improve the likelihood of a healthy pregnancy and baby.”

New treatments

First licensed vitiligo treatment is approved

NICE has recommended ruxolitinib (Opzelura, by Incyte) for non-segmental vitiligo (below) affecting the face in people aged 12 and over, where first line topical treatments have not worked.

Vitiligo is a chronic autoimmune disease in which areas of the skin lose pigment because of the progressive destruction of melanocytes, leaving pale pink or

white patches. The cream, applied twice a day, works by calming the immune system's attack on melanocytes.

More than 80 000 adults and teenagers in England will benefit, said NICE.



New migraine pills benefit 22 000 people

More than 22 000 people had the migraine pills atogepant or rimegepant prescribed by their GP last year, more than tripling from 2024, NICE reported. The treatments, which are specifically designed to prevent migraine and work by blocking calcitonin gene related peptide (CGRP), were approved in 2024 (atogepant) and 2023 (rimegepant). While CGRP targeting treatments are not new, they were previously available only as infusions and injections.

EMA approves single dose sleeping sickness drug

Acoziborole Winthrop (acoziborole), a treatment for the most common form of sleeping sickness, received a positive opinion from the European Medicines Agency's Committee for Medicinal Products for Human Use. The single dose oral treatment for both early and advanced stage *gambiense* sleeping sickness is indicated for people aged 12 and older who weigh at least 40 kg. It was developed by the Drugs for Neglected Diseases initiative and Sanofi, which has said that it will donate the medicine to the World Health Organization through its philanthropic arm.

IN BRIEF

Regenerative medicine

Japan endorses artificial stem cell products

A Japanese health ministry expert panel conditionally endorsed two products that use induced pluripotent stem cells (iPSCs)—artificially created cells that can transform into nerve, muscle, and other body cells, potentially restoring lost functions. It paves the way for the world's first practical use of iPSC derived products in regenerative medicine. One product is cardiomyocyte sheets for treating ischaemic cardiomyopathy, and the second involves cells for transplantation into the brains of patients with Parkinson's disease.

Sudan

Conflict has “hallmarks of genocide,” warns UN



Atrocities carried out by paramilitary forces in western Sudan as they laid siege to the city of El Fasher had the “hallmarks of genocide,” a fact finding mission for the United Nations reported. Evidence showed that the Rapid Support Forces (above) in the Darfur region had carried out targeted killings, sexual violence, starvation, torture, and “systematic humiliation” of non-Arab communities with the goal of wiping them out, the mission concluded. An estimated 150 000 people have been killed and 14 million displaced since April 2023.

Vaccines

FDA reverses stance on Moderna jab

US Food and Drug Administration officials suddenly reversed their

position on a new mRNA flu jab that they previously refused to allow into the medicine approval process. The rejection of the Moderna vaccine had come amid widespread speculation that the FDA opposed mRNA vaccine developments in principle. The change of heart followed a high priority meeting and submission of an amended application by the company. Moderna also agreed to perform an additional study of its vaccine in adults over 65. The FDA has now set a review date of 5 August 2026.

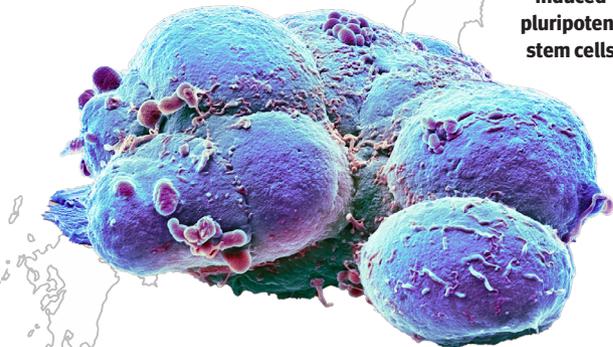
HIV and syphilis

Denmark eliminates mother-to-child transmission

Denmark has become the first EU country to eliminate mother-to-child transmission of HIV and syphilis, the World Health Organization announced. Denmark met all WHO's requirements from 2021 to 2024, including low transmission rates and high coverage of prenatal testing and treatment among pregnant women. Denmark's health minister Sophie Løhde said, “Denmark's universal health system—built on equal access for all—has been the foundation of this achievement. We hope our experience can inspire and support other countries on their path to elimination.”

Cite this as: *BMJ* 2026;392:s420

Japan has backed use of products using induced pluripotent stem cells



TYPE 2 DIABETES

Changes to guidance on type 2 diabetes—including offering SGLT-2 inhibitors as first line treatment—could prevent around 17 000 deaths in the UK over three years

[NICE]

SIXTY SECONDS ON... TETRIS FOR TRAUMA

BLOCKING OUT THE TRAUMA?

Potentially. Results from a small trial by UK and Swedish researchers indicate that playing the vintage video game *Tetris* could reduce distressing memories in healthcare workers following trauma.

BUILDING THE EVIDENCE BASE?

The randomised controlled trial recruited 99 healthcare workers exposed to trauma at work during the covid-19 pandemic. Some 40 people received imagery competing task intervention (ICTI), a simple digital intervention that included playing a slow version of *Tetris*. They were compared with two control groups: one that listened to music by Mozart and podcasts about the composer to alleviate stress and one that received standard care.

HOW DID THE RESULTS STACK UP?

The findings, published in *Lancet Psychiatry*, showed that those using the *Tetris* based treatment had 10 times fewer flashbacks than either of the control groups within one month. It remained highly effective after six months, with 70% of participants in the *Tetris* based group reporting no intrusive memories at all. The treatment also alleviated symptoms of post-traumatic stress disorder.

FORMING SHAPES IN THE MIND?

Explaining how the ICTI process works, Emily Holmes, professor of psychology at Uppsala University and study lead, said, “Even a single, fleeting intrusive memory of past trauma can exert a powerful impact in daily life by hijacking attention and leaving people at the mercy of unwanted and intrusive emotions. By weakening the intrusive aspect of these sensory memories with this brief visual intervention, people experience fewer trauma images flashing back.”

CONSOLES ON PRESCRIPTION?

Holmes said the team was “delighted” to have shown that the intervention can work but that larger trials would be needed to test its effectiveness. She added, “It is far more than just playing *Tetris*, and while it is simple to use it has been a complicated process to refine and develop. We hope to expand our research so it can be put into practice by determining its effectiveness for a broader range of people and scenarios.”

Gareth Iacobucci, *The BMJ*

Cite this as: *BMJ* 2026;392:s387

GALLERI CANCER TESTS

Controversial NHS trial fails to meet key goal

A controversial blood test aiming to detect multiple cancers in their early stages failed to meet a key trial endpoint of a significant reduction in stage III-IV cases.

The results of the multimillion pound Galleri trial could jeopardise a deal whereby the NHS would buy millions of the tests and Grail, the manufacturer, would build a state-of-the-art facility in the UK.

The test uses sequencing technology to analyse DNA fragments circulating in the blood, with the aim of detecting more than 50 cancers in a single sample.

In 2020 Grail announced it would fund a £150m trial in the NHS in England. The full trial results have not been published but will be presented at a meeting of the American Society of Clinical Oncology later this year. But the company said in a press release: “The primary endpoint of statistically significant stage III-IV reduction was not observed.” It added, however, that other trial data showed the test had value.

In England, adding Galleri to standard screening for breast, colorectal, cervical, and high risk lung cancers “resulted in a



In 2020 Grail announced it would fund a **£150m** trial of the tests in the NHS. It recruited **142 000** adults aged 50 to 77 in England and followed them over three years

fourfold improvement in the overall cancer detection rate,” when compared with standard screening alone, Grail said.

It also said that adding Galleri to “standard of care screening” led to a “substantial and clinically meaningful reduction in stage IV diagnoses compared with standard of care alone across the group of 12 deadly cancers,” along with a “substantial” increase in stage I and II detections.

But Richard Houlston, from the Institute of Cancer Research, is critical of the way the results were framed. “Without mortality data and a transparent account of harms, including false positives, unnecessary procedures, and opportunity cost, claims of population benefit from multicancer early detection remain speculative,” he said. Grail said no serious safety concerns had been reported in the trial.

An NHS spokesperson said it would carefully study the full results from the trial to help determine how blood tests like this could be used in the future.

Documents show the NHS has committed to buying five million tests by 2030 if it fulfilled certain criteria and in exchange Grail would build a “state-of-the-art test processing and sequencing facility in the UK,” keeping the nation “at the global forefront of clinical application of genomics.” As the trial started, NHS England described the test as the “beginning of a revolution.”

But the NHS-Galleri trial was controversial from the outset. Eight months before the trial was announced Grail published data showing that in patients already known to have cancer the test detected only 43.9% of stage I-III cancers. Critics told *The BMJ* at the time this was “strikingly low.”

Deborah Cohen, London [Cite this as: *BMJ* 2026;392:s364](#)

Doctors’ pay “fell more than the public sector average over 14 years”

EXCLUSIVE Consultants’ and resident doctors’ real terms earnings fell more sharply than the average drop across the public sector between 2011 and 2025, a new analysis shows.

Think tank the Nuffield Trust came to this conclusion after comparing real terms earnings of doctors and other healthcare groups with the public and private sectors.

In the 14 years to March 2025—the last complete financial year for which data are available—real terms average earnings of resident doctors fell 8.6% and that of consultants 10%.

This compared with an average fall of 6.9% across the public sector.

Earnings in other healthcare groups also saw greater falls than the public sector average, including ambulance staff (down 8.1%), nurses (10.7%), and midwives (13.5%).

However, the authors noted that the pay gap for resident doctors is narrowing after salary improvements in recent years. In real terms, resident doctors are now only 8.6% behind the 2011 level, as of 2024-25, compared with being 15.9% behind in 2023-24.

The gap for consultants is also narrowing, from a high of 15.2%

behind 2011 levels in 2022-23 to 10% behind in 2024-25.

In contrast to public sector earnings, average private sector pay rose in real terms over the same 14 year period, the analysis found—by 3.3%.

The authors said healthcare workers’ pay was especially hit around 2022-23, when wages struggled to keep pace with inflation.

“For consultants, their pay has fallen in real terms for quite some time behind other groups,” Lucina Rolewicz (right), Nuffield Trust fellow and coauthor of the analysis, told *The BMJ*. “Since then [2022-23] it has made somewhat of a recovery, but it’s still quite far below where pay was 15 or so years ago,” she said.

“Similarly, resident doctors’ pay has gone up in the last couple of years relative to its worse position a couple of years ago. They have had a bigger relative pay increase compared with other groups, which is why we see a bit of a bounce back there.

“That being said, it is far behind what we see with the public sector average trend.”

She added, “And of course private sector [pay] suffered a bit of a dip, but

First baby in UK born after womb transplant from dead donor

A baby boy is the first child to be born in the UK after a uterus transplantation from a deceased donor.

Hugo was born by caesarean section at Queen Charlotte’s and Chelsea Hospital in London in December. His mother, Grace Bell, was born with Mayer-Rokitansky-Küster-Hauser (MRKH) syndrome, a rare condition affecting one in 5000 women, characterised by the

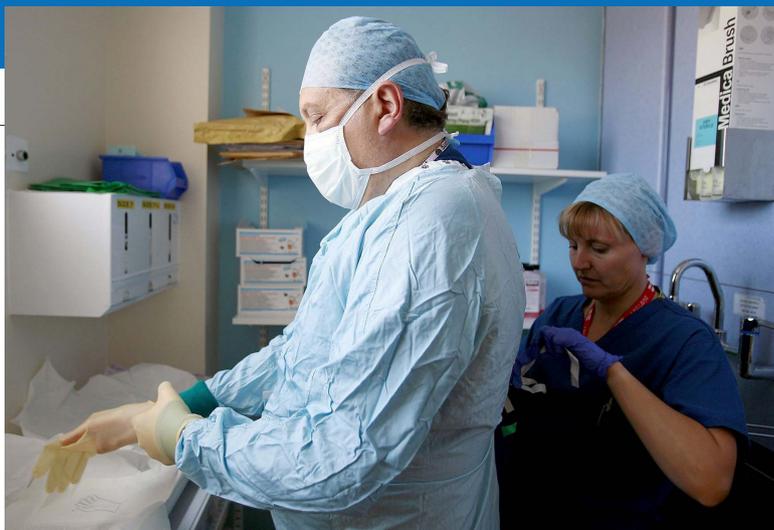


WOMB TRANSPLANT UK/PA

underdevelopment or absence of the uterus and vagina. She has normal ovaries but was told at the age of 16 she wouldn’t be able to carry her own child.

Consultants' pay has fallen in real terms for quite some time behind other groups

Lucina Rolewicz



CHRISTOPHER FURLONG/GETTY

CONSULTANTS' earnings—after a 4% pay rise for this financial year—are still 9.3% behind their pay levels in 2010-11

essentially that has always sat above those NHS groups.”

While noting the improvements, the analysis estimated that the overall trend was unlikely to shift much when data for 2025-26 become available.

Consultants' earnings—after a 4% pay rise for this financial year—are still 9.3% behind pay levels in 2010-11, and resident doctors are also still predicted to be 6.9% behind 2010-11 levels, despite a 4% increase and a £750 one-off payment in 2025-26, the authors estimated.

“However, this would be a clear recovery from where doctors' pay had decreased to just two to three years ago,” they wrote.

The Department of Health and Social Care (DHSC) has proposed a 2.5% pay uplift for consultants and other doctors for 2026-27, an offer that the BMA has branded “indefensible.”

The Review Body on Doctors' and Dentists' Remuneration (DDRB) has not yet published its response, which will inform the final uplift for the coming year.

The BMA remains in dispute with the government over pay and jobs, with talks between union leaders and health secretary Wes Streeting continuing.

For other healthcare staff groups, the Nuffield Trust estimated that the 2025-26 uplift of 3.6% to Agenda for Change staff earnings—which applies to all NHS staff besides doctors,

dentists, and very senior managers—would have led to only a “very modest improvement.”

In particular, it reported that midwives and nurses continue to lag behind other staff groups, with their pay still 13.1% and 10.3%, respectively, below the level it was 15 years ago in real terms.

Looking ahead to the next financial year, the government accepted the 3.3% uplift to Agenda for Change pay packets for 2026-27 that pay review bodies recommended. But the authors said this is still unlikely to restore earnings for most NHS workers to 2010-11 levels, given that CPI inflation is estimated to be 2.2% in 2026-27.

The authors excluded GPs' earnings from their analysis as information beyond 2023-24 is not yet available.

BMA council chair Tom Dolphin said, “This is further evidence that, whatever measure you use, doctors are still worse off now than they were a decade ago and that the real terms pay cuts they have experienced have been deeper than others.

“Our critics may denounce calls for pay restoration as out of touch with the wider economy, but this shows that workers in the private sector have had their pay restored.”

DHSC was approached for comment.

Gareth Iacobucci, *The BMJ*
Cite this as: *BMJ* 2026;392:s426



Last year a baby girl was born to a woman who received a live womb transplant donated by her older sister.

But Bell is the first woman in the UK to give birth after a transplantation from a dead donor. Two previous births after deceased womb donation have been reported in Europe, and about 25 to 30 are believed to have occurred worldwide.

The transplantation was part of a research programme funded by the charity Womb Transplant UK that will involve 10 transplants from deceased donors. Three have been carried out, but Hugo is the first baby to be born after the procedures.

The clinical team gave their time free of charge, with the charity funding the cost of the transplantations and associated treatments.

This form of organ donation is not

covered by the NHS organ donor register and is not covered by deemed consent, which presumes people want to donate unless they opt out.

Potential donors' families have to be asked specifically for consent after the donation of other organs have already been agreed.

Complex procedure

The womb implantation took just under seven hours and was undertaken at the Churchill Hospital in Oxford in June 2024. Bell then had IVF treatment and embryo transfer at the Lister Fertility Clinic in London.

Isabel Quiroga, consultant transplant and endocrine surgeon at Oxford University Hospitals, who carried out the transplantation, told BBC Radio 4's *Today*

news programme that the procedure is very complex, much more so than with a living kidney transplant. “The vessels are extremely small, and it's a very delicate and sensitive operation,” she said.

She added that any resulting pregnancy is high risk and needs to be very closely monitored. The mother has to be immune suppressed, and the baby has to be born by caesarean section.

But celebrating the birth of Hugo she added, “This is a huge milestone, giving more hope to women who do not have a womb and are looking to start a family.

“This is the only treatment that gives them the ability to carry and give birth to their own child, offering another option alongside adoption or surrogacy.”

Jacqui Wise, Kent
Cite this as: *BMJ* 2026;392:s369

GP CONTRACT OVERHAUL: How credible are government's headline grabbing promises?

- **New deal for England focuses on access, with a promise of same day urgent appointments**
- **Offer includes funding to recruit GPs and new QOF vaccination thresholds**
- **BMA has rejected the deal, labelling it “unrealistic” and “unsafe”**



PVOISINPHANIE/SIPA/ALAMY

? **What is the overall funding uplift?**
The GP contract for England for 2026-27 includes a £485m uplift in core general practice funding, effective from 1 April.

This uplift represents a 3.6% cash increase or 1.4% real terms growth, NHS England said. This includes an assumption of a 2.5% pay uplift in 2026-27, subject to the recommendation from the pay review bodies' recommendation, it added.

The £485m uplift brings the total GP contract value to £13.86bn.

But the uplift is substantially lower than the £969m (7.2%) increase in investment made in 2025-26.

In addition, £292m from the capacity and access payment (CAP)—an existing income stream paid to practices through local primary care networks to fund access improvements—has been redirected to a practice level reimbursement scheme that will fund the hiring of more GPs or increased sessions from GPs already in a practice.

The government says this will boost access and is equal to around 1600 (full time equivalent) GPs across England.

But some experts questioned whether the investment was sufficient to help struggling practices.

Andy Pow, adviser to the Association of Independent Specialist Medical Accountants, who advises general practices, said, “A cash uplift of 3.6% is unlikely to leave practices with a significant funding increase for the year ahead.

“The 2.5% assumed pay uplift looks low compared with a rise in the national minimum wage of 4.1% and the agenda for change staff pay increase of 3.3%. Consumer price inflation remains at 3% for other costs.”

Pow also questioned the wisdom of shifting £292m to a ringfenced scheme. “This may appear a good thing at a headline level by expanding the number of reimbursed GP roles,” he said. “The reality, however, is that practices are already using this funding in an unrestricted way [for example, to employ other staff]. Ringfencing the money is going to cause problems.”

Steve Taylor, GP co-lead for the Doctors' Association UK, said any increase in GP funding was welcome

but that the new contract “merely tinkers around the edges.”

“The funding increase for core general practice is only £85m when adjusted for inflation and will not go very far,” he said.

Becks Fisher, director of research and policy at the Nuffield Trust, said the 3.6% settlement was “much more sparing” than last year's deal and that without additional in-year funding boosts “money will not be shifting towards GPs and their practices, despite the commitment to offer patients more of their care outside hospital.”

Victoria Tzortziou Brown, chair of the Royal College of GPs, said the new contract contains “some steps forward” in tackling the GP workforce crisis but said “significant” longer term investment is needed “to bring patient-GP ratios, which are currently 15% higher than in 2015, down to safer levels.”

? **How does the government want to improve access?**

The access commitments are the main reason that the BMA's GP Committee for England (GPC England) has rejected the deal.

The contract requires that patients' requests identified as clinically urgent—as determined by the practice—must be dealt with on the same day. It also requires that practices must not ask patients to call back or make contact on another day.

Katie Bramall, chair of GPC England, said, “We expect the government to frame this GP contract as a major win for patient access, but hard working family doctors will be deeply concerned about setting up even more unrealistic expectations of unlimited, same day, urgent care provision alongside potential barriers being put in place around specialist referrals, all while trying to keep practices open

A cash uplift of 3.6% is unlikely to leave practices with a significant funding increase for the year ahead
Andy Pow



and prevent even more surgery closures.”

Amanda Doyle, NHS England’s national director for primary care and community services, said the ringfenced £292m would help practices provide this level of service by allowing them “to recruit more GPs and strengthen the care they provide.”

In addition, practices will be allowed to hire experienced GPs through the additional roles and reimbursement scheme. Currently the scheme only allows newly qualified doctors and non-medical support staff to be recruited.

Tzortziou Brown said that, while “long overdue” investment in general



The obesity enhanced service payment scheme is also being dropped in favour of two new QOF targets to provide weight management services, including delivering weight loss injections such as tirzepatide (Mounjaro).

To help tackle falling vaccination rates, additional improvement thresholds will be introduced to QOF to provide more support to practices, often in deprived areas, that struggle to meet existing coverage thresholds but demonstrate “meaningful and sustained improvement” in vaccination uptake.

Practices will also be expected to offer respiratory syncytial virus vaccinations to all registered older adult care home residents and all patients over 80 who have not previously been vaccinated.

Beccy Baird, senior fellow at the King’s

Fund, welcomed the emphasis on prevention and tackling health inequalities and said extra financial support to general practices in areas with low childhood vaccination uptake was a “crucial” step.

But she added, “Questions remain about how achievable these ambitions are without sustainable, long term planning for the right workforce makeup in general practice.”

Tzortziou Brown made a similar point, saying that while QOF and vaccination payment changes “appear logical” they have “potentially significant resource implications.”

? What other changes does the deal include?

The government is scrapping the £20 fee paid each time a GP seeks “advice and guidance” from a specialist. This payment will now be embedded in core practice funding, a step that Tzortziou Brown said required caution.

“Our members have raised concerns over how its use varies across the country, how delays and potentially blocked referrals can jeopardise patient safety, and how it can push workload from secondary to primary

care without clear resourcing, consistent clinical governance, or sufficient consideration of the downstream consequences for capacity and care quality,” she said.

Also new is a mandatory requirement for GPs to provide NHS England with data to support the lung cancer screening programme.

NHS England intends to collect practice level data on access and demand so it can develop appropriate future interventions.

Practices will also have to provide data on video and online consultation services so NHS England can monitor access, patient experience, and system performance by measuring areas such as call waiting times between 8 am and 10 am and during core hours, percentage of clinically urgent patients seen on the same day, and percentage of “non-clinically urgent” patients seen in a week.

? What happens next?

GPC England voted to reject the deal on 26 February. It will now carry out a referendum of its members on whether to accept the contract or ask the government to “return to direct negotiations” with the committee.

The BMA has criticised the government for departing from previous contracts by not solely negotiating with GPC England. The government consulted other stakeholders such as the Royal College of GPs, National Voices, the Institute of General Practice Management, Healthwatch England, the NHS Confederation, and the National Association of Primary Care.

Bramall said, “Unless we see the government return to the negotiating table and enter into serious one-to-one negotiations over a new contract with GPC England—as promised repeatedly by secretary of state Wes Streeting—to restore the viability of partnerships and practices, deliver safe working practices for patients, and fair remuneration for all GPs, the profession will be left with no alternative but to escalate to action to protect ourselves and our patients.”

● HELEN SALISBURY, p 251

Adrian O’Dowd, Kent
Cite this as: *BMJ* 2026;392:s390



Any increase is welcome but this merely tinkers around the edges

Steve Taylor



Family doctors will be deeply concerned about setting up even more unrealistic expectations

Katie Bramall



Questions remain about how achievable these ambitions are

Beccy Baird

The GP CONTRACT £485m

for 2026-27 includes a uplift in core funding

practice is welcome, “it will not solve our capacity problems overnight or guarantee an ability to meet ambitious access targets.”

The contract also requires practices to keep online consultation systems open throughout core hours (8 am to 6:30 pm, Monday to Friday) so patients can contact their GP digitally as well as by telephone and walk-in access.

? How is QOF changing?

The quality and outcomes framework (QOF), which rewards practices for hitting specific clinical targets, is being updated to align with National Institute for Health and Care Excellence guidance on childhood vaccinations, diabetes care, obesity, and heart failure.

These changes will be supported by an additional 18 QOF points, with a combined value of £25m.

Several QOF measures are being combined. For example, there is a new blood pressure control indicator for patients aged up to and including 79 without frailty—combining and replacing the separate coronary heart disease and stroke blood pressure control indicators.

Is the UK's creaking water network eroding a key cornerstone of public health?

- Recent outages left up to 30 000 households without drinkable water
- Come amid legal action against water firms over threats to human health
- Experts warn the UK may be taking the guarantee of clean water for granted

In January as many as 30 000 households across Kent and Sussex had no water. Schools closed and some hospital appointments had to be carried out virtually. The prime minister called the outage “totally unacceptable.”

The company South East Water—which was already being investigated by the Drinking Water Inspectorate and the water services regulator Ofwat for intermittent supply problems—blamed Storm Goretti for the crisis.

The storm, along with freezing weather, caused bursts and leaks in pipes as well as upstream problems at a treatment plant that affected water quality.

Although this was a major event, the disruption is just the latest consequence of a creaking and antiquated water system.

Thames Water, for example, is facing legal action from campaigners who say that sewage pollution from storm overflows and raw sewage discharges as a result of a failure to upgrade treatment plants is making rivers unsafe and is a direct threat to people's health.

And in 2024 more than 140 people in Devon became ill after an outbreak of cryptosporidium, a microscopic parasite that is resistant to chlorine. It causes nausea, vomiting, and diarrhoea and is transmitted by swallowing contaminated water. The outbreak led to South West Water being taken to court.

Reported figures show that in 2025 more than 1200 people became ill after swimming in designated bathing waters across England, despite three quarters of those spots being rated “good” or “excellent.”

Last year the Environment



A typical person in the UK gets six cubic meters of potable quality water in their house every month. We put most of it down the toilet

Barbara Evans

We've not done enough to maintain the quality of the distribution network

Paul Hunter



Agency rated England's water companies' performance the worst since 2011.

Last summer an independent report commissioned by the government from Jon Cunliffe, the Bank of England's former deputy governor, called for “fundamental reform” of the water sector. It made 88 recommendations that included a complete overhaul of regulation and better management of risks to public health.

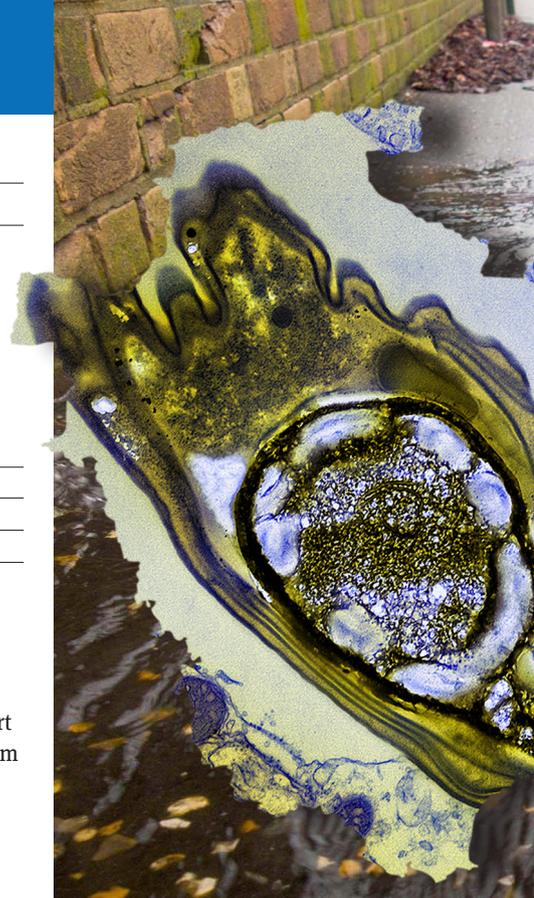
In response the government published a white paper, *A New Vision for Water*, promising a single integrated regulator, a ban on unfair bonuses, and billions of pounds of investment to reduce leakage, shore up water treatment plants, and build new reservoirs. Ministers are also promising joined up, long term planning and “MOT-style” checks on pipes, pumps, and other parts of the system.

Environment secretary Emma Reynolds says, “These are once-in-a-generation reforms for our water system—tough oversight, real accountability, and no more excuses.”

Just a sticking plaster?

Yet public health experts warn this could merely be another “sticking plaster” and that plans may not be radical enough. They say the consequences to human health of not getting it right are dire.

Rapid urbanisation and industrialisation in the 1800s led to a surge in waterborne diseases. Epidemiologist John Snow traced a cholera outbreak to a single water pump in London, leading to changes in management of water and waste across the country. More regulation, including the Public Health Act of 1875, followed.



The Victorians undertook giant and ambitious infrastructure projects, which is why Birmingham's water comes from Wales and Manchester's from the Lake District. By the 20th century most was under the control of local government.

Barbara Evans, chair of public health engineering at the University of Leeds, says that when Margaret Thatcher sold all the water assets in England and Wales to the private sector in the late 1980s the UK became one of only two countries in the world to have done so.

Regardless of the public versus private debate, “we have never really admitted that we basically pay nothing for water,” she says. “A typical person in this country gets six cubic meters of potable quality water in their house every month, and we put most of it down the toilet. We haven't had a cholera outbreak since 1875.”

She adds, “The underlying problem is that we're sitting on 160 year old infrastructure, which is amazing but needs rebuilding.”

An example of the “endless sticking plasters” is the “incredibly expensive” Thames tideway, Evans says. It was built to capture almost all the raw sewage and rainwater from combined sewers that would otherwise overflow into the river during heavy rain.

“It's a wonderful piece of engineering, but there was an



integrated water systems at Sheffield University, says improvements to the infrastructure in recent years are happening at a faster rate than previously but argues that the UK remains complacent. The pipe network is “highly vulnerable,” she says. “We don’t even know the age of half the pipes, and the ones we do know are probably 75 years old, on average.”

Having lived all over the world, including in the US and Canada, Speight finds it “mindboggling” how much people in the UK complain about the price of their water bills. She says that other countries have lived with water rate increases much as they have with rising energy costs.

With a shake up of regulation, there is an opportunity to make it mandatory for water companies to replace so many miles of pipe each year. But “the system is so entrenched, it’s going to be hard to completely change it,” she says.

Investors and shareholders

When people see water being wasted from burst pipes while water company bosses walk away with huge bonuses, it is hard to make the case for rate increases for consumers, agrees Speight. But the water companies were designed to find investors and make profits for shareholders. “The system was cooked from the start. We made them that way, and now we’re living with the consequences,” she says.

The true cost of illness from the water system is not acknowledged or accounted for, she adds, with many pathogens not reported—when people become ill without knowing the source, for example.

The US Centers for Disease Control and Prevention has estimated that 7.15 million episodes of waterborne illness occur annually in the US with direct healthcare costs of more than \$3bn (£2.2bn).

“The figures are eye opening, and the UK needs to get a handle on that underlying burden of disease,” Speight says. “When you’re just getting by, and you’ve got crumbling pipes, and it’s okay on a good day but not when a bad day comes, that’s not really a ‘fit for the future’ kind of system.”

Emma Wilkinson, Sheffield
Cite this as: *BMJ* 2026;392:s378



We don’t even know the age of half the pipes we use—the ones we do know are probably 75 years old, on average

Vanessa Speight

alternative that no one talked about, which was to dig up all the combined sewers in London and replace them with separate sewers and plumb every house with rainwater catchers and grey water flushing systems,” Evans says. “We could have equipped London for another 100 years, but actually we’ve equipped it for 20 years at best.”

Asset not cost

Infrastructure is always presented as a cost rather than an asset, and we have lost sight of its value, Evans argues. “This is foundational public health and security infrastructure,” she says, and if it doesn’t work almost everything falls apart, be it healthcare, schools, or businesses.

Antimicrobial resistance is a perfect example that is rarely discussed, she adds. “If you have a failing sanitation system, you create pools of anoxic, nutrient rich, warm sludge full of all the bugs that came out of people’s guts, plus any antibiotics they consumed.

“You’re basically creating the perfect laboratory conditions for generating resistance to antibiotics.”

Evans says that clean water is “a lifesaver for the NHS” as the health

service would struggle to cope if there were a large increase in waterborne infections.

Paul Hunter, professor in medicine at Norwich Medical School, has spent his career responding to and studying infections in drinking water.

He emphasises that the UK is in a much better place now than in the 1990s, when there were large numbers of cryptosporidium outbreaks. He adds that “we have some of the best quality drinking water in the world.”

But there are valid concerns, and the greatest risk is in the pipes and service reservoirs that come after the water treatment plants. “We’ve not done enough to maintain the quality of the distribution network,” he says. “Getting that updated is a huge task but something we need to do.”

Water quality at recreational bathing sites also needs tackling, and Hunter is working on a project to monitor and assess the 2000 spots that people use for swimming.

Yet he says the reality is that investment must be balanced with other competing and urgent priorities, including in public health.

Vanessa Speight, professor of

IN 2025 reported figures showed more than **1200** people became ill after swimming in designated bathing waters across England, despite three quarters of those spots being rated “good” or “excellent”

THE BIG PICTURE

THE ART OF GROWING OLDER: new exhibition reflects on perceptions of ageing

The Wellcome Collection's upcoming exhibition *The Coming of Age* presents experiences and perceptions of ageing and asks how societies can adapt for everyone to age better.

One in 10 children in the UK are expected to live beyond the age of 100. But who gets to live longer and "age well"? More than 120 works by artists such as Serena Korda and Paula Rego consider how age and ageing are shaped by our environment, culture, and society.

Bringing together perspectives from art, science, and popular culture, the exhibition aims to challenge assumptions about life stages and asks what greater longevity means for us all.

The Coming of Age, 26 March to 29 November, Wellcome Collection, London NW1 2BE

Alison Shepherd, *The BMJ*

Cite this as: [BMJ 2026;392:s413](#)



1



3



- 1 Wild Apples, Serena Korda
- 2 King Me, Deborah Roberts
- 3 Por um fio (By a Thread), Anna Maria Maiolino
- 4 I'm Having a Mid-Teen Crisis, Flo Brooks
- 5 Nursing, Paula Rego



Eliminating female genital mutilation by 2030

Elimination must build on locally driven, grassroots achievements

Global efforts to eliminate female genital mutilation (FGM) stand at a crossroads, with uneven progress, commitments increasingly tested,^{1,2} and 4.5 million girls at risk of FGM in 2026 alone.³ Achieving elimination of the practice by 2030 (a sustainable development goal¹) looks unlikely without a big shift in political commitment, financing, and momentum in changing social norms. Nonetheless, the global community has consensus on ending FGM, and we must strive to achieve it.

FGM is defined as the partial or total removal of, or other injury to, the external female genitalia for non-medical reasons.⁴ It offers no health benefits and is associated with immediate and long term health risks that include bleeding, infections, and complications for sexual, mental, and obstetric health.⁴ FGM is reported in at least 94 countries.⁵ It is internationally recognised as a violation of multiple human rights, including the rights to health, bodily integrity, freedom from violence, and freedom from discrimination, all of which supersede the right to express culture or tradition.⁶

More than half (62%) of the countries where FGM has been reported have enacted legislation prohibiting the practice,⁷ and seven countries (Benin, Cameroon, Ghana, Maldives, Niger, Togo, and Uganda) are on track to have no new cases by 2030. However, the pace of elimination in some countries remains stagnant, and in others it would need to increase over 10-fold to meet the zero goal by 2030.¹ Data on FGM prevalence and typology in parts of South East Asia in particular, are limited,⁸ but available evidence indicates substantial numbers of women and girls are affected.

One barrier to elimination is a growing counter-movement from some Islamic and political leaders



Freedom from violence and discrimination supersedes the right to express culture or tradition

that frames FGM as a right to cultural or religious expression.⁹ Furthermore, sections of academia have pushed back against a standardised member state driven rights based agenda to end FGM, instead supporting a supposed diverse “culturally sensitive” and permissive stance.¹⁰ Others propose that certain types of FGM are non-harmful, and even promote the involvement of health workers to improve “safety.”⁹⁻¹³

But leading Islamic bodies and scholars have delinked FGM as a religious rite.¹⁴⁻¹⁶ Moreover, arguments about an external agenda negate the historical achievements of locally driven grassroots efforts to abandon FGM, which have inspired a global movement on its elimination. Extensive evidence on health complications associated with FGM⁴ shows why it is unethical for health workers to participate.

Local data and investment

Respectful and constructive dialogue is needed to close the cultural gap between local beliefs and international human rights standards.¹⁷ Consent, dignity, protection, bodily integrity, non-discrimination and health are the rights of every girl or woman and need to be central in these conversations. The evidence base must be decolonised by considering data gathered locally in Africa or Asia from grassroots led elimination initiatives that often pre-date global ones. Finally, we must increase

dissemination and translation of local historical knowledge and solutions that incorporate the perspectives of affected communities into FGM elimination.

Management of FGM related health complications is estimated to cost \$1.4bn annually,¹⁸ and \$2.4bn is required to eliminate FGM in high prevalence settings.¹⁹ Domestic government financing needs to be scaled up to match international commitments; other forms of financing might include development or social impact bonds (which shift financial risk from governments and donors to investors and encourage results rather than inputs)²⁰ and public, philanthropic, private capital and crowd funding.

Gaps in data and monitoring can be addressed using validated methods such as snowball methods²¹ and small areas estimation informed by administrative data, which are tailored to smaller populations and hard-to-reach groups. These would provide a granular understanding of changing practices in specific subnational regions to complement data from large scale population based surveys. A feasible and cost effective means of strengthening accountability and guiding adaptive programming is to improve tools and indicators that capture shifts in social pressure or values supporting FGM that are thought to precede individual or community abandonment.²² These data could be collected by community workers and routine administrative or information systems.

Millions of girls remain at risk, but change is possible. With strong leadership, smart investment, and community driven action, elimination of FGM could be attained as we move towards the end of the sustainable development goal era and onwards.

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Curbing health harms from microplastics

Policy action lags behind growing evidence

Microplastics have emerged as a serious environmental and public health concern in recent years. Initially regarded as an environmental problem affecting marine organisms, microplastics have been detected in food, drinking water, indoor and outdoor air, and, more recently, in human tissues and biological fluids, and are now recognised as a human health concern.^{1,2}

Despite this growing understanding and awareness, legislation and regulation of microplastics is still under development, and a more operational approach is needed to prevent microplastics from entering the environment.³

Microplastics are defined as plastic particles smaller than 5 mm, originating either from intentional production at small sizes—such as in cosmetics or biomedical products—or from the environmental breakdown of larger plastic materials, including food packaging, tyres, and synthetic textiles. Nanoplastics, typically defined as plastic particles smaller than 1 µm,⁴ are also an emerging concern because of their higher cellular uptake and broader tissue distribution in mammals.⁵

Health harms

In recent years, growing attention has focused on the potential health harms posed by the ubiquitous presence of microplastics and nanoplastics, which enter the body through ingestion, inhalation, and dermal absorption.⁹

Studies on the health effects of microplastics in different organs or cells have increased substantially in the past five years, mostly using laboratory based methods. Microplastics exert adverse biological effects in several organs with common pathways of physical damage, oxidative stress, inflammation and genotoxicity, and



Microplastics are implicated as contributors to neurodegenerative, cardiovascular, endocrine diseases and cancer

are implicated as contributors to neurodegenerative, cardiovascular, and endocrine diseases and cancer.¹¹

Few clinical or epidemiological studies have been done, probably because of the difficulties in obtaining samples and lack of standardised analytical techniques. Avoiding plastic contamination during sample collection and analysis is a major challenge. Also, it is difficult to characterise exposure and define vulnerable populations, given the widespread human exposure to plastics. A prospective, multicentre, observational study involving 309 patients reported that those who had carotid artery plaques containing microplastics or nanoplastics had a four times higher risk of myocardial infarction, stroke, or death from any cause at 34 months of follow-up than those with no microplastics detected.¹²

Another prospective observational study of 110 patients with acute myocardial infarction in China found that the concentration of polyvinyl chloride (PVC) was higher in patients who experienced major adverse cardiac events during the 31.5 weeks of follow-up. Concentrations of PVC in coronary blood correlated with several proinflammatory cytokines.¹³ Both studies indicate that circulating microplastics may significantly affect the cardiovascular system.

Health protective global treaty

Decreasing plastic production is critical to reducing microplastic pollution, but at the global level,

regulation is still in its early stages. Some regions and countries are implementing national or regional bans, restrictions, or targets for specific categories of plastic. For example, the European Union has adopted a plastics strategy and directive on single use plastics to phase out certain disposable items and establish recycling targets¹⁴ and is also evaluating regulatory approaches for intentionally added microplastics (eg, in cosmetics, detergents, and industrial applications) to curb their release into the environment.^{15,16}

Negotiations for a legally binding international treaty to address plastic pollution have been ongoing since 2022.¹⁷ However, a coalition of oil and gas producing countries and industry groups is trying to limit the treaty to waste management and recycling, opposing discussions on a full lifecycle approach and the regulation of the toxic chemicals present in plastics.¹⁸

The treaty also has important gaps related to microplastic pollution, such as definitions, monitoring protocols, source attribution, and transboundary regulatory enforcement.¹⁹ Human health is at risk in all stages of the plastics life cycle²⁰ and therefore should be central to development of the global treaty.^{21,22}

Plastic production is projected to double by 2050, which will lead to higher microplastics and associated contaminants in the environment.²³ The health sector and health professionals have a responsibility to protect human and planetary life from this toxic material.²⁴ Expanding medical research is crucial to better understand how microplastics affect human health, as is advocating for microplastics and their impacts to be properly addressed in the global plastic treaty discussions and local regulations.

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BMJ INVESTIGATION

The growing health threat of domestic wood burning stoves—and the industry’s legal attempts to shut down clean air campaigns

As public health officials warn about rising urban wood pollution, a BMJ investigation finds that just under a third of councils in high use areas have faced pressure from the stove industry to tone down or withdraw campaigns. **Sophie Borland** investigates

Councils in England are being threatened with legal action for running public health campaigns warning against the use of wood burning stoves, *The BMJ* can reveal.

Freedom of information requests found that just under a third of the councils in England with the highest concentration of wood burning stoves had been threatened with legal action or lobbied by the Stove Industry Association (SIA). Other local authorities have received



Studies show reducing wood burning pollution leads to improved health
Gary Fuller

leaflets from the main stove trade group claiming that wood burning can be good for you by lowering blood pressure and stress.

UK government emission data show that domestic burning is a major source of fine particle air pollution (PM_{2.5})—particles of 2.5 micrometres or less that the World Health Organization considers the most harmful pollutant to human health. Outdoor PM_{2.5} pollution, which includes residential heating as a predominant source, has been classified by WHO as a carcinogen

that causes lung cancer and is associated with an increased risk of bladder cancer.

In the UK, PM_{2.5} emissions from domestic burning are comparable to levels from road transport, with wood burning responsible for around 50% of PM_{2.5} released from fires in the home. Figures suggest that one in 10 homes in England now own a wood burning stove. The fine particles released can enter the bloodstream and internal organs, and there’s a growing body of evidence associating PM_{2.5} exposure with a range of debilitating health conditions, including cardiovascular disease, cancer, and asthma (box).

Senior government advisers, including the chief medical officer for England, Chris Whitty, are particularly concerned about these stoves. Whitty tells *The BMJ* that their rise in popularity in urban areas “contributes a significant and growing proportion of air pollution and in some places is reversing many decades of progress.”

The government’s 10 year health plan for England states that domestic burning is “a major source of emissions of harmful particulate matter, especially in urban areas.” The newly launched UK consultation on solid fuel burning could see mandatory health warnings added to new stoves, akin to those on cigarettes.

Not all forms of domestic burning are equally polluting: when compared with open fires, the newer “eco” stoves reduce air pollution emissions by as much as nine times. But research cited by Whitty has shown that even the newest stoves emit considerably more pollution than a gas boiler or electric heating.

Gary Fuller, air pollution scientist at Imperial College London, says, “Wood burning seems natural, but it’s misleading to think that it’s harmless. Smoke from wood burning adds to the particle pollution in our air. It also contains many harmful chemicals, some that carry a risk of cancer. Numerous studies show that reducing wood burning pollution leads to improved health. This should be our goal.”

Local public health campaigns—including those run by the

What are the health effects of wood burning stoves?

A 2020 systematic review in *Lancet Global Health* found that indoor air pollution, including domestic wood burning, was associated with heart and lung disease, lung cancer, strokes, stillbirth, and asthma. Lighting fires at home is a major source of small “particulate matter” that can enter the bloodstream and be transported around the body, lodging in the heart, brain, and other organs.

The Stove Industry Association (SIA) argues that the review includes data from low income countries, where exposure is typically driven by open fires and very basic stoves. However, a 2023 North American cohort analysis of 50 226 non-smoking women found that using fireplaces or wood stoves for more than 30 days a year was associated with a 68% rise in lung cancer risk. The SIA said that the study didn’t distinguish between open fires and modern stoves.

Research from Imperial College London in 2024 linked short term exposure to carbon particles, including those from wood burning, with a higher risk of death from respiratory causes.

England’s chief medical officer, Chris Whitty, has repeatedly warned that an “enthusiasm for wood burners” in the UK is worsening indoor air pollution. Although new eco design stoves emit less particulate matter than older models, Whitty’s 2022 report said that they still produced 450 times more toxic air pollution than gas central heating. (Older stoves, now banned from sale, produce 3700 times more.)

A study in *Scientific Reports* last July showed that, although the improved stoves reduced pollution overall, they still produced significant spikes during refuelling, lighting, and ash removal.

The SIA argues that emissions of PM_{2.5} and PM₁₀ from domestic combustion fell by 17% from 2020 to 2023. A spokesperson says, “This can be attributed to several factors, including adoption of modern stove appliances, the use of better quality fuel, and increased consumer awareness of the importance of burning best practice.”

Laura Horsfall, of University College London’s Institute of Health Informatics, tells *The BMJ*, “Recent research shows that even eco design and other modern stoves can emit ultrafine particles into the home during normal use.

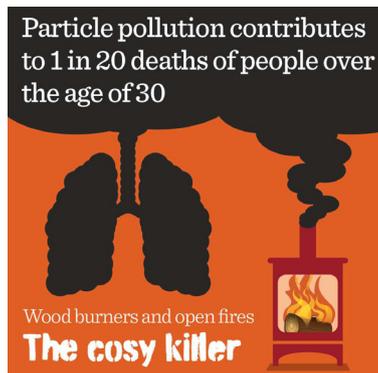
government funded London Wood Burning Project, representing London borough councils—have seen the stove industry take action against them for asking households to think twice before lighting their fires and wood burners.

The SIA, which represents stove manufacturers, suppliers, and retailers, said that it took very seriously the allegations that it had wrongly threatened councils and said that several factors had been taken out of context.

“The correspondence we have had with local authorities and trading standards has been aimed at trying to provide a balanced and educational position on behalf of our members,” it told *The BMJ*. “At no point have we intentionally set out to undermine public awareness about the health effects of domestic wood burning. Air quality is a key priority for the SIA. Our members have worked and continue to work hard to drive down emissions by improving technology.”

“Careless not cosy”

The BMJ sent freedom of information requests to the 50 councils in England with the highest number of wood burning stoves per area, identified using data collected by researchers at University College London’s Institute of Health Informatics. In total, 15



Public health campaign from Brighton and Hove City Council whose claims are disputed by the stove industry

authorities (30%) had received emails from the SIA, including letters threatening legal action, as well as press releases about the supposed benefits of wood burning.

Eight London boroughs—Croydon, Haringey, Islington, Lewisham, Merton, Richmond, Southwark, and Wandsworth—were threatened with legal action in late 2023 over a joint public awareness campaign about the harms of wood burning. The SIA argued that flyers stating that wood burners were “careless not cosy” had breached the UK’s advertising codes because they were dishonest, inaccurate, and not backed up by evidence. The trade group also objected to a cartoon of a smoke plume with an angry face, which it claimed was “excessively large” and



Particle pollution is twice as high in winter as in summer
Tim Rowkins



It’s not for industry to scare off councils from communicating health advice to residents
Larissa Lockwood

too close to the ground.

The SIA told the London boroughs that it was seeking advice on “whether legal action will be appropriate” over breaches of the advertising code. It was also “exploring options for potential legal action” over unfair trading laws. In the event, the Advertising Standards Authority (ASA) took no action, and the SIA didn’t take legal action.

But the threat has had a chilling effect, councils tell *The BMJ*. Tom Parkes, air quality programme manager for Camden Council, which leads the London Wood Burning Project, says, “It’s had quite a detrimental effect on local authorities’ confidence. There’s a degree of worry about what happens if we are challenged, even if we’re confident that the science backs up what we’re saying.”

Watchdog raps “cosy killer” campaign

Brighton and Hove City Council has also faced pressure over a public health campaign warning that wood burning was a “cosy killer.”

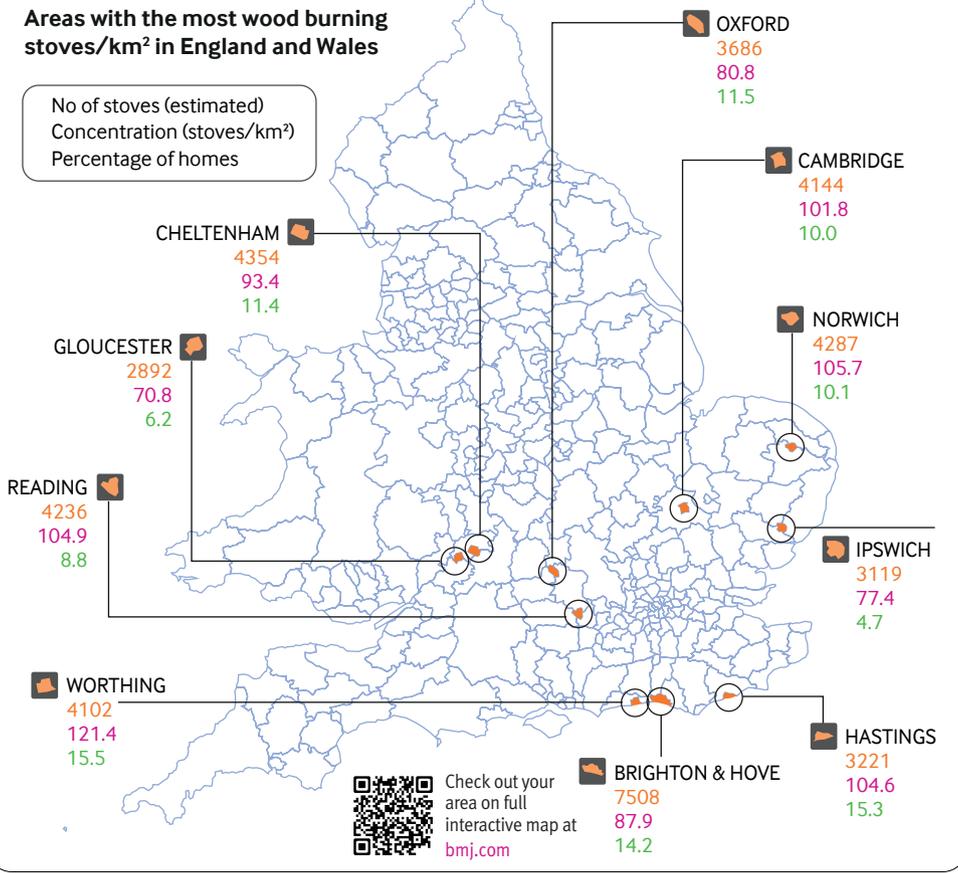
Hove Wood Burners, a local stove business and SIA member, complained to the ASA last year. The ASA investigated and advised the council not to make one particular claim—that particulate pollution was linked to one in 20 deaths—unless it had “adequate evidence.” This wasn’t a formal ruling, but the SIA and one stove manufacturer called it a “key development” in wood burning and a “return to common sense,” in news stories on their websites.

The council relaunched the campaign again this winter, still making the disputed mortality claim, and Hove Wood Burners has said that it has filed another complaint to the ASA. Data from air quality sensors across Brighton and Hove showed dramatic increases in harmful particle pollution last winter, peaking at 10 pm, when wood burners would typically be lit.

A local councillor, Tim Rowkins, tells *The BMJ* that particle pollution in Brighton and Hove is twice as high in winter as in summer. “I don’t think you could sit and look at that data,

Areas with the most wood burning stoves/km² in England and Wales

No of stoves (estimated)
Concentration (stoves/km²)
Percentage of homes



SOURCE: UCL

tells *The BMJ*, “I’m shocked. I’ve actually never heard of anything like this—industry lobbying public health servants to ignore a serious public health issue and go against medical advice. If health researchers and the chief medical officer of England and the government in their 10 year health plan all recognise that domestic burning is a public health problem, then it is a public health problem.”

“It’s not for industry, who are obviously selling domestic burning products, to go around telling councils otherwise and scaring them off from communicating the facts and the health advice to residents.”

Jemima Hartshorn, founder of the campaign group Mums for Lungs, which campaigns to end the use of wood burners, tells *The BMJ*, “Commercial bodies with financial interest are putting pressure out there to stop health information. For local authorities, the threat of being sued is a real concern—there’s a lot of financial and media pressure on them when this happens.”

“Health and wellbeing” claims sent to councils

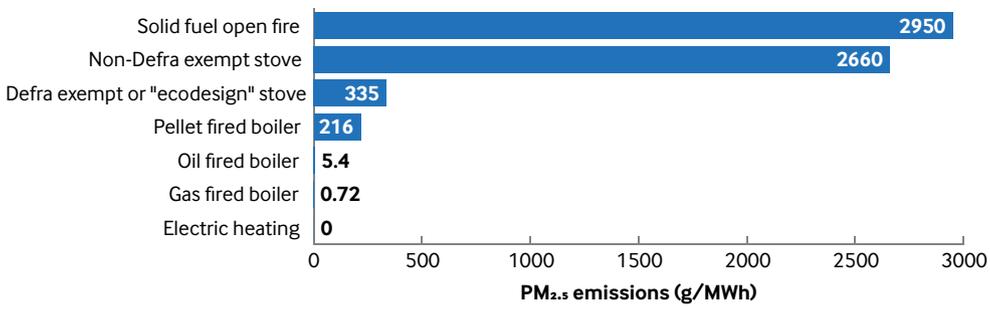
Three councils—Dudley in the West Midlands, Elmbridge in Surrey, and Rushmoor in Hampshire—were sent leaflets from the SIA claiming that wood burning provides “health and wellbeing benefits.” The trade group claimed that it helped to lower blood pressure, reducing anxiety and depression, and contributed to a “better sense of family cohesion and togetherness.”

Dudley Council also received a video from the SIA rebutting the “misconceptions” that wood burning stoves were harmful. The video claimed that “eco” stoves were the “future of low carbon, low emission, sustainable heating.” The Dudley councillor Phil Atkins tells *The BMJ* that the information sent by the SIA “is not something the council has used nor promoted.”

A spokesperson for Elmbridge Borough Council says that it has a “statutory duty to review and assess local air quality and to take proportionate action to protect public health.”

Fires and stoves are hundreds of times more polluting

Relative PM_{2.5} emissions from domestic heating methods



CHIEF MEDICAL OFFICER’S ANNUAL REPORT 2022

especially comparing the winter to the summer months, and not see that there’s a very major thing going on,” he says. “The key thing is that in almost every case, people who are burning wood at home are doing so because it’s nice to do. They’re not doing it instead of their central heating.”

In November the ASA ruled against the SIA for its advertising claim that modern stoves burning dry wood fuel can “significantly lower emissions and improve efficiency compared to an open fire or older stove.” The ASA pointed to the official database of air pollutants in the UK, which showed that while modern stoves emitted considerably less PM_{2.5}



For councils the threat of being sued is a real concern
Jemima Hartshorn

than open fireplaces, they actually produced more PM_{2.5} than the older stove types listed.

Asked to show proof of harm

Oxford City Council received an email from the SIA in December 2022 after a similar public health campaign. The trade group requested evidence that wood burning harmed health and claimed that there was “no scientific evidence” for “adverse” health effects, but it didn’t threaten legal action.

Larissa Lockwood, director of policy and campaigns at the climate action charity Global Action Plan,



The growth of wood burning stoves in some places is reversing many decades of progress
Chris Whitty



People aren't aware they're polluting themselves in their home
Matthew Clark



Some campaigns by local authorities were not balanced
SIA

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Adur and Worthing Councils in West Sussex were sent a series of emails and press releases from the SIA from 2022 to 2024 promoting the benefits of stoves. The SIA cited an unpublished literature review from the University of Manchester that it had funded, which found “no scientific evidence” for adverse health effects from modern wood burning stoves.

The review, seen by *The BMJ*, also gave the caveat that a lack of scientific evidence didn't mean no risk, highlighting WHO's warning that there's “no safe level” of particulate matter exposure and saying that “data in the context of developed world studies is extremely limited.” This wasn't reported in the SIA's publicity material.

Eastbourne Borough Council in East Sussex received press releases in February and June 2024 arguing that “eco” stoves produced very few harmful emissions.

Commenting on *The BMJ*'s findings, Jonathan Blades, head of policy at the charity Asthma + Lung UK, says, “These tactics by the stove industry clearly try to undermine public awareness of those risks, and that means people aren't able to make informed decisions for their health. That's a real concern that the councils need to address.”

An SIA spokesperson tells *The BMJ*, “There were some campaigns by local authorities that we and our members felt were not balanced and could, in our opinion, be seen as scaremongering the public. It was these that we challenged. That action was not to oppose public health objectives but to try to seek to ensure that the messaging used was fair and balanced.”

Nineteen of the 50 councils said that they hadn't run any sort of public health campaign on wood burning stoves in the past five years, and 15 said that they had no plans to launch one this winter.

“It's a hard backdrop to be fighting against,” says Matthew Clark of the Chartered Institute of Environmental Health's advisory panel on pollution. “It's a very, very challenging time for local authorities. People aren't aware that they are polluting themselves

ONE FINE, FROM 476 COMPLAINTS

Public health campaigns are one of the few avenues open to local councils concerned about domestic wood burning. By law, only local authorities with smoke control areas have the powers to hand out fixed penalty notices. These zones—mainly in large towns and cities—prohibit households from releasing visible smoke from a chimney. The law in these areas also states that households can use stoves only if approved by the Department of Food, Environment and Rural Affairs (Defra) as being relatively efficient and less polluting.

The BMJ's investigation discovered that only a single fine for domestic wood burning had been issued by just one of the 50 councils in the past two years. Bristol City Council told us that it had handed out a fixed penalty notice of £180 after a complaint about “chimney smoke” in 2023-24. Twenty of the 50 councils had no smoke control areas within their boundaries—meaning that they had no powers to issue fines or ensure that residents used Defra approved stoves.

Even in smoke control areas, where residents are not allowed to produce visible smoke, this doesn't tackle the harmful ultrafine particles from wood burning stoves, which are invisible. James Heydon, assistant professor in criminology at the University of Nottingham, says, “Councils are very limited on what they can do. Smoke control areas tackle visible smoke—but this isn't the main issue. Smoke control areas allow Defra approved stoves that emit PM_{2.5} and therefore exempt the very thing which is the problem. It's a really difficult situation.”



within their own home and that this pollution often stays trapped in there when they're doing it.”

Whitty tells *The BMJ*, “Air pollution is an extremely important, solvable health problem that leads to many diseases, including asthma in children, cancers, heart disease, and stroke. The effects of air pollution are greatest on the most vulnerable people—children, pregnant women, and people with pre-existing cardiovascular or lung conditions who can be exposed to outdoor air pollution without any choice.

“In urban areas, high concentrations of medically vulnerable people and high concentration of solid fuel burning can combine. The growth of wood burning stoves in urban areas now contributes a significant and growing proportion of air pollution and in some places is reversing many decades of progress.”

Laura Horsfall of the Institute of Health Informatics says, “We need clearer and more honest public

health messaging. Wood burning is often marketed as natural, cosy, or environmentally friendly. There's also a need for greater awareness that even ‘eco design’ stoves are not pollution free.”

Horsfall cites the ASA's finding against the SIA that “the data did not show a significant decrease in all relevant GHG [greenhouse gas] and other air pollutant emissions between older stoves and open fireplaces, and Ecodesign stoves.”

A Defra spokesperson says, “Dirty air robs people of their health and costs our NHS millions each year. We've set new ambitious targets to cut air pollution by a third by 2030, including the public's exposure to fine particulate matter—the pollutant most harmful to human health.

“To help reach this target, we are planning stricter limits on newly purchased stoves and health labels for fuels, as we strive to protect public health and the environment.”

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“Are you scared of Reform?” Marmot urges PM to be bold on child poverty

Lifting the two child benefit cap is an important step in the right direction by the government but will still leave 4.15 million children living in poverty, Michael Marmot tells **Elisabeth Mahase**

The UK’s leading expert on health equity questions why the Labour government has gone back on its promise to make England a “Marmot” country and urges Keir Starmer to take bold action to tackle child poverty.

In an interview with *The BMJ*, Michael Marmot says that Labour “invited me with open arms when they were in opposition” but that, since getting into government, “the arms have been a bit more folded.”

In the run up to the 2024 election, Starmer’s Labour Party promised to follow the example set by “Marmot cities” such as Manchester by adopting the Marmot principles (box) and implementing policies that would improve health equity by giving “every child the best start in life” and ensuring “a healthy standard of living for all.”

Eighteen months after taking power that promise has yet to come to fruition.

“Who are you scared of? Reform? The *Daily Mail*? I mean, who are you scared of? Say, ‘We want a better, fairer, healthier Britain, and this is the way we are going about it,’” Marmot says.

Marmot tends not to get involved in party politics, but he says that he wants Starmer and his cabinet to “be much bolder.” “If their political strategists say, ‘No, we’ve got to be cautious,’ well, okay, but you can’t say that’s an absolutely brilliant strategy—because you’re not terribly popular.”

When *The BMJ* asked the government why it had failed to follow through on the pledge, a spokesperson did not answer the question directly. They said: “This government’s ambition is to give every child the best possible start in life—regardless of their background. That’s why we’re taking action on the wider factors that shape children’s health, not just healthcare alone.”

They added that the child poverty strategy “sits at the heart of our commitment to raise the healthiest generation of children ever” and that “we’ve also put children at the centre of our 10 year health plan.”



Politicians should focus on policies rather than on insults or culture wars

Sharp increase in child poverty

Marmot conducted the landmark report *Fair Society, Healthy Lives* (the “Marmot review”) in 2010, commissioned by the then Labour government, and he now heads up the UCL Institute of Health Equity. He advises local and national governments around the world on how to reduce health inequality.

He has been critical of the policies implemented under the coalition and Conservative governments over 14 years from 2010—including the “steeply regressive” changes to taxes and benefits.

“In 2010, 27% of children were in poverty. By 2019, that had risen to 30%,” Marmot says. “About a third of children are now growing up in poverty.”

After getting into power Starmer’s Labour government has been slow to act on the growing problem. In November 2025, after a year and a half of political infighting within the Labour Party, the government announced that it would be lifting the two child benefit cap from April 2026.

Marmot says the move is an “important step in the right direction” and will lift around 350 000 children out of poverty. “Without that, the estimate is that the number of children in poverty would have grown from 4.5 million to 4.6 million in the

The eight Marmot principles

- Give every child the best start in life
- Enable all people—children and adults—to maximise their capabilities and have control over their lives
- Create fair employment and good work for all
- Ensure a healthy standard of living for all
- Create and develop healthy and sustainable places and communities
- Strengthen the role and impact of ill health prevention
- Tackle racism, discrimination, and their outcomes
- Pursue environmental sustainability and health equity together

life of the parliament. Now it will go down to 4.15 million,” he says. “But what about the 4.15 million children growing up in poverty? It doesn’t have to be this way because it isn’t this way in other European countries.”

Local leaders give Marmot hope

Marmot also laments how politics and politicians have changed over the decades and calls for a return to focusing on policies rather than “insults or culture wars.”

While national politicians cause disappointment, meeting local leaders around the UK gives Marmot hope. “The level of commitment and enthusiasm [they have], knowing that people are looking at our evidence based recommendations and trying to implement them, it’s wonderful,” he says. “What they are doing is going to make a difference, it is making a difference, and it keeps me positive.”

And, although Starmer’s government has failed to follow through on its pledge to make England a Marmot country, the governments in Wales and Scotland seem keener. Wales announced its intention to become the world’s first Marmot nation in June last year, and Public Health Scotland is working with Marmot on a national strategy to reduce health inequalities.

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CAREERS CLINIC

Understanding the NHS pension: what do doctors need to know?

Three NHS pension experts answer doctors' questions, from what early career doctors need to know to the impact of career breaks



CLARK'S OVERVIEW OF THE SCHEMES:

1995 section

Type: Defined benefit. The pension for "officers" (hospital doctors) is based on your final years pensionable pay at retirement, or in either of the two preceding years if higher. As a "practitioner" (GP) it's based on your total dynamised (increased in line with inflation) career earnings

Accrual rate (the proportion of salary that will be received as pension): 1/80th of final pensionable pay for each year of membership for officers. As a practitioner accrual is based on 1.4% your total dynamised career earnings

Normal retirement age: 60

Lump sum: Automatically 3x annual pension, with option to exchange income for extra cash up to a maximum amount

2008 section

Type: Defined benefit. The pension for officers is based on your reckonable pay at retirement. This is the average of the best consecutive three years' pensionable pay out of the final 10 years before retirement. Each year in the past 10 will first be revalued in line with the consumer price index. As a practitioner it's based on your total dynamised career earnings

Accrual rate: 1/60th of "reckonable" pay per year of membership for officers. As a practitioner accrual is based on 1.87% your total dynamised career earnings

Normal retirement age: 65

Lump sum: No mandatory lump sum but there is an option to exchange income for cash up to a maximum amount

2015 scheme

(Career average revalued earnings, CARE)

Type: Career average defined benefit

Accrual rate: 1/54th of each year's uprated pensionable earnings

Normal retirement age: State pension age

Lump sum: No mandatory lump sum but there is an option to exchange income for cash up to a maximum amount

? What are the different NHS pension schemes and what's the difference between them?

There are two NHS pension schemes, of which one has two sections, and whether you are a member of each depends on when you joined the scheme, explains Alex Clark, a chartered financial adviser with Chase DeVere which specialises in advising doctors and dentists.

He says, "In simple terms, if you joined before 1 April 2008 you will be a member of the 1995 section of the 1995/2008 scheme.

"If you joined after 31 March 2008 but before 1 April 2015 you will be a member of the 2008 section of the 1995/2008 scheme.

"If you joined after 31 March 2015 then you will just be a member of the 2015 scheme."



Members can retire early or later in all schemes

Alex Clark

? When can I retire? And what is the impact of early retirement?

"Members can retire early (from age 55) or later (up to age 75) in all schemes," Clark says.

If you take your pension before your scheme's normal pension age, "your benefits are reduced to reflect the fact that they're paid for longer."

"The reduction is based on actuarial factors applied by the scheme," he explains. These could include life expectancy and time until normal retirement age. "Lump sums, where applicable, are also reduced proportionally."

? As an early career doctor, what do I need to know about my pension?

Ella Patel, chartered financial planner at Fidelity, says, "The NHS pension is one of the most valuable benefits available to doctors and is particularly important to understand early in your career."

Doctors starting their careers now will be part of the 2015 scheme, meaning they build up their pension "each year at a rate of 1/54 of your pensionable earnings," she explains.

"This amount is then increased annually in line with inflation plus 1.5% while you remain an active member. Over time, this builds a guaranteed, inflation protected income for life, paid as a taxable annual pension, with additional benefits such as ill health retirement and financial support for dependants."

Patel highlights the "substantial employer contribution" made on your behalf by the NHS.

"This is currently 23.7% of pensionable pay in England and Wales, 22.5% in Scotland, and 23.2% in Northern Ireland. For most doctors, this level of employer funding makes the NHS pension extremely difficult to replicate through private saving alone."

On top of this, "active membership of the scheme includes valuable protection benefits that are often overlooked," she says.

"If a doctor dies while still an active member, a death-in-service lump sum of two times pensionable pay is payable, alongside an ongoing survivor's pension for eligible dependants. These benefits operate in a similar way to life insurance, without the need for a separate policy.

"The pension scheme also provides ill health retirement benefits, which act as a form of income protection by providing an ongoing income if you are unable to continue working because of permanent ill health."



The NHS pension is one of the most valuable benefits available to doctors

Ella Patel

However, while the protection benefits are “extremely valuable, they may not fully meet every doctor’s individual needs,” Patel says. This is because levels of cover are linked to “pensionable pay and scheme rules, rather than personal circumstances such as dependants, mortgages, or long term financial commitments.”

She says, “As a result, many doctors choose to take additional cover. Speaking to a financial adviser can help ensure that the overall level of life and income protection is appropriate for your situation.”

? With the NHS pension linked to the state pension age, should younger doctors consider a self-invested personal pension if they want to retire earlier?

“While the NHS pension remains a very valuable, inflation linked benefit, it does mean that it may not line up neatly with when some doctors would ideally like to slow down or stop working,” Patel says.

Currently the state pension age is 66, but this is set to rise to 67 between 2026 and 2028, and then to 68 between 2044 and 2046.

“Although the NHS pension can usually be accessed earlier, from age 55 (rising to 57 from 6 April 2028), taking it early comes at a cost, as the annual pension is reduced to reflect the longer period over which it is expected to be paid.”

Patel says an additional, personal pension, such as a self-invested personal pension (SIPP), can therefore be useful.

“One of the main attractions of a personal pension is tax relief on contributions, meaning some of the money that would otherwise have gone to tax is added to the pension instead. This can make it an efficient way to save for later life. However, as pensions can only be accessed from age 55 (rising to 57 from 6 April 2028), their role in bridging the gap is naturally limited.”

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For doctors looking for “greater flexibility around when money can be accessed” other options such as individual savings accounts (ISAs) and general investment accounts could be considered.

? What happens to my pension if I take a career break or parental leave?

“Taking time out of work, whether for parental leave, caring responsibilities, or a career break, does not necessarily mean losing NHS pension benefits, but it is important to understand how different types of leave are treated,” Patel says.

“During paid parental leave, including maternity, paternity, and adoption leave, you generally remain an active member of the NHS pension scheme. Contractual maternity pay is pensionable, and pension contributions are ordinarily deducted from the maternity pay you receive.

“Pension growth is usually based on the pay you would have received had you been working normally, rather than the reduced pay you may actually be receiving, meaning pension accrual is largely protected during paid leave.”

However, “pension contribution rates during periods of reduced pay are assessed using actual earnings rather than normal full time pay,” she explains. “This means that while on reduced maternity or parental pay, contribution tiers are based on what you are actually paid, often resulting in lower pension contributions.

In contrast, “periods of unpaid leave are treated differently,” she says. “If you move onto unpaid maternity or parental leave, or take an unpaid career break, pension accrual normally stops for that period.

During formal career breaks, “pension membership is usually paused for the duration of the break, with no further pension built up during that time. On returning to eligible NHS employment, membership typically resumes automatically, but the period out will result in a gap in pension accrual unless additional steps are taken.”

Patel recommends checking how a “planned break or period of parental leave will affect your pension in advance,” as the details can “vary depending on contract type, length of leave, and individual circumstances.”

“Small decisions made at the time can have a long term impact on retirement income,” she explains. “For doctors planning extended time out of work, taking

financial advice can help ensure that pension arrangements remain aligned with wider career and family plans.”

? If I work part time as a GP, will I have enough pension for my retirement?



The costs you incur change later in life—and everyone is different

Andy Pow

Andy Pow, specialist medical accountant and adviser at Medics’ Money, says, “The NHS pension provides a good pension, but it can be reduced where people work less than full time, have career gaps in the UK, or may have come to the UK to work later in their career.”

“When planning for retirement, the main consideration is to ensure you have sufficient income or capital to allow you to live the way you want to live. The costs you incur change later in life—and everyone is different—so an individual assessment needs to be done to work out what you need as a regular income when you stop work, as well as allowing for those larger one off spends like a change in car or a holiday.”

If once you’ve worked out what you’re likely to get when you retire you feel there is a shortfall, Pow suggests a few options doctors can consider. These include investing in stocks and shares, investing in a private pension, or building up a cash saving pot, although he says that “cash is never a good long term investment, as the interest you earn will be eroded by inflation.”

“Which route you take will depend on your needs, but there are tax differences between ISAs and pensions,” he explains. “With ISAs you don’t get tax relief on the investment, but the fund grows tax free and can be accessed at any point you choose. With pensions you get tax relief on the investment at your marginal rate of tax, and the fund will grow tax free. However, when you take the benefits, the income you draw will be taxable.”

“In summary, it’s an individual choice. Less than full time workers will have an NHS pension which is smaller than those working full time but it is linked to your income so it may still leave you with enough in retirement. Do assess your needs though as everyone is different.”

Elisabeth Mahase, *The BMJ*

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