this week

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BMA NEWS

GPs face huge pension tax bills this year

Some GPs will face pension tax bills of almost half their post-tax income this tax year, and many will have to pay the charge for the first time because of soaring inflation, the BMA has warned. It has modelled GPs' annual allowance charges on the basis of the consumer price index hitting 10% this year. Currently 9%, it is predicted to pass 10% in October.

The modelling indicates that, with CPI at 10%, a GP who has built up a pension of £46 300 (close to the lifetime allowance) and has pensionable earnings of £115 000 will face a pension tax bill of £32 349 for exceeding their annual allowance. But even a GP who has accrued a £20 000 pension and has earnings of £70 000 will be hit by a £6771 charge.

GPs will face the choice of paying the charge now out of their income or face a reduced pension when they retire through "scheme pays." An annual allowance charge of £32 349 settled by "scheme pays" would reduce their pension by £1419.50 a year, if they retired at age 60 in the next year (that is, no interest). If interest is charged, it will accrue at CPI plus the "SCAPE" rate, which is 2.4%, reducing their pension further. For 2022-23, with the CPI at 10%, the interest rate would be 12.4%.

Tony Goldstone, deputy co-chair of the BMA's pensions committee, said, "We're going to have colleagues in general practice who have previously not been anywhere near the annual allowance, and it's now going to become a massive problem for them, and we've got other colleagues who are already affected by the annual allowance who are going to have a bill the size of which they've never seen before." He predicted "significant workforce issues" as GPs sought ways to reduce their pensionable income to avoid the charge.

Goldstone said, "The fact that all this is happening at a time when the NHS can least afford to lose experienced clinicians is deeply concerning. It warrants an immediate response from government."

A health department spokesperson said, "The generosity of the NHS Pension Scheme and well remunerated careers mean that some senior doctors exceed their allowances for tax free pension saving.

"GPs who pay into the scheme benefit from their pension pot being automatically increased in value at the end of each scheme year, to help maintain its purchasing power over time."

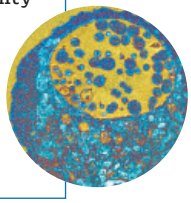
Ingrid Torjesen, *The BMJ*

Cite this as: *BMJ* 2022;377:o1297

The BMA's Tony Goldstone predicts major workforce problems as GPs seek ways to cut their pensionable income

LATEST ONLINE

- US hospitals continued to perform unnecessary surgeries during pandemic
- Task force calls for targeted primary care interventions to tackle maternity inequality
- Sexually transmitted diseases surged in US during covid pandemic



SEVEN DAYS IN

JCVI advises further covid jab for vulnerable adults and health and care workers

LENA CONSTANTIN / ALAMY

An extra booster dose of covid vaccine will be offered to the most vulnerable adults and some health and social care workers this autumn, under draft guidance from the Joint Committee on Vaccination and Immunisation. But most people under the age of 65 will be excluded from the UK autumn booster programme if the interim advice, which has been issued for "purposes of operational planning," remains in place.

The JCVI said considerable uncertainty remained over the likelihood, timing, and severity of any potential future wave of covid in the UK in the year ahead, though winter will remain the season when the threat from covid is greatest. The committee added that the primary objective of the 2022 autumn booster programme would be to increase population immunity and protection against severe covid disease, specifically hospital admissions and deaths, over the winter period.

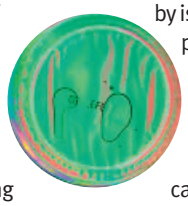
It recommended that in autumn 2022 a further covid vaccine should be offered to residents and staff of care homes for older adults, "frontline" health and social care workers, all people aged 65 years or over, and people aged 16-64 who are in a clinical risk group.

Jacqui Wise, Kent Cite this as: *BMJ* 2022;377:o1277

General practice

GPs tell patients to direct their anger at government

GPs published an open letter to patients, acknowledging their concerns with the current "fractured" system of general practice. The letter, coordinated by the Rebuild General Practice campaign, urged patients who found it difficult to access primary care to redirect their anger away from general practice staff and towards the UK government, and it called on ministers to deliver a plan to boost the NHS workforce. "It is because of decades of underfunding and neglect; broken government promises and political contempt for you—our patients—that the system is fractured," the letter concluded.



NHS sets out unacceptable patient behaviour

Updated guidance from NHS England set out the types of inappropriate or unacceptable behaviour by patients that could lead to a warning or removal from a general practice list. These include swearing and using bad language, racial or sexual abuse, unnecessarily persistent or unrealistic service demands causing disruption, damaging practice premises, and stealing from practices. The Medical Defence Union welcomed the guidance and recommended that general practices review their own zero tolerance policies.

HRT shortages

Pharmacists get more flexibility to switch drugs

The government took further action to tackle HRT shortages by issuing serious shortage protocols (SSPs) to allow pharmacists the flexibility to offer substitutes for high demand HRT products. Pharmacists can now replace products that are in short supply—such as Oestrogel, Ovestin cream, Lenzetto transdermal spray, and Sandrena gel sachets—with appropriate alternatives, such as transdermal patches, that are in good supply. SSPs, which restrict prescriptions to a maximum of three months' supply, will also be issued for substitute products as a precautionary measure to ensure that the supply of substitutes is maintained.

Pensions

Doctors wrongly told they owed tax after error

Thousands of doctors were wrongly told by NHS Pensions that they had exceeded their annual pension allowance and must pay tens of thousands in tax, with one told that they needed to pay £1.3m. Around 2800 incorrect pension savings statements were sent by NHS Pensions on 28 April, and the statements affected were dated 20-27 April. The error was spotted by Graham Crossley, a financial planning consultant at the wealth management company Quilter, after one of his clients who hadn't expected a tax charge got a statement suggesting that he owed £16 000.

Patient care

NHS trust is fined £1.3m over deaths

Shrewsbury and Telford Hospital NHS Trust was fined more than £1.3m after admitting failures in care that had contributed to the deaths of a pensioner with chronic lung disease and a patient in his 30s who was receiving dialysis. Max Dingle, 83, died after becoming trapped in a bariatric bed and having a cardiac arrest after he was freed. Mohammed Ismael Zaman, 31, known as Bolly, died of severe blood loss while undergoing dialysis after his line became disconnected. The trust was prosecuted by the Care Quality Commission.

MPs warn of substantial complaints backlog

A report by the House of Commons Public Administration and Constitutional Affairs Committee warned of a "substantial backlog" of cases at the complaints handler of last resort for NHS and government services. Despite steps taken by the Parliamentary and Health Service Ombudsman to tackle the pandemic induced backlog, MPs said that they "remained concerned" at the impact of delays. The committee chair, William Wragg (left), said, "In the long term, the government must take seriously the issue of reform of the ombudsman and legislate to bring it in line with international best practice, providing greater access to justice for complainants."

MEDICINE

Maternity

"Urgent action needed" on systemic racism

Systemic racism in UK maternity services must be tackled, an inquiry by the charity Birthrights has concluded. The inquiry analysed the factors contributing to poorer outcomes and experiences among ethnic minority patients. Taking testimony from over 300 people, it found several themes, the most prominent of which was "feeling unsafe during maternity care." The inquiry recommended that black and brown maternity patients should make decisions on their care and in the wider maternity system.

Ethnic minority maternity patients "feel unsafe," inquiry concluded

Medical education

RCEM candidates were given exam passes in error

Fifty candidates who sat a Royal College of Emergency Medicine exam in March were incorrectly told they had passed. The college said that a fault with the examination system had affected the results of the March 2022 Fellowship of the Royal College of Emergency Medicine SBA examinations. The college said that it had contacted all candidates affected to offer apologies and support. A statement said, "The fault and correction of results was extremely disappointing news for these candidates, and we are working hard to rectify the situation."

Guidelines

New drug for rare liver illness "not cost effective"

Draft NICE guidance does not recommend lumasiran for treating primary hyperoxaluria type 1. People with the condition have high oxalate levels that can lead to end stage kidney disease. Clinical trial evidence indicates lumasiran reduces oxalate levels more than standard treatment alone, but NICE said cost effectiveness estimates are above £1m per QALY gained and so are not an acceptable use of NHS resources.

Increase uptake of routine vaccinations, says NICE

General practices and other healthcare providers should have a named lead on vaccination to increase uptake of routine vaccinations, said new guidance from the National Institute for Health and Care Excellence. The vaccination lead should be responsible for identifying people eligible for vaccination, keeping records up to date, and sending out appointments and reminders, said NICE. General practices should update vaccine records within two weeks and should validate their vaccination records at least monthly against the data received, it added.

Whistleblowing

Former Isle of Man medical director wins case

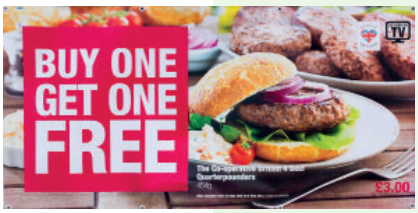
The former medical director for the Isle of Man Department of Health and Social Care won a whistleblowing case against the department, having been sidelined and moved into a "shell" job after urging tougher measures to deal with covid on the island, such as locking it down. The Manx Employment and Equality Tribunal ruled that Rosalind Ranson was unfairly dismissed for making "protected disclosures" (whistleblowing) when she tried to alert politicians to doctors' warnings that the service could be overwhelmed. Ranson, 57, is now unemployed.

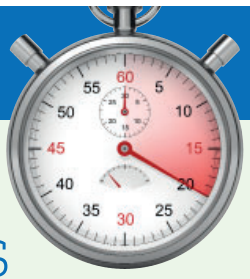
Cite this as: *BMJ* 2022;377:o1291

PROSTATE CANCER

Urgent referrals for urological cancers in England rose by **23%** in March 2022 from the previous month and by **30%** from the same month last year, with 24 331 cases checked after a campaign launched in February by the NHS and Prostate Cancer UK

[NHS England]





SIXTY SECONDS ON . . . **OBESITY IN THE UK**

A BIG PROBLEM?

It certainly is. Alarming estimates from the charity Cancer Research UK (CRUK) indicate that more than 21 million adults in the UK will be obese by 2040, around 36% of the adult population. If the trend continues, obesity will eventually surpass smoking as the biggest cause of cancer, the charity has warned.

FOOD FOR THOUGHT

The report suggests that if current body mass index trends continue the number of people who are obese could overtake the number who are a healthy weight in the UK by 2040. It says this "tipping point" could occur as early as the late 2020s in England, with Northern Ireland following suit in the late 2030s. In Scotland and Wales the crossover is not expected to happen before 2040.

SURELY THIS DEMANDS A WIDE RANGING PUBLIC STRATEGY?

You would think so. But although the government has perused the menu of options for tackling the obesity crisis, its ideas have amounted to little more than pie in the sky. Campaigners recently accused ministers of a shameful U turn after a proposed ban on multibuy deals for junk food was delayed by a year because of concerns about the economic impact on consumers.

A BIT OF A STRETCH?

CRUK called the government's claim that the delays would help tackle the cost of living crisis "grossly misleading." Its report pointed out that people living with higher levels of economic deprivation will suffer the most in terms of ill health if current prevalence trends continue without action on obesity.

WHAT HAPPENED TO "LEVELLING UP?"

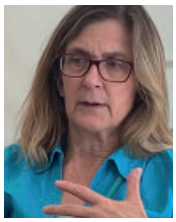
Michelle Mitchell, CRUK chief executive, said the charity's projections should serve as a wake-up call to the government. "The report shows a stark and growing difference between obesity rates in those that are least well off and most well off," Mitchell said. "Ministers mustn't keep kicking the can down the road when it comes to tackling the obesity crisis."

Gareth Iacobucci, *The BMJ*

Cite this as: *BMJ* 2022;377:o1265

Monkeypox: what do we know about the outbreaks in Europe and North America?

The virus first discovered in monkeys in 1958, which spread to humans in 1970, is being seen in small but rising numbers in western Europe and North America. **Elisabeth Mahase** reports on what we know so far



Many of these global reports of monkeypox cases are occurring within sexual networks Inger Damon

How many confirmed cases have there been?

WHO said 92 confirmed cases and 28 suspected cases have been reported up to 21 May in 12 countries not endemic for monkeypox, including the US, Australia, and in Europe. Some countries have since reported additional cases, including the UK, with 57 cases now confirmed between 7 and 23 May, Spain, with 30 reported cases, and Portugal, with 23.

How is it spreading?

Transmission between people mostly occurs through large respiratory droplets, normally meaning prolonged contact face to face. But the virus can also spread through bodily fluids. The latest cases have mainly been among men who have sex with men.

The UK Health Security Agency said that, although monkeypox has not previously been described as a sexually transmitted infection, it can be passed on by direct contact during sex. It can also be passed on through other close contact with a person who has monkeypox or contact with clothing or linens used by a person who has monkeypox.

Inger Damon, director of the US CDC's Division of High Consequence Pathogens and Pathology, said, "Many of these global reports of monkeypox cases are occurring within sexual networks. However, healthcare providers should be alert to any rash that has features typical of monkeypox. We're asking the public to contact their healthcare provider if they have a new rash and are concerned about monkeypox."

What are the symptoms?

Symptoms can include fever, headache, muscle aches, backache, swollen lymph nodes, chills, and exhaustion. Typically a rash will develop, which often starts on the face but can then spread to other areas such as the genitals. The rash will go through different stages before forming a scab that finally falls off.

The European Centre for Disease Prevention and Control (ECDC) said that the recent cases among men who have sex with men have involved lesions in the genital area.

Is the virus deadly and can it be successfully treated?

Generally, monkeypox cases are mild and people tend to recover within weeks. But the death rate varies, depending on the type. The ECDC has said that the west African clade, the type so far seen in Europe, has a case fatality rate of around 3.6% (estimated from studies conducted in African countries). Mortality is higher in children, young adults, and immunocompromised individuals.

Michael Head, senior research fellow in global health at the University of Southampton, said, "The risks to the wider UK public are extremely low, and we do have healthcare facilities that specialise in treating these tropical infections. However, with tropical medicine, these imported cases do indicate a

Digital app is recommended for insomnia treatment

GPs should consider offering patients with insomnia the Sleepio app as an effective and cost saving alternative to sleeping pills, NICE has recommended.

The app will also reduce patients' reliance on drugs such as zolpidem and zopiclone that can be dependence forming, said NICE's medical technologies advisory committee.

Sleepio uses an artificial intelligence algorithm to provide tailored cognitive behavioural therapy for insomnia (CBT-I). It is primarily accessed through a website, with an app for mobile devices.

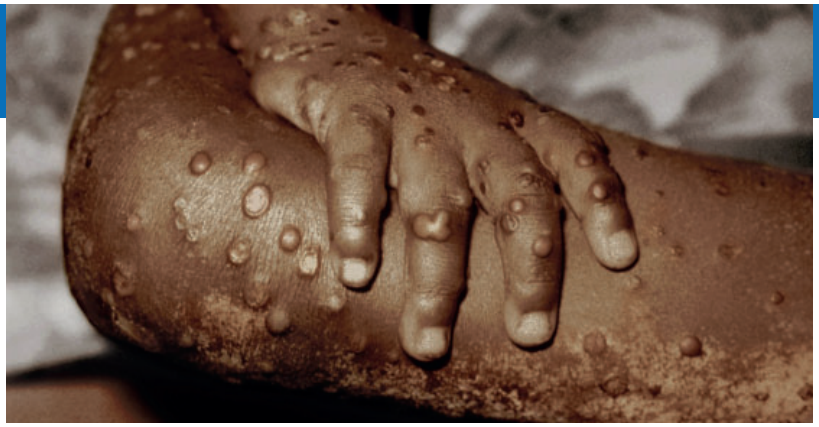
The current recommended care pathway for people with poor sleep is to first offer advice about sleep hygiene. If this does not work, and the insomnia is causing significant distress, a 3-7 day course of a non-benzodiazepine hypnotic medication can be considered. The committee heard that the gold standard treatment for clinically diagnosed insomnia that is unlikely to resolve soon is face-to-face CBT-I, but its availability is very limited in the NHS.

Clinical evidence from 12 randomised controlled trials showed that Sleepio reduced insomnia symptoms when compared with sleep hygiene and sleeping pills. However, there was limited clinical evidence to show how effective it was in comparison with face-to-face CBT-I in primary care, and more research was needed, the committee said.

Priced at £45 per person, Sleepio is cost saving when compared with usual treatment in primary care, said NICE. A data analysis of primary care use, before and after the app was introduced in nine general practices, found that costs were lower after a year, mainly because of fewer GP appointments and sleeping pills prescribed.

The app provides a six week self-help programme involving a sleep test and weekly interactive CBT-I sessions. These focus on identifying thoughts, feelings, and behaviours that contribute

Our rigorous, transparent, and evidence based analysis has found that Sleepio is cost saving for the NHS Jeanette Kusel



wider burden of disease elsewhere in the world.

"It may be that in a post-pandemic environment we should be giving more consideration to understanding the local and global implications of Lassa, monkeypox, Ebola, and other rare but serious pathogens."

Although there are no specific treatments for monkeypox, the smallpox vaccine—which has been shown to be up to 85% effective in preventing monkeypox—and the antivirals cidofovir and tecovirimat can be used to control outbreaks. The UK government has reportedly bought thousands of vaccine doses and already begun deploying them among close contacts of infected people.

? Have the US and Europe seen previous major outbreaks?

In 2003 the US had an outbreak of 47 confirmed and probable cases linked to a shipment of animals from Ghana. Everyone infected with monkeypox became ill after contact with pet prairie dogs that had been infected after being housed near the imported small mammals.

Seven previous cases of monkeypox have been reported in the UK (in 2018, 2019, and 2021), mainly among people with a history of travel to endemic countries.

However, the ECDC has said that this latest outbreak is the first time that chains of transmission have been reported in Europe without known epidemiological links to west and central Africa, and they are also the first cases reported among men who have sex with men.

In a statement it said, "Given the unusually high frequency of human-to-human transmission observed in this event, and the probable community transmission without history of travelling to endemic areas, the likelihood of further spread of the virus through close contact, for example during sexual activities, is considered to be high.

"The likelihood of transmission between individuals without close contact is considered to be low.".

Elisabeth Mahase, *The BMJ*

Cite this as: *BMJ* 2022;377:o1274

to symptoms of insomnia. Cognitive interventions aim to improve the way a person thinks about sleep, and the behavioural interventions aim to promote a healthy sleep routine.

A daily sleep diary helps users track their progress, and the data can be automatically uploaded from a compatible tracing device such as an Apple watch or a Fitbit. People also have access to articles, online tools, and a user community for support.

The guidance recommends that before referral a medical assessment should be done for patients who may be at higher risk of other sleep disorders, such as those who are pregnant or have comorbidities.

NICE acknowledged that Sleepio may be difficult for some people to use. It requires access to a computer and the internet and may be difficult for people with limited English skills.

Jeanette Kusel, acting director for med tech and digital at NICE, said, "Until now people with insomnia have been offered sleeping pills and taught about sleep hygiene, so our committee's recommendation of Sleepio provides GPs and their patients with a new treatment option.

"Our rigorous, transparent, and evidence based analysis has found that Sleepio is cost saving for the NHS compared with usual treatments in primary care. It will also reduce people with insomnia's reliance on dependence forming drugs."

Jacqui Wise, Kent

Cite this as: *BMJ* 2022;377:o1268

Guidance is issued to doctors after 84% rise in eating disorders

New guidelines to help doctors spot the signs that someone with an eating disorder is dangerously ill have been issued, after an "alarming" rise in hospital admissions for illnesses such as anorexia nervosa.

An analysis of hospital data by the Royal College of Psychiatrists showed that admissions had risen by 84% in the past five years, reaching 24 268. A total of 11 049 more were recorded in 2020-21 than in 2015-16.

The college developed the guidance, *Medical Emergencies in Eating Disorders*, because of concerns that patients with severe anorexia nervosa were being admitted to general medical units and, in some cases, deteriorating and dying. It replaces the *Management of Really Sick Patients with Anorexia Nervosa* (MARSIPAN) and Junior MARSIPAN guidance.

Missed signs

The guidance says that the signs that someone with an eating disorder is in need of hospital treatment are often missed in primary care and emergency departments because of a lack of training and advice. The main barrier to spotting patients at risk is that, even when seriously unwell, some patients can appear healthy and have normal blood tests.

One in five deaths of people with anorexia nervosa is due to suicide, and all eating disorders see high rates of self-harm and depression.

The number of young people with eating disorders rose by 90% in the five year period analysed, from 3541 to 6713 episodes, with a 35% increase in the past year alone. Boys and young men showed a 128% rise in hospital admissions, from 280 in 2015-16 to 637 in 2020-21

The guidance contains a traffic light risk assessment tool for all ages. The framework combines clinical assessment with investigations, assessment of motivation and engagement, and, particularly for younger patients, assessment of parental or carer support.

The tool aims to help doctors determine the risk of serious complications, including acute pancreatitis or gastrointestinal rupture, or of death from suicide, infections, or cardiovascular complaints. The guidance notes that patients with bulimia nervosa who are not underweight can also present in life threatening emergencies because of electrolyte disturbances and gastrointestinal complications.

Dasha Nichols, who led the guideline development, said, "Eating disorders can affect people of any age and gender. Even though anorexia nervosa is often referred to as the deadliest mental health condition, most deaths are preventable with early treatment and support."

Jacqui Wise, Kent

Cite this as: *BMJ* 2022;377:o1256

NEWS ANALYSIS

Doctors' wellbeing must be "critical priority" after pandemic mistakes, says BMA

The BMA's review into how the UK managed the covid pandemic found that the government failed in its duty of care to protect doctors and other staff from avoidable harm. **Matthew Limb** examines its findings

On 19 May the BMA published the first two reports of its five part review into the lessons learnt from the covid-19 pandemic, which will inform its submission to the upcoming public inquiry. The reports lay bare doctors' often traumatic experience through stark personal testimonies and data collected through real time surveys. Ministers must make doctors' wellbeing a "critical priority" while learning lessons from the "devastating" harms and policy mistakes, the BMA said.

Preparedness

The UK was forewarned of the coronavirus as early as December 2019, and by February 2020 Italy's deadly toll had dramatically signalled what the UK could face.

But the BMA said the UK was underprepared and had failed to learn key lessons from previous pandemic preparedness exercises, including the need to maintain stockpiles of personal protective equipment. Chronic underfunding of the NHS and public health had left the UK "brutally exposed," with "too few staff, too few beds, and buildings that were unsuitable for full implementation of recommended infection control policies," it said.

Maintaining continuous and transparent assessments of workforce shortages and future staffing needs will be crucial to ensure governments are held to account, the BMA said.

Personal protective equipment

Many healthcare staff were left unprotected because of critical PPE shortages and became infected at a higher rate than the general population. Basic PPE such as masks, eye visors, and gowns weren't routinely available. One SAS doctor said, "We made our own and bought [it] when we could find any. We depended on friends sourcing FFP3 masks, my son's school 3D printing visors."

Many doctors reported being pressured to work without adequate protection, while some felt unable to challenge management on the issue. Women struggled to find well fitting masks, as they were largely manufactured to suit white male faces and physiques. The situation improved after the first wave, but for much of the pandemic staff were inadequately protected, the BMA said.

Infection prevention and control guidance

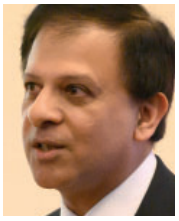
Infection prevention and control were inadequate, while IPC guidance was "poorly communicated and difficult to implement," the BMA concluded.

Doctors told the inquiry that updated guidance was slow to be issued and that, when it was, it was contradictory and spread across different documents. "This led to inconsistencies in the level of protection afforded to different kinds of medical professionals," the report said. One consultant said, "Some colleagues started wearing fluid resistant masks early in March, only to be threatened by management with disciplinary action due to scaremongering the rest of the department."

Testing

The BMA heard that the government drastically overestimated the UK's capacity to test at the pace and scale needed as SARS-CoV-2 began circulating widely in the community. Ministers abandoned contact tracing early in the pandemic and later had to set up NHS Test and Trace at major cost to the taxpayer.

Medical professionals said they were unable to test incoming patients, which made determining covid-19 positive patients difficult and meant that doctors often came into contact with patients who had tested positive without the recommended PPE. This, in turn—given the shortage of tests available for medical professionals in the early stages—may have meant that they unwittingly transmitted the virus to their patients and colleagues. "This lack of testing capacity was undoubtedly a significant factor in the high levels of nosocomial spread we saw during the first wave of the pandemic," the BMA said.



Doctors saw levels of illness and death they were never trained for
Chaand Nagpaul

Risk assessment and inequalities

Two thirds (64%) of the respondents surveyed by the BMA said that by May 2020 they had not been risk assessed for contact with SARS-CoV-2. Doctors with a disability or long term condition said they felt less protected than other groups, with some being told that they were not allowed to work remotely.

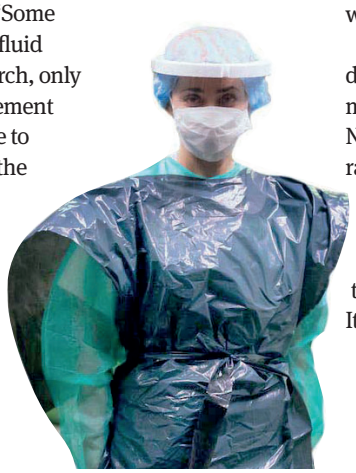
Clinically extremely vulnerable staff were in an especially"unenviable position" and some doctors weren't supported by their employer, the BMA said. "I have received pressure from my line manager to return to environment verging on harassment," a public health consultant in this group said.

Deaths among staff

In the first wave hundreds of healthcare workers and more than 50 doctors died after becoming infected, as staff were "too often left unprotected and exposed, suggesting these deaths were not inevitable," the BMA said.

Nearly all (95%) of the doctors who died in April 2020 were from ethnic minorities (which make up 44% of NHS medical staff), indicating deep race inequalities in the workforce.

The BMA said, "We are calling for the experiences of ethnic minority doctors to be examined closely by the public inquiries into covid-19." It added that there might have been



fewer deaths among patients and doctors if services had been better staffed when the pandemic began. Staff may have felt pressured to work even when unwell, because of understaffing of services, and this sense of duty may have led them to inadvertently spread the virus further.

Long covid

A significant minority of respondents who had covid-19 said that they were now dealing with severe ongoing symptoms and needed extensive support. One junior doctor said, "I caught covid-19 in March 2020 from a colleague at work. I have been mostly bedbound since. My life as I knew it had ended. These are supposed to be the best years of my life, but I'm spending them alone, in bed, feeling like I'm dying almost all the time."

Around 11% of respondents who had long covid 19 were at some point unable to work full time or at all, while 51% reported that, though they were still able to work, their quality of life was affected. The BMA said, "Had we been better able to protect staff we may have seen fewer long term absences due to long covid and consequently, less capacity lost to health services."

Exhaustion

Medical work during the pandemic caused physical harm beyond covid. Chaand Nagpaul, BMA chair of council, said, "Alongside the acute mental and emotional trauma, physical exhaustion, and the toil of long hours in full PPE, lack of rest and higher workloads have been relentless." Nearly 60% of respondents in April 2021 said their level of fatigue or exhaustion during the pandemic was higher than normal.

High levels of staff burnout and stress were a threat to healthcare in a chronically understaffed service, the BMA said. "The medical profession is exhausted and needs to be supported. If this does not happen, we risk more doctors leaving, which is a threat to patient safety we cannot afford."

Mental health and emotional wellbeing

In addition to burnout and overwork, many doctors experienced difficulties because of grief and trauma. "Doctors saw levels of illness and death they were never trained for," said Nagpaul. "Psychologically it was one of the worst periods of my life," one SAS doctor said. "I received private therapy throughout the pandemic and that helped tremendously but I have felt suicidal at times."

Another doctor described being "horrified" at having to care for friends and colleagues in the intensive treatment unit.

Calls to the BMA's counselling service rose by more than a third (37%) in the first year of the pandemic, and several survey respondents said they had left or would soon be leaving the profession. Psychological support services must be made available to "staff at all levels," the BMA said.

Anxiety and moral injury

More than half (53%) of doctors said that insufficient staff to treat all patients suitably was the leading cause of their moral distress, followed by individual mental fatigue (41%).

"I have seen some difficult things in the past few years. I have made some decisions that I would not have had to make in pre-pandemic times. These have all caused me significant moral injury," said a salaried GP in Scotland.

Another doctor said, "I have flashbacks to wheeling patients to an overfull morgue and denying relatives entry to the emergency department during the first wave as their relatives were dying."

Many doctors reported anxiety or depression. In some cases, anxiety was exacerbated by worries about mistakes and liability, for example, if they were working remotely or in an unfamiliar area without adequate training.

Lack of support

The BMA said the government had failed to express support for doctors, contributing to perceptions among the public and media that doctors were not seeing patients when needed. At best, medical professionals were "unhelpfully branded as heroes and heroines," capable of withstanding any pressure, rather than "fallible human beings doing their best in the circumstances."

The BMA urged the government to examine the extent to which the system was able to financially support staff with short or long term health effects.

Positive changes

The vaccination campaign and rollout are regarded as one of the few successes of the response to the pandemic, benefiting staff and patients and generating professional pride.

Morale improved at the outset of the crisis, the BMA said, but has waned since. In May 2020 65% of respondents agreed there was a greater sense of team working, 45% agreed they felt more valued as a doctor, and 47% felt less burdened by bureaucracy.

For some doctors, such as those with a disability or long term condition, remote working (where it had been facilitated by an employer) has been "hugely beneficial."

Matthew Limb, London

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The medical profession is exhausted and needs to be supported, or we risk more doctors leaving
BMA report

CALLS to the BMA's counselling service rose by 37% in the first year of the pandemic, and several survey respondents said that they had left or would soon be leaving the profession

THE BIG PICTURE

Record breaking heat hits India and Pakistan

A brutal heatwave has been sweeping across India and Pakistan in the past few weeks, with the temperature in some areas reaching 50°C, a record high for this time of the year. At least 50 deaths have already been reported to be a direct result of the heat.

Such heat—the average maximum temperatures in May have been the highest in 122 years—does not usually hit the subcontinent until July and leaves the relief of the monsoon season many months away.

Both countries have suffered several heatwaves already this year, with March and April also seeing record breaking temperatures. Health experts say hospital admissions in both countries for heat related incidents have risen sharply and warned the situation will worsen before the peak of summer has passed.

Ritu Saxena, head of the emergency department at Delhi's LNJP hospital, told the United News India agency, "Patients are coming with complaints of severe dehydration, fever, vomiting, and loose motion. Most cases are affected by heatstroke. The situation may aggravate as the temperature soars."

Hospitals have also reported treating a rising number of patients with typhoid.

Alison Shepherd, *The BMJ*

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1. Men sleep in the shade on the banks of the Yamuna river in New Delhi
2. Men sleep on the floor of a mosque in Karachi
3. People try to keep cool in a canal in Lahore
4. A health worker fends off the heat at a Karachi hospital

ANUSHREE FADNAVIS; AKHTAR SOOMRO; AKHTAR SOOMRO/REUTERS/ALAMY; SAJJAD/XINHUA/ALAMY

EDITORIAL

The end of great expectations?

The pandemic inquiry must account for stalling life expectancy before the pandemic

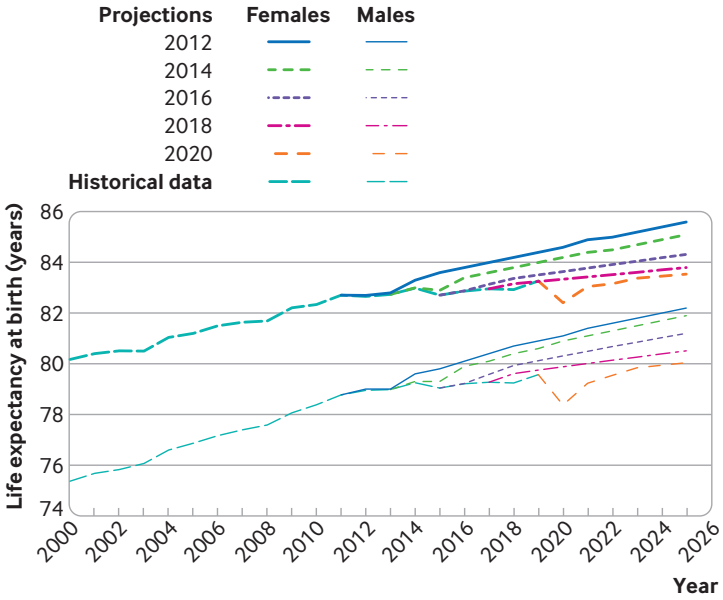
Life expectancy at birth is a key summary measure of the health of any given population. Ideally, it should increase steadily over time in the absence of data artefact, mass migration in or out, or a large scale event such as war or natural disaster, disease outbreak, or societal collapse. Any break in the trend beyond isolated annual fluctuations should raise alarm among health workers, policy makers, and the public.

The covid-19 pandemic has caused life expectancy to fall below predicted levels worldwide, including in the UK.[1] Part of this may have been inevitable given what we now know about this new coronavirus, but part could have been avoided.

When the UK's pandemic inquiry takes place it must also consider what was happening before the pandemic began. This is essential to ensure that the population harms caused by covid-19 are measured accurately, taking full account of prevailing trends before the pandemic. By March 2020, decades of progress in improving life expectancy had already stalled, and for some groups, reversed. Women over 65 years old were the first to experience falls in life expectancy.[4] Subsequently, more groups and communities have experienced widening inequalities and declines in life expectancy,[6] including people at and below the fourth most deprived decile.[8]

In January this year, the ONS published an update of its regular life expectancy projections using the latest population estimates and data on life expectancy, up to and including 2020.[9] The figure shows these and previous projections for both males and females in the UK.

The recorded historical data, represented by the turquoise dashed lines, show that life expectancy fell for women briefly after 2011 and for both men and women more substantially after 2014, before rising above the 2014 levels in the year before the pandemic. Between 2012 and 2014, projected life expectancy for people in 2025 fell by 0.5 years for women and 0.3 years for men. Between 2018 and 2020 the same projections fell by 0.3 years for women and 0.5 years for men. In other words, the fall in projected life expectancy caused by the first year of the pandemic was comparable with a similar fall in the early 2010s.



Projections of life expectancy at birth for males and females in the UK, 2012 onwards. The turquoise dashed lines show the actual recorded historical data from 2000 to 2019, and the other lines show ONS projections made every year from 2011 to 2025[9]

Distorted baseline

Importantly, estimates of excess mortality linked to the pandemic compare mortality in 2020 and 2021 with a five year average—including the period between 2015 and 2019 when life expectancy was stalling. This distorted baseline (with higher mortality than might be expected historically) may lead to underestimation of the true excess mortality caused by covid. We should aspire to a higher level of population health than we had in 2015-19.

Other high income countries also experienced falls or stalls in life expectancy between 2014 and 2015.[5 11] However, when trends for 18 Organisation for Economic Cooperation and Development countries were examined, researchers found that all countries except the US and UK recovered with "robust gains" in 2015-16.[11] The US is poor company to be in with regard to population health: life expectancy at birth there has declined annually since 2015, except for a small increase in 2019, with increasing inequalities in age at death.[12 13]

These latest ONS data suggest the UK was an outlier among comparable countries, with worsening population health in some years before covid.[5] ONS projections of life expectancy are likely to be revised down further when the 2022 based projections are published next year or in early 2024, as these will include far more complete data on covid deaths in 2021 and 2022.

To be fully comprehensive, any inquiry into pandemic deaths must also investigate the underlying causes of the concerning trends in life expectancy over the decade before the pandemic began. Those same causes, which are presumably ongoing, probably exacerbated harms done by the pandemic and may continue to cause serious harm if they are not acknowledged and urgently tackled.

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EDITORIAL

Acute hepatitis of unknown origin in children

There are many leads but few clear answers

Recent reports of severe acute hepatitis of unknown aetiology in previously healthy children across multiple countries have resulted in health alerts and a race to identify the underlying cause.

By 11 May, around 450 probable cases of acute hepatitis of unknown cause had been reported in children worldwide,[1] with 163 in the UK by 3 May.[2] Affected children were aged between 1 month and 16 years, although more than three quarters of those in the UK were under 5 years and those in the US had a median age of 2 years.[2] Eleven children have died so far, and 31 have been reported to require liver transplants (11 in the UK, 5 in Europe, and 15 in the US).[3 4] Gastrointestinal symptoms are common,[2-5] including jaundice (71%), vomiting (63%), pale stools (50%), and diarrhoea (45%). Fever (31%) and respiratory symptoms (19%) are reported less often.[6] Most affected children have not received a covid-19 vaccine.

Adenovirus

Tests for hepatitis viruses A–E have been universally negative. Detailed laboratory investigation by the UK Health Security Agency (UKHSA) found that 91 of the 126 children (72%) tested for adenovirus had positive results, and adenovirus type 41f was identified in blood samples from all 18 children with successful subtype analysis.[6] Adenovirus was also identified in 44% of stool samples and 29% of respiratory samples.[6]

Active SARS-CoV-2 infection has been confirmed in 24/132 (18%) of affected children in the UK, but serological testing is ongoing. Epstein-Barr virus, enterovirus, cytomegalovirus, respiratory syncytial virus, and human herpes viruses 6 and 7 have also been identified in UK patients, though at lower frequency. No common exposures have been identified.[4-7] Histopathology of liver samples from UK children showed a non specific pattern, variable severity including hepatic necrosis, and no identifiable cause.

Stefanie Cunha and her daughter Quinn

By 11 May, around 450 probable cases of acute hepatitis of unknown cause had been reported worldwide

While adenovirus alone is rarely associated with fulminant hepatic failure in healthy children, other factors may increase vulnerability, so current hypotheses continue to include an adenovirus aetiology.[4 6] According to the UKHSA, contributing factors may include abnormal susceptibility or host response—for instance, because of lack of previous exposure; increased community prevalence of adenovirus; or abnormal susceptibility because of priming by previous infection, co-infection with SARS-CoV-2 or other pathogens, or toxin, drug, or environmental exposure.[6]

Other leading hypotheses include a post-infectious SARS-CoV-2 syndrome, a new variant of adenovirus, non-infectious causes, a novel pathogen, or a new variant of SARS-CoV-2.[6 8]

Covid-19 associated hepatitis in children was reported in 37 children two to six weeks after SARS-CoV-2 infection during an outbreak of the delta variant in India.[9] However, the children's synthetic liver function was unaffected with no jaundice; none had fulminant liver failure; and there were no deaths. Still, the current outbreak may represent the more severe end of the spectrum of covid associated hepatitis, or perhaps another post-infectious inflammatory or autoimmune syndrome.

Children in a recent series of cases from Alabama had no history of SARS-CoV-2 infection, and, although all tested positive for adenovirus, liver biopsy samples showed no viral inclusions and no evidence of adenovirus infected hepatic tissue or viral particles.[5] Histopathology findings remain hard to interpret but no pattern of necrosis or apoptosis consistent with known causes of viral hepatitis has emerged. Histopathology results from a larger patient cohort would provide additional insights.

Complex pathology

Non-infectious or toxicological causes have not been identified but cannot be ruled out. Previous SARS-CoV-2 infection causing an immunopathological response that leads to more severe adenovirus infection is also being considered and requires further investigation. Case-control analyses of serology would be helpful to identify a true signal.[6]

This seemingly rare but severe condition is likely to have a complex pathology. While the cause or causes remain unknown, and agent specific control measures cannot be identified, adherence to general risk mitigation and infection control strategies are important. Risks assessments should consider all potential causative agents. Outbreak investigation is a well trodden path: a methodical and empirical approach using standardised case definitions and diagnostic algorithms[6] coupled with an open mind, information sharing, and collaboration will help facilitate the global response.

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FEATURE

How Hong Kong's vaccination missteps led to the world's highest covid-19 death rate

With the arrival of omicron the island's pandemic response turned from being one of the world's most successful to its least. A key reason for this is its handling of vaccination, writes **Rhoda Kwan**

Hong Kong's strict guidelines on social distancing and its restrictions on travel ensured months of low infection rates for covid-19, until the omicron variant hit the city in February 2022. Before that, Hong Kong had reported 212 deaths related to covid-19; around 9000 people have since died from the virus in the city's fifth wave of infection.

As of late April, more than 70% of deaths were in patients aged 80 or older, 73% of whom were unvaccinated. The hospital system has been overwhelmed, with patients occupying hospital beds in parking lots, bodies kept in hospital corridors and in patient rooms, and morgues overflowing.

This is despite vaccines being readily available in the city since February 2021. Hong Kong had procured enough doses of the Pfizer and Sinovac vaccines for its population of seven million, and both vaccines were made available at community vaccination centres and private clinics across the city within weeks of the rollout. Older citizens were given priority access to vaccination.

The government encouraged the public to get vaccinated, and the private sector offered vaccination incentives. Hundreds of companies launched raffles and offered perks worth millions of dollars for fully vaccinated consumers—one raffle prize was an apartment valued at HK$10.8m (£1m). But the push wasn't enough. Before cases surged in late February 2022, only 43% of residents over the age of 80 had received their first vaccination dose.

The vaccine hesitancy widespread among Hong Kong's older population, experts say, was a result of politicising vaccination, subsequent mixed messaging from both government and doctors, and local media's portrayal of deaths that followed vaccination. Together, these caused confusion and fuelled mistrust.

Politicised vaccination, mixed messaging, and the media's portrayal of deaths after vaccination all caused confusion and fuelled mistrust

Politicisation of vaccination

Hongkongers had a choice of two vaccines—one manufactured by US-German Pfizer and the other by China's Sinovac. But government guidance on which to have was not in line with the scientific data available at the time, experts in the city say.

In February 2021, results from third phase clinical trials of Sinovac had not been released, while Pfizer's third phase results had been published in a peer reviewed journal before being examined by the government's medical advisory board. Pfizer's mRNA based vaccine claimed a 95% efficacy rate, while Sinovac—a more traditional vaccine based on inactivated virus—had an efficacy of 63-91% depending on which data were considered.

LAM YIK/REUTERS/ALAMY

Despite the stronger clinical evidence for the Pfizer vaccine, the government's message was that both were equally effective. It even invoked emergency powers to approve Sinovac for use before third phase clinical data were available. This message was reinforced when the city's top officials, including the secretary for food and health, Sophia Chan, publicly chose to receive the Chinese vaccine.

Karen Grepin, an associate professor at the University of Hong Kong's School of Public Health, says, "the [government's advisory panel on covid-19 vaccines] would say that [Pfizer] was more clinically effective, and the entire political elite would go and get Sinovac. The way in which vaccines were made available to people was very politicised ...This created a bit of confusion amongst many about who do you trust about issues related to safety and effectiveness."

A brief, temporary suspension of vaccination with Pfizer occurred one month after the rollout because of faulty packaging, and further added to the confusion and distrust.

Media representation

At the beginning of the vaccination rollout, local media outlets ran splashy headlines about deaths following vaccination, even as no evidence of causation existed.

"Every time somebody died in Hong Kong within 14 days of their vaccination, it was being reported what their vaccination status was, even though there may not be a linkage between these things," says Grepin. "It created a lot of concern about the safety and effectiveness of the vaccine, really early on."

LAM YIK/REUTERS/ALAMY

TYRONE SIU/REUTERS/ALAMY

Clockwise from top: people queue at a makeshift testing centre in February; patients at a makeshift treatment area outside a hospital earlier this month; and workers wearing protective suits carry out compulsory tests in January

The public read the headlines and drew their conclusions, says Siddharth Sridhar, a clinical virologist at the University of Hong Kong. "That contributed to the kind of thinking that vaccines were basically harmful."

The government's response to public anxiety about vaccines did little to assuage concerns. According to Ben Cowling, chair professor of epidemiology at the University of Hong Kong's School of Public Health, "The explanation was that this person had heart disease, so it was no surprise that they had a heart attack after vaccination. That way of phrasing it wasn't exactly saying the vaccine didn't cause it, it was saying that the event might have occurred anyway even without vaccination."

"Unfortunately… [the public was] kind of balancing these different streams of information, one telling them that vaccines were beneficial, one telling them that vaccines were harmful, and nothing was done to counteract those kinds of harmful messaging," Sridhar said.

Pre-screening misunderstanding

The government advised individuals with chronic illnesses who had concerns about vaccine side effects to consult their medical practitioner before getting the jab.

But the emphasis on medical consultation gave the impression that the vaccines were dangerous for older people and those with chronic illnesses, and that an individual had to be healthy to get vaccinated. "You've basically created this idea that, if there's something wrong with you, then you should not get vaccinated—otherwise why would you go to see your doctor?" says Grepin.

Medical professionals welcomed discussion about vaccination with patients because they were keen to provide paid-for "pre-covid vaccination health screening" services at private clinics, she said. This cemented the mistaken belief that only healthy people should receive the vaccine.

"That put healthcare providers in a very strange situation," Sridhar says, "On the one hand the messaging is that covid vaccination is safe and should be given to all, but on the other hand, you have this proliferation of services for pre-covid [vaccination] healthcare screening."

Many risk averse doctors recommended against vaccination, even when risks were extremely low. "A lot of healthcare providers did err on the side of what they thought was caution, only to put patients in a very vulnerable position when covid finally came," Sridhar says.

Many older patients trusted the advice of their medical practitioners over government messaging.

Even the president of the Hong Kong Medical Association, Choi Kin, cautioned against enforcing third doses of the vaccines without access to what he considered sufficient scientific data.

"What is the percentage of asymptomatic infection here by omicron? What percentage develop what? What is the percentage with ICU care? What is the number that needed intubation or ICU care? Without these figures, can doctors blindly ask their patients to risk the side effects of vaccination?" Kin wrote in the February 2022 edition of *HKMA News*.

Zero covid

A study by the University of Hong Kong published in March 2022 found that vaccine hesitancy was highest among people aged 65 and older.

A separate study conducted by the university in June 2021 found social factors, including whether one's family members were vaccinated, and the level of trust in the government, played a significant role in individuals' attitudes towards vaccines. The study found that only around 41% of participants were willing to get vaccinated, and the rest were either hesitant or resistant.

Meanwhile, the Hong Kong government has insisted on "dynamic zero"—a strict quarantine for anyone testing positive for covid-19—in line with Beijing's "zero covid" policy towards infections. This means people have no urgency to get vaccinated against the virus. While the government says its goal is to keep covid out, why risk the side effects of vaccinations?

"If there's no covid, any risk of vaccination would seem unreasonable, but of course you had to suspend belief to believe we would never have covid," Grepin says. "I think people really do fear the immediate risk of being vaccinated more than the potential risk of catching covid and potentially getting ill."

The public continues to appear lacking in urgency to get vaccinated, even as the city's morgues are overflowing with bodies. The vaccination rate among people aged 80 and older was around 61% in late April. At the time of writing, the government continues to insist on a strict zero tolerance policy towards covid infections.

"Now, especially because the wave is receding and the government has categorically stated that dynamic zero is their preferred policy, people are looking ahead and they're saying 'OK, if we're going back to dynamic zero, then there's no urgency in getting vaccinated," Sridhar says.

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GPs filling gaps in failing NHS dentistry

As dentists hand back their NHS contracts in record numbers, GPs are seeing the impact on their workload and patients' health, especially in "dental deserts," reports **Sally Howard**

Over one week this spring, 20 patients presented at GP Abbie Brooks' York surgery with abscesses, dental pain, and broken teeth—demanding antibiotics and painkillers. Brooks could not prescribe because she was not indemnified to perform dental work. Many of these patients, Brooks says, were not registered with a dentist or able to find an NHS dentist, and had already been told to call 111. The NHS medical helpline had advised patients to visit emergency NHS dentists 50 miles away from Brooks' surgery.

"Vulnerable patients often can't get to emergency dentist appointments in Bradford or Leeds for logistical or financial reasons," she says, adding that a small proportion of patients became difficult when Brooks was unable to help. "One woman was really quite angry that I wouldn't incise and drain her abscess," she says. "It's not acceptable for GPs to have to deal with this crisis not of our doing."

This is not an isolated incident, and it is more acute in certain areas of the country. GPs are complaining of a "dentistry crisis lapping at the doors of primary care" as an unprecedented number of dentists hand back their NHS contracts. A May 2022 report commissioned by the Association of Dental Groups (ADG), which represents major chains of dental surgeries, found that England had its lowest number of NHS dentists in a decade; that 2000 dentists had left the profession in the year to May 2022; and that only a third of adults in England, and half of children, have access to an NHS dentist. The report highlighted "emerging dental deserts," including north and east Lincolnshire, Norfolk, Staffordshire, and the East Riding of Yorkshire, where many patients are unable to access NHS dental care.

The British Dental Association, a registered trade union for dentists in the UK, says that the nature of NHS dentistry contracts makes it impossible for dentists to afford to treat patients presenting with complex problems (see box 1).

The problem, says a principal dental surgeon in Sheffield who holds an NHS contract and did not want to be named, is that practices are paid the same amount for one filling as for 10 and that complex cases, or indeed multiple fillings, involve a net loss to the practice if patients cannot top up the difference.

It's not acceptable for GPs to have to deal with this crisis not of our doing
Abbie Brooks

"The NHS contract system makes taking on NHS patients a loss leading venture," the dental surgeon tells *The BMJ*. "Dental practices are left with the choice of either getting sued for not doing the right treatment and leaving patients with problems, or providing comprehensive care and going bankrupt." Practices face steep penalties if they do not meet their treatment targets under the contract.

Box 1 | A "broken" contract—why NHS dentistry is failing patients

NHS England spends about £3bn a year on dental care; the amount has remained flat for some time. Brought in in 2006, the NHS Dental Contract remunerates dentists for NHS provision under units of dental activity (UDAs) in three cost bands: band one (examination and x rays, two UDAs), band 2 (fillings and roots canals, three UDAs), and band three (advanced work such as crown and bridges dentures, up to 12 UDAs). The government contribution for each UDA is around £32.

NHS England announced £50m of additional funding to provide dentistry appointments in January, however the Association of Dental Groups (ADG) says that this will not recover the backlog of care from the pandemic or shore up the finances of practices trying to provide NHS services.

Successive governments since 2010 have pledged to reform the dental contract but none have done so. In February the House of Lords debated an amendment, put forward by the British Dental Association, to place a duty on the secretary of state to report annually to parliament on the state of NHS dentistry. A debate on support for the dental sector followed in the Commons, with MPs presenting evidence of the crisis of NHS dentistry access in their constituencies.

Up to 30% of NHS dentists are drawn from Europe, notably Poland, Romania, and Spain. The ADG says that the end of Brexit interim arrangements, in December 2022, that allow European Economic Area qualifications will lead to a reduction in new joiners, furthering pressures on NHS provision.

Dentists additionally allege that the rise of "no win no fee" lawyers and distrust of UK statutory regulator the General Dental Council make them shy away from conducting riskier procedures on patients in need that might lead to lawsuits.

MALCOLM WILLETT

Patients in pain

This gap in NHS dentistry provision results in patients presenting to general practice with tooth decay, root infections, abscesses, and impacted wisdom teeth.

Brooks says that many patients with abscesses she sees in her practice end up "getting more and more unwell and eventually present to the oral and maxillofacial teams in hospitals." This is "wasting resources unnecessarily," she adds.

Additionally, dentists are often the first to spot symptoms of mouth cancers and type 2 diabetes, with the ADG arguing that lack of access to dentistry will lead to later diagnosis of these diseases and an increase in mortality. Mouth cancer referrals have dropped 65% since the first covid-19 lockdown and the diagnosis of type 2 diabetes was missed or delayed for 137 000 people in 2020.

Patients with infected wisdom teeth come back again and again for antibiotics
Katherine Hickman

A May 2022 report by independent consumer experience organisation Healthwatch England found that 20% of respondents could not access dental treatments amid rising costs of living and that one third of respondents said a lack of access to dental care led to more serious health problems, including struggling to eat or speak properly.

Katherine Hickman, a GP partner in Bradford and administrator of online doctor support network Physician Mums UK, says the crisis in NHS dentistry in England has been "bubbling for years."

"You get patients with infected wisdom teeth, for example, who come back again and again for antibiotics," she says. "They are in pain and they're kicking off at the surgery."

Box 2 | Treating dental pain in primary care: the legal view

Kathryn Leask, medicolegal adviser at Medical Defence Union, tells *The BMJ* that under the Dentist's Act 1984 the practice of dentistry is restricted to registered dental professionals and those in training—however, GPs can provide urgent and necessary medical treatment if the patient is not able to contact a dentist.

Leask adds that it's important for GPs to keep a record of any treatment and advice provided and that they make sure they are aware of relevant guidance, such as the NICE clinical knowledge summary on managing dental abscesses in primary care.

Box 3 | The Department of Health and Social Care responds

A DHSC spokesperson says:

"We've given the NHS £50m to fund up to 350 000 extra dental appointments and we are growing the workforce so people can get the oral care they need. In December 2021, there were 264 more dentists registered than the previous year.

"That's on top of our unprecedented support for NHS dentists during the pandemic, including protecting the incomes of dental practices that couldn't deliver all their usual services, and tackling the covid backlog.

"We are committed to levelling up health outcomes across the country—we have set up the Office for Health Improvement and Disparities to tackle long standing health disparities and will publish a white paper this year to ensure everyone has the chance to live longer and healthier lives, regardless of background."

Exasperation, frustration —and risk

Hickman admits these presentations "exasperate" her. "I tell patients, 'Coming to your GP for your teeth is like me coming to you for a colonoscopy'."

Rokhsareh Elledge is a locum GP at a practice in south Birmingham and also a dentist, practising privately at a dental clinic in Worcester two days a week. "We see more dental patients presenting in general practice," she says, "and I understand GPs' frustration. GPs are not insured to treat these problems and often don't know what they are looking at—for example spotting cancers or infections that risk sepsis."

Elledge adds that she is not indemnified to practise dentistry when working as a GP and that the examination room conditions are "not at all ideal" for working with patients' mouths even for a GP with the requisite knowledge.

GPs are not insured to treat the problems of dental patients
Rokhsareh Elledge

I am concerned about GPs' legal and ethical exposure
Jackie Applebee

Jackie Applebee is a GP in Tower Hamlets, London, and chair of union Doctors in Unite, who is concerned about GPs' legal and ethical exposure if they treat patients with dental pain (see box 2). "I am regularly asked by people with dental pain for antibiotics and painkillers because they either can't find an NHS dentist or can't afford the charges. We are not qualified to diagnose dental problems and if we prescribe, the cause is not being dealt with and we are risking antibiotic resistance," she says.

Chewing over solutions

Hickman's surgery has initiated "rigorous gatekeeping" for dental presentations. "Sadly, you have to cut any and all requests for dental treatment off at the front desk and GPs and administrative staff have to be singing from the same hymn sheet," she says. "If you allow one tooth abscess to walk through the door, you will get a hundred more, though it's sad to have to put it in these terms."

Patients who do call with dental problems are referred to 111.

With a foot in both general practice and dentistry, Elledge would like to see a strengthened "core" dental service with larger NHS dental surgeries to treat emergencies, acute conditions, and people in need—supplemented by an affordable insurance based subscription service for those who pay. "Crucially, this should be centrally planned so we don't end up with the patchwork of underserved areas we have today," she says.

Rizwana Lala, a dentist, academic, and consultant in public health at the UK Health Security Agency, conversely believes the only solution, after two decades of dwindling provision, is a comprehensive public system. She says, "Over years the NHS contract system has shown that it is not equipped to meet the dental needs of high need groups and those living in deprived areas.

"We need to go back to the founding principles of the NHS, which included a universal, publicly funded dental service, free at the point of need."

The ADG is calling for a six point government action plan that includes increasing the number of dentist training places in the UK, with a new school in the east of England; continued recognition of EU trained dentists after the end of Brexit interim arrangements; simplification of the system to allow overseas dentists to practise in the NHS; reform to allow therapists and hygienists to initiate courses of NHS treatment; and reform of the "broken" NHS contract to do away with the "treadmill" of under remunerated bands and performance targets.

An NHS England and NHS Improvement spokesperson told *The BMJ*, "The NHS has taken unprecedented action throughout the pandemic to support dentists to continue to treat their patients.

"An additional £50m was made available to support patients with urgent care needs in January—as well as income protection for practices unable to deliver their usual levels of activity."

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