comment

"We call for greater levels of cultural competency" **IQBAL SINGH AND MARTIN FORDE** "After years of talk the time to challenge and bring accountability is now" **PARTHA KAR PLUS** "So, what are the joys of general practice?" **HELEN SALISBURY**

OPINION Aneez Esmail and Sam Everington

The GMC has been failing for 30 years

The Arora case shows it is not fit for purpose and should be placed in special measures



he GMC has made dealing with criticism into a performative masterclass. It has honed several strategies: deny there is a problem, cite the lack of evidence, commission research that often produces predictable answers to banal questions, and produce an endless series of reports so that it can wring its hands in false contrition and promise that change will come.

The GMC's internal report into the case of Manjula Arora is damning. The only thing it will seize on is that the report's authors could not find evidence of direct racial bias. But, tellingly, they did not exclude this possibility.

Problems with racial bias in the way the GMC deals with cases were first raised by us nearly 30 years ago, in 1993. The GMC subsequently commissioned research by the Policy Studies Institute, which identified major flaws in the way that the GMC made decisions related to what was then defined as serious professional misconduct. These reports set out the need for the GMC to produce agreed standards, criteria, and thresholds by which decision makers could determine whether a set of facts amounted to serious professional misconduct and thus avoid the problems of perceived racial bias.

The Shipman inquiry report published in 2004 included a detailed and forensic examination of all the processes of the GMC, together with clear recommendations on how it could develop standards against which it could assess "impairment of fitness to practise." Nearly 20 years later, the GMC is still grappling with the same issues—the failure to define standards, criteria, and thresholds. It's almost as if the desire to learn is lacking—the Arora report talks about the absence of a culture of curiosity, the lack of consistency in its decision making, the failure to question its own decisions, and case examiners failing to seek legal advice, which resulted in a wrong legal test being applied.

This one case review gave rise to 18 recommendations, suggesting that the problems are systemic. As well as failing, the GMC is also dysfunctional, used to blaming *(Continued on page 272)*

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politicians and the legislature for its inability to make changes because of constraints in the Medical Act 1983.

Even the recommendations of the report that the GMC commissioned in 2019—that local resolution should be the default starting point of minor infringements—could have prevented escalation of Arora's case. To make matters worse, the GMC lawyers used an adversarial approach in the tribunal service, so much so that the authors of the Arora report make a plea to the GMC to show compassion and respect. These are some of the foundational principles of medical professionalism.

Some doctors have described to us how the barristers instructed by the GMC are often perceived as trophy hunters. This lack of compassion and respect has also resulted in 29 doctors taking their own lives while under investigation by the GMC. Appleby's report for the GMC in 2019 called for more sensitivity in the investigation of doctors, yet judging by the Arora report, the GMC is still failing in the standards it has set itself. This is a problem for both patients and doctors. In a series of reports on women's health, for example, the GMC has failed to implement some of the recommendations relevant to its processes.

Lack of public scrutiny

If the GMC was subject to public scrutiny in the same way that the Care Quality Commission assesses healthcare organisations and general practices, it would be rated as inadequate and subject to special measures.

The GMC has now become an organisation that serves only itself and perpetuates the myth that it acts on behalf of patients and doctors. Doctors are willing to pay a substantial sum of money through annual registration fees because they see the importance of a regulatory body that protects the interests of patients and ensures that when things go wrong there is scrutiny of the doctors who might be involved.

The GMC has been given the opportunity to reform for over 30 years by a range of organisations, in addition to undergoing a full and thorough public inquiry. The gulf between what the GMC says and what it must do to change is now so great that the only solution is for it to be placed in special measures so that a new organisation can be created that can truly represent the needs of patients and doctors.

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OPINION Iqbal Singh and Martin Forde

What can we learn from the Manjula Arora case?

The diversity of the medical profession has never been greater—42% of doctors in the NHS are of black and minority ethnic origin in a workforce heavily reliant on international medical graduates. Almost two thirds of doctors joining the UK medical register are from ethnic minority groups.

So when Manjula Arora, a locum, was given a month's suspension over whether or not she was promised office equipment, the consternation was instant, and palpable. At its heart, this issue hinged on a legal test around dishonesty which was wrongly applied. Had that test been applied correctly, the allegation against Arora would never have made it to a tribunal, preventing a great deal of anxiety.

THE BOTTOM LINE Partha Kar

workforce issues also pose a real danger.

And yet it's striking that one of the biggest

employers on the planet continues to rely

on the stopgap measure of asking people

from other countries to come and fill the

The problem with this is its long term

"non-local" workers grows, so do the voices

highlighting the unfairness these people

group talking about how they're treated

because of where they trained or their

experience. How do you shut down a huge

ethnicity? How do you defend the narrative

that their training is good enough for lower

grade roles-the ward duties no one else

does-but not for higher bands and posts?

datasets in the public domain, such as the

Workforce Race Equality Standard (WRES)

and the Medical Workforce Race Equality

Standard (MWRES), not only confirm what

people have been saying but tell you even

more about inequalities in the workforce?

How do you square that circle when

unsustainability. And as the cohort of

holes in the workforce.

It's time for accountability and

Last week the GMC published a review of the case which we co-chaired. We hope that our review of the Arora case will encourage modern regulation which is compassionate, caring, and fair. It is our belief that we can make cases such as this into "never events."

Recommendations

Our review makes a series of recommendations, from greater consistency in managing concerns so that "local first" (managing concerns at a local level rather than referral to the GMC) becomes the default, to more rigorous investigation plans and case assurance.

But crucially we also call for greater levels of cultural competency to better understand the professionals working in

discomfort about staff inequalities In debates about the challenges facing the NHS, financial difficulties are always front and centre. Now there's a realisation that

> rely on goodwill to fill gaps in rotas? The recent suspension of Manjula Arora led to a groundswell of support for UK doctors who trained in other countries, and work by the British Association of Physicians of Indian Origin, the Doctors' Association UK, and others have shown the appetite for coordinated effort in this area. On a personal front, it's heartening to see engagement from the GMC, willingness to open a review, and acceptance of mistakes made. Hopefully this is the start of a fairer and kinder health system.

> How, then, can we map out the next steps for tackling racial inequalities in the NHS workforce? It's time to move beyond reconfirming the same narrative. Data should track progress, or the lack of it, and bring accountability. If, as a trust or system, you're serious about this, show me the data to justify your hashtags and posters. Or let the data be part of your assessment of whether or not you're a failure on this. There's no point in having job titles or



our services. The NHS remains a beacon of diversity but is lacking on inclusion. Sadly, the feeling persists that our system is not a level playing field for staff of all backgrounds. The GMC can be a leader in changing this perception if it develops greater insight into the experiences of doctors, so misunderstandings are not compounded by mistakes.

The GMC must show greater compassion in its interactions with doctors, patients, and referrers. We know that investigations are hugely stressful for doctors and can have a lasting effect on their mental or physical wellbeing. The need for support is sometimes



We hope our review of the case will encourage modern regulation which is compassionate, caring, and fair

even more important at the end of tribunal hearings than during the process itself.

Regulators should judge their success not by how many cases they handle, but how they support local systems towards local resolution and remediation, and how good practice is shared and standards are continually improved. That is where compassion will benefit not just doctors and regulators but also patients and employers. It should be noted that the GMC is making some positive contributions already. The GMC invited this review, after hearing the concerns raised about the case. Its outreach teams deliver sessions to acclimatise new doctors to UK medical practice, helping them integrate into the NHS and community.

It could do even more through using responsible officers to support local resolution to avoid unnecessary referrals. If and when the UK government undertakes reform of its legislation, the GMC will be better able to dispose of fitness to practise concerns consensually.

Until then, the GMC and the wider health service must engender a culture of curiosity in how it fulfils its statutory duties and treats those doctors who come into its orbit. We believe that the GMC is committed to embedding equality in its processes and in the health service; now it must use its influence to follow through on that commitment.

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departments dedicated to equality if the data show no such dedication.

Consider the WRES work led by Anton Emmanuel. The next steps are ambitious. They start with disaggregation of data so there's no more lumping everyone together and labelling them "BAME"—having a couple of South Asian people to tick a box does nothing to improve representation from the black community. The data will also help with setting targets and drilling into the performance of trusts, systems, and regions—and they need to be made public. Holding areas to account, and involving the Care Quality Commission in using them for assessments, is all part of the data driven approach to improve outcomes, as is offering support when data show a lack of progress.

Which brings us to medicine, and the MWRES role I hold now. The plan is mapped out, as I've outlined here previously. We're on the cusp of agreement from all stakeholders the GMC, NHS Employers, NHS Resolution, the Academy of Medical Royal Colleges, and the BMA. Once we have that, the work starts. The key is having data in the public domain and having accountability. We need to be able to challenge trusts and systems, openly and transparently, not hidden in emails or board meetings where compromises are struck.

A firm focus on GMC referrals will remain, tracked by data and with robust challenges

around inappropriate referrals. We need to see what these systems are doing to improve representation in leadership roles, with the disaggregated data mentioned above, as well as induction programmes for international medical graduates and, importantly, progress of SAS doctors (specialty doctors and associate specialists) into relevant senior roles. We've shown we can improve diabetes care using processes such as Getting It Right First Time, so why can't we do it for a workforce struggling with racial discrimination? If a trust's WRES/MWRES data continue to be poor, this should form part of a CQC finding of "poor" or "inadequate." Workforce wellbeing is everyone's business and, in 2022, you can't be an "outstanding" trust if you can't look after your whole workforce.

We need to be able to challenge trusts and systems transparently That at least is the ambition, and the trillion dollar question is whether NHS England has the stomach to achieve it. Will those plans survive the ongoing upheaval, restructuring, and crisis? Not if they are diluted. That would show that, as a system, we fail to understand the basic tenets of the issue, continuing to pay lip service when 40% of the medical workforce in the NHS is non-white. Every protected

characteristic is important, and prejudice must be tackled at all levels—yet NHS surveys still show that ethnic minority staff have a more a negative experience of the NHS.

After years of talk, presentations, and hashtags, the time to challenge and bring accountability is now, without fear of causing discomfort. We have a clear vision and strategy for the next steps, and I hope you can join

us in this journey.

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OPINION Martin McKee and Scott L Greer

Doctors are accountable to the GMC, but who is the GMC accountable to?

In the light of the Arora case we need to start asking fundamental questions about who health regulators should answer to

he GMC makes it clear that doctors in the UK are "personally accountable for [their] professional practice and must always be prepared to justify [their] decisions and actions." It expects them to comply with a set of obligations, periodically updated, in a series of domains including safety and quality, skills and performance, and maintaining trust.

But who is the GMC accountable to? This is an important question given a series of high profile cases that have attracted widespread criticism, most recently that of Manjula Arora, whose case handling the GMC has apologised for.

The GMC's Code of Conduct states that it is accountable to "the public through parliament and the Privy Council." Yet the Medical Act (1983) that establishes its legal basis does not mention parliament, instead saving that it will "be constituted as provided for by order of the Privy Council." This was noted by MPs who sat on the House of Commons Health Committee in 2011. They stated that "the current legislation makes the GMC accountable to the Privy Council; in the absence of a mechanism which makes this accountability effective we intend to exercise this function ourselves, on behalf of parliament." This decision, while pragmatic, had no legal force.

Important changes came in 2002, with the introduction of the National Health Service Reform and Health Care Professions Act. This established the Professional Standards Authority for Health and Social Care with the over-riding brief to protect the public. It does so by, among other things, maintaining public confidence in professions overseen by certain regulatory bodies, including the GMC, and the professional standards and conduct of members of these professions. Its scope was expanded in the Health and Social Care Act (2012). This represents what has been termed "meta-regulation," in which regulators are themselves regulated.

To make sense of these arrangements, we must look at the organisations involved and how they work.

The Privy Council

The Privy Council originated from bodies that predate the Norman conquest but has existed in its current form since 1801, albeit with some changes in its powers. It is presided over by the lord president of the council, a member of the UK cabinet who is usually also the leader of the House of Commons. The current holder is the MP Penny Mordaunt. As of 2022, it has over 700 members, each appointed for life by the sovereign on the advice of the prime minister. Although some postholders are customarily appointed by virtue of the posts they occupy, the prime minister ultimately has complete discretion.

Most privy counsellors are current or former politicians in the UK or Commonwealth countries, with some senior judges, bishops, and members of the royal family. In practice, however, its meetings are much smaller. They are attended by the sovereign and, typically, by four privy counsellors (the quorum is

Like so much of the unwritten British constitution, these arrangements have long defied logic



The GMC apologised to Manjula Arora, a locum, after imposing a month's suspension over whether or not her trust promised her a laptop



three), normally including the cabinet minister responsible for the subject matter of any orders being presented. The procedure involves the reading of an order proposed by a minister or other bodies, to which the sovereign will generally respond with "Approved." The sovereign remains standing throughout, thereby ensuring that the meetings remain brief.

Like so much of the unwritten British constitution, these arrangements have long defied logic. Baroness Royall, a former president of the council, has described the Privy Council's continued existence as "more or less a constitutional and historical accident." Using the terminology of Walter Bagehot, in his classic book *The English Constitution* (1867), it belongs to the "dignified" part of the constitution, those theatrical elements intended to impress the masses, rather than the "efficient" part, whose role was to govern them.

The dignified elements provided the legitimacy needed by the efficient ones. In practice, however, it is a vehicle by which the current government, and other statutory bodies such as the GMC, can avoid parliamentary scrutiny. Thus, despite its meetings being reported online, it is still described as "something of a black hole."

The GMC

The second organisation to consider is the GMC itself. It underwent major reform in 2003, described on its website as a transition from self-regulation to what it terms "professional regulation." The number of doctors on its council was reduced considerably—currently six lay and six medical members—and are appointed by members of the Privy Council. Previously, they were elected by the membership and thus accountable to them. The GMC has subsequently implemented a series of measures to increase the accountability of doctors, including revalidation.



It is clear that the GMC's claim that it is accountable to the public, through parliament and the Privy Council, is a convenient fiction

Ironically this came at a time when its own accountability had become less clear.

Professional Standards Authority

The third organisation is the Professional Standards Authority. Its website states that "parliament oversees our work. The Privy Council consults on the budget we say we need to do our work and sets the fees that the regulators must pay. The Health Committee can call us to appear and give account of our work," although the last time it seems to have done so was in 2016.

As noted above, it is tasked with protecting the public and maintaining public confidence in the regulation of healthcare professions. Its functions include formulating principles guiding good professional self-regulation, to encourage regulatory bodies to conform to them, and promote good practice. It is empowered to "investigate, and report on" the performance of regulators and recommend changes to the way they operate. Additionally, it publishes annual reports on each regulator, which are presented to parliament.

Its annual reviews of the GMC assess its performance against 18 standards, and, in conclusions that might surprise some of the GMC's critics, it has decided each year since 2014 that all have been met. But it clearly has some concerns. In its last parliamentary evidence session, its former chief executive stated: "We are working against the legal framework rather than with it" and, with regard to the complex appeals system against GMC decisions, "There is duplication of effort with, to my view, no obvious public benefit."

It can also initiate special investigations when requested by the health secretary in England or the devolved administrations.

Health and Social Care Committee

We have previously mentioned MPs on the House of Commons Health Committee (now "Health and Social Care" since the department it scrutinises was renamed in 2018). Like other select committees it has limited powers but, by virtue of its independence from the executive, can make recommendations. As noted, in the early 2010s it held a series of accountability hearings into the functioning of the GMC, showing that the committee was willing to challenge it. In its 2013 hearing it noted that the GMC was unable to explain the reason for the growth in complaints against doctors. Yet it has limited power. It provides recommendations to the GMC and the government but, in its responses, the government has limited its comments to those directed explicitly to it.

No recent hearings have taken place, however, except for one that specifically examined the GMC's handling of the case of Hadiza Bawa-Garba, when the Professional Standards Authority advised the committee during its preparations. This is despite the committee's previously stated view that such hearings should take place annually.

A former member of the committee (in a personal communication) has described the extremely heavy workload of the committee, with members balancing their increasing workload across their many responsibilities. This means that, in effect, members depend on the assessments of the Professional Standards Authority and would only hold an accountability hearing if it seemed necessary.

For completeness, it is necessary to note that, like all statutory bodies, the actions of the GMC may be subject to judicial review where it is argued that they are unfair, illegal, unlawful, unreasonable, disproportionate, or irrational. In addition, the reporting arrangements differ in some respects in the devolved administrations.

Lack of accountability

The unwritten British constitution has evolved incrementally, resulting in a situation that is often difficult to understand. Ministers still have widespread power under the Royal Prerogative, for example, although less than previously. Yet, as the Ministry of Justice noted in 2009, the scope of this power is "notoriously difficult to define," and many elements have "no judicial authority at all."

This has created a situation in which we depend on what Lord Henessey has referred to as "the good chaps theory of government," in which those in positions of authority can be trusted to do the right thing. But, as he has highlighted, recent events have shown that this no longer works.

Examining the current setup makes it clear that the GMC's claim that it is accountable to the public, through parliament and the Privy Council, is a convenient fiction. Other than through the courts, there seems no clear and transparent way for the public to hold the GMC to account. For this to change, its current legislative basis would need to be revisedsomething that is now being considered. This should, however, oblige it to account, regularly and transparently, to the members of parliament and their counterparts in the devolved nations, who represent the public. This would demonstrate that it is capable of responding to legitimate concerns about how it operates and the priorities it decides on.

In this digital age, the public expects a higher degree of transparency than ever. It is unclear whether a system with an institution older than Queen Victoria at its heart can provide it. Nor is it clear whether the government's current thoughts on possible change will tackle this issue.

The independent review into the handling of Manjula Arora's case stated that "The UK government's reform of legislation that underpins the regulation of healthcare professionals is long awaited and is vital for a more flexible, proportionate, and compassionate approach to fitness to practise in the future. We join the GMC in calling for these reforms, which we believe should happen as quickly as possible, for the benefit of both doctors and patients." We agree, but argue this should not tinker at the margins but ask fundamental questions about who health regulators really are accountable to.

Martin McKee, professor of European public health, London School of Hygiene and Tropical Medicine Scott L Greer, professor of global public health, University of Michigan School of Public Health Cite this as: *BMJ* 2022;379:02676

I'm a GP—get me out of here?

'm reaching the age when my friends are discussing retirement, pensions, and the next stages of their lives. And sometimes, when I describe my hours and volume of work, it's a bit like being on the other side of a consultation with a patient who persists in self-destructive behaviour. I hear my own explanations and see people listening hard, trying to understand while utterly mystified.

So, what are the joys of general practice? Let's for a moment forget the time spent poring over ever changing target spreadsheets-the Quality and Outcomes Framework, the Investment and Innovation Fund, and the Prescribing Quality Scheme, to name but three (although of course, we must pay attention, as our income depends on them). Let's also put aside the struggle, in an area of labour shortages and intense competition, to recruit, train, and retain the clinical, reception, and admin staff we need. Let's also ignore, at least temporarily, the extra work created by NHS England, such as the latest half baked and unsafe scheme for automatic, online patient access to notes. Instead, let's focus on the job we trained for.

Our patients come to us in pain or fear, and our job is to listen, investigate, reassure, and sometimes refer. We have powerful drugs at our disposal including antibiotics and painkillers, but the most effective tools in our box are knowledge and care. There's satisfaction in the astute diagnosis of serious medical conditions, particularly when the interface with secondary care colleagues is working smoothly. It's also satisfying to set people's

I want my patients to know that I'll do my best to help when they need me minds at rest—by explaining why this left arm pain is not a sign of heart problems; or that, despite a temperature and rash, their toddler is not dangerously unwell, and all that's needed is paracetamol.

A large part of the pleasure I find in my work comes from continuity, the result of tending my patients over many years. I know their medical histories, but I also know them as people, albeit in a limited, rather skewed way. This knowledge speeds up some consultations but can slow down others, when patients want to share significant developments in their lives because they think I'll be interested. And I am. In the past few months I've been both sung to and danced at, as demonstrations of newfound health.

There's a fine balance between cultivating patients' confidence in my ongoing care and reassuring them that my colleagues are just as good as me (and sometimes better), to avoid unhealthy dependence. But I do want to be dependable and for my patients to know that I'll do my best to help when they need me, and I'll be ready to accompany them on even the most difficult journeys.

Not every practice can offer this sort of personalised care, but it's the reason I carry on working. If, as a profession and a system, we placed greater emphasis on continuity, it would not only help patients but also make our GPs happier. We might even succeed in keeping them for a few more years in

> the jungle that is primary care. Helen Salisbury, GP, Oxford helen.salisbury@phc.ox.ac.uk Twitter @HelenRSalisbury Cite this as: BMJ 2022;379:02680

LATEST PODCAST



Talk Evidence: Diabetes data and colonoscopies

In the latest episode of the Talk Evidence podcast, the team discuss a paper about colorectal cancer screening. Juan Franco, editor in chief of *BMJ Evidence-Based Medicine*, introduces the study:

"It was very popular in the news because it's one of the first randomised controlled trials that put colonoscopy under scrutiny. It was a large trial between 2009 and 2014 in Poland, Norway, Sweden, and the Netherlands with follow-up data from more than 84 000 participants, who were randomised to be invited to undergo a single screening colonoscopy or no invitation to screening."

Joseph Ross, US research editor at *The BMJ*, describes how it led to heated discussion on Twitter: "It was a bit of a Rorschach test in the sense that people saw in it what they wanted to see. There were the people who saw the low participation rate and said, 'Ah, that means screening programmes aren't likely to work. There's too much overdiagnosis, too much testing and treatment. This is just one more nail in the coffin for screening programmes.'

"Other people were like, 'Hey now, it's more complicated than that.' And when you do the per protocol analysis, and focus on the people who actually underwent screening, it actually is effective at the individual level. To me, this raises an interesting question."

The team also unpick the evidence for England's NHS Diabetes Prevention Programme, with Franco discussing what we understand about how lifestyle interventions work at a population level:

"One of the questions I have as a clinician is how much of these programmes are trying to prevent the chemical diagnosis of diabetes or how much are we preventing the actual morbidity that is related to diabetes and the burden of the disease?"

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Edited by Kelly Brendel, deputy digital content editor, The BMJ

COVID INQUIRY

Knowledge mobilisation: quick generation, dissemination, and use of evidence

Raheelah Ahmad and colleagues examine how the method worked during the covid-19 pandemic and call for successful models to be embedded in UK research and policy environments

he simplest definition of knowledge mobilisation is the process of optimising the use of knowledge generated from research.¹ Connecting academic research with non-academic decision makers, including those involved in public policy and professional practice, is a complex process, but can be facilitated if problems are defined and solutions are tackled collaboratively. Effective knowledge mobilisation occurs when research knowledge is perceived as relevant and usable and there is minimal duplication of effort through "unused" research findings.⁴

The covid-19 pandemic presented a previously unseen level of demand and urgency for research based evidence and for mechanisms to enable use of evidence almost in real time. The United Nations research roadmap for covid-19 recovery⁵ puts knowledge mobilisation at the top of a list of required investments along with implementation science, rapid learning systems, scaling up data infrastructure, and the science of science.⁵ It is therefore important that the UK covid inquiry examines how knowledge was mobilised during the pandemic and what can be done to improve use of research evidence.

Pandemic mobilisation

From a UK perspective, notable examples of generating usable evidence quickly include the development and trial of the Oxford-AstraZeneca covid-19 vaccine led by Oxford University's Jenner Institute and Oxford Vaccine Group, and well coordinated rapid clinical trials such as Recovery, which helped guide treatment. Existing infrastructure, technology, and expertise at the host centres enabled studies to start much quicker than usual, with joint working with centres across the world and regulatory bodies, open access research protocols, and rapid dissemination of summary results.

Investment in these projects in the face of high uncertainty was justifiable in the context of a pandemic of a novel virus.⁶ The situation required "intelligent and informed risk taking" and mobilisation of collective action, rather than all the answers.⁶⁷ Subsequent trials that helped to understand what aspects of immunity contribute to protection also relied on existing infrastructure.

These large scale trials also contributed to progress in methods of participant recruitment. Public participation in research had begun to increase before covid, with the NIHR clinical research network recording a 20% increase in participants from 2017-18 to 2018-19. Additional mechanisms used during the pandemic included mass campaigns, endorsements by the chief medical officers of the four UK nations and NHS medical directors,⁹ and the NHS vaccine registry allowing any member of the public to volunteer.

Participation is likely to have been encouraged by the increase in accessibility of scientific language and democratisation of knowledge. The R number, modelling, evidence, and data featured in wider public

Large scale trials also contributed to progress in methods of participant recruitment

discourse,¹⁰ and epidemiologists, infectious disease specialists, and global health experts became household names.

What facilitated knowledge mobilisation?

Below we consider three examples of successful knowledge mobilisation during the pandemic. The lessons from their success can be built on to help deal with routine health system challenges as well as epidemic and pandemic threats.

Integrated care records make studies quicker and easier

Availability of linked data to support patient care and research across health and social care in England remains patchy. The main national database, Clinical Practice Research Datalink, is based on linked primary care records and provides data for around 16% of the UK population, with links to hospital records, the national cancer registry, area level social deprivation information, and national mortality data. However, inferences are limited to specific regions and extracts are not updated in real time.¹¹ This limited its usefulness in research to inform the response to covid-19.

A better system was offered by the whole system integrated care database in northwest London, which was set up before the pandemic to provide comprehensive integrated medical and social care records in near real time (table).

To enable expedited research access at the start of the pandemic this data infrastructure was rapidly expanded to include Imperial College Healthcare NHS Trust inpatient data, and then maintained in de-identified form on a cloud based data analytics platform.

A covid-19 data prioritisation review panel was set up, including a patient and public involvement representative. Research protocols were assessed within a week for methodological rigour and,

KEY MESSAGES

- Effective response to the pandemic required real time use of research knowledge
- Some existing infrastructures accelerated collaborative working during the pandemic, and helped direct research appropriately
- Investment is needed in integration of data, particularly for social care
- Successful knowledge mobilisation needs to be sustained and expanded to support our recovery from the covid-19 pandemic and respond to further threats

importantly, for relevance to policy and practice. This structure enabled interdisciplinary research teams to quickly pivot to investigate relevant health service management and delivery in surgical care, for example, and to consider important operational and applied research questions, such as the uptake and effectiveness of the vaccination programme.¹²

This infrastructure is now even more useful for understanding the consequences of covid-19 on population health outcomes and for planning healthcare as the pandemic eases. The challenge will be maintaining it as the system grows and is used more widely beyond covid-19. There is potential for other regions to replicate this infrastructure, particularly the agile methods used for development, access, and permissions. With dedicated resourcing, it has the potential to be a global exemplar of integrated applied research and informed decision making.

Value of adaptive trials

Unlike traditional "A" ν "B" randomised controlled trials, participants in randomised, embedded, multifactorial adaptive platform (Remap) trials are randomised to receive one intervention in each of one or more categories of treatment ("domains"). This allows for multiple interventions to be tested simultaneously (table).

The Remap Trial for Community Acquired Pneumonia (Remap-CAP) was set up to evaluate the effect of different interventions on outcome of patients admitted to intensive care with community acquired pneumonia and operates in over 300 sites across 21 countries. In March 2020, the protocol was rapidly adapted to allow timely generation of evidence for treating severe covid-19.¹³ The specification of pathways enabled the data safety monitoring board to liaise directly with public health authorities as results arose.

The research showed that the interleukin-6 receptor antagonists tocilizumab and sarilumab save lives in people with severe covid-19 and speed up recovery, as do corticosteroids.^{14 15} These results were incorporated into NHS treatment guidelines the day after they became publicly available and formed part of WHO treatment guidelines.¹⁶

This infrastructure worked because it had the foundation of a strong international peer network and well established spirit of collaboration and commitment to contributing research evidence for those who urgently need it. If this adaptable method is replicated and scaled up it will enable rapid investigation of responses to future health emergencies.

Potential of technology for mass public participation

The ZOE app was developed for the Predict study to understand how different people respond to food and what determines these variable responses using data self-reported by public participants. The research team rapidly adapted the app as a symptom tracker for covid-19 and launched it in the UK and US before 30 March 2020.

The app collected data from asymptomatic and symptomatic people (table) and enabled the ZOE Covid Study, which was highly efficient compared with traditional methods. In the first month 2 450 569 UK and 168 293 US residents reported symptoms through the free smartphone app, and results were published on the study website and in peer reviewed journals.^{17 18}

This infrastructure worked because of the unique reach and usability of the technology, coupled with the wider cultural shift in terms of public involvement. The challenge is to expand the reach among people who are less confident with smartphone technology.

In its first month 2450569 UK and 168293 US residents reported symptoms through the free ZOE app

The app shows the potential of recruiting the public for symptom tracking as part of routine infectious disease surveillance, providing early warning systems.

Adapting research infrastructure for effective knowledge mobilisation

These examples are a small subset of the many excellent knowledge mobilisation journeys since covid-19. Existing infrastructure such as NIHR biomedical research centres, health protection research units, patient safety translation centres, and notably the clinical research networks, encouraged multidisciplinary working and collaboration. For example, the existence of clinical research networks, which facilitate research on national priorities, contributed to the success of the Recovery trial and helped the UK lead global recruitment in the Remap-CAP trial. Many of these infrastructures also improve commercialisation of ideas by bringing together researchers, practitioners, and managers across clinical and academic disciplines.^{19 20}

The Research to Access Pathway for Investigational Drugs for Covid-19 was key to getting new treatments to patients quickly.²¹ It brought together the NIHR, NHS, National Institute for Health and Care Excellence, and Medicines and Healthcare Products Regulatory Agency to rapidly review results, allowing assessment of preprints as well as peer reviewed publications. Preprint platforms such as bioRxiv and medRxiv allowed rapid global reach of findings, but the sheer volume of research studies available before peer review was difficult for individual readers to evaluate. Editorial boards of journal families (eg, Lancet Group) combined their submission systems given the volume of submissions, saving time for themselves and researchers.

A more permanent shift in early posting of research protocols and results for other less immediate but serious global threats would help reduce duplication of effort, allowing a focus on much needed implementation studies. Such repositories could also help funders when commissioning research; researchers likewise would benefit when refining research plans given the length of time it takes from announcement of funding calls to finally contracting work. Additional resources shared between global interdisciplinary research networks

Questions for the public inquiry

- What were the conditions and infrastructure that allowed NHS and academia to implement successful knowledge mobilisation measures?
- How should successful infrastructures, networks, and registries be maintained outside the pandemic?
- Are adequate data available on the complete patient pathway across health and social care and was maximum benefit derived from existing platforms?
- Where did knowledge fail to be mobilised, and why?
- How can pragmatic and adaptive trial methods, particularly for the management of infectious diseases, be more widely applied and supported?
- How can trust and strong public commitment best be fostered and harnessed early, to participate and contribute data?
- How can we build on the positive cultural change and choreograph informed citizen science to shape and raise questions for research?

Examples of knowledge mobilisation mechanisms and potential for development

Example	Existing mechanisms	Developments resulting from covid-19	Non-academic users	Benefits	Widervalue	Challenges to sustainability and expansion
Northwest London linked datasets— linked credible real time data for health decision making	Medical and social care records for 2.4 million people De-identified patient data, including healthcare provider variables, available through a cloud based system Curated subsets allow researchers to tailor the filter data extraction query, facilitating rapid comparisons over time, setting, and patient population Local governance structures	Data review panel established to assess the research for methodological rigour and relevance to policy and practice Public and patient involvement in assessment process Rapid response to research proposals Near real time data linkage and accessibility	Local NHS	Condensed timeline from study conception to use of findings Ability to examine immediate operational and applied research questions	To understand longer term population health outcomes To inform health service planning	Expanded governance structure required to ensure safe and equitable access without protracted lead times Technical expertise needed in working with linked datasets generated from different sectors and understanding limitations Lack of data on populations excluded from or with limited access to formal healthcare services Costs of maintenance and expansion
Adaption of Remap-CAP trial to include treatments for covid-19	The trial system allows for multiple interventions to be tested simultaneously Response adaptive randomisation information from patients already participating in the study can also be used to help guide the treatment of patients joining the study Strong international peer network and well established spirit of collaboration and commitment	Rapidly responded to test new therapies for covid-19	National NHS	Multidisciplinary experts with credibility Data safety monitoring board allowed for a fast process to address covid-19 Greater pool of participants and a larger group	Application of this method to other infectious and non-communicable diseases	Strengthening local capacity in relevant global settings to contribute to such studies Investment is needed to maintain infrastructures for ready response to smaller and larger scale threats
Smartphone technology for capturing patient generated data	Existing technology to collect self-reported data from public participants for ZOE trial Ease of use on personal mobile devices enabled recruitment of large populations	App adapted as a symptom tracker for covid- 19 and launched in the UK and US by end of March 2020	Public and policy makers	Enabled data collection from asymptomatic and symptomatic people (including symptoms, hospital admission, test results, demographic information, and pre-existing medical conditions, vaccine status) Provided information that would have taken vast resource and time to get using traditional data collection and epidemiological research methods	Real time, cost effective Could be used for communicable and non-communicable conditions and as early warning Inclusion of a wide section of community Promotes citizen science	Costs of maintenance and expansion Potentially missing particular subsets of the community Need to expand reach among those who are less confident with technology

(eg, Global Challenges Research Fund hubs) provided methods for efficient workarounds and for protecting researchers and participants during field work.²²

What can we do better?

The experience of knowledge mobilisation during the pandemic suggests some questions that should be considered during the UK public inquiry (box). Although contemporary literature rightly emphasises the complexity of uptake of research based knowledge,^{23 24} the pandemic has created an opportunity to pause and reflect on simpler models. The scale of the problem created universal demand for solutions. Infrastructure, track record, and credibility of scientists contributed to enhanced knowledge mobilisation, but there was also a unique opportunity to innovate and for people from outside the systems to help tackle this multifaceted problem.²⁵ Researchers and industry took leadership and were given freedom and autonomy to get on with the work because of the urgency of the problem. We may now need to be more open to the full range of supply push, demand pull, and integrated approaches to routine decision making, so that our systems for generation and use of research knowledge acquire flexibility, memory, and resilience.

The importance of investing in knowledge mobilisation is already recognised. NIHR health protection research units have assigned knowledge mobilisation leads, for example, and the science grants of the Canadian Institute for Health Research Knowledge Mobilization are aimed at achieving equitable health outcomes. But knowledge mobilisation for other global health problems, including the threat of antimicrobial resistance, requires substantial strengthening.^{26 27} Additionally, gaps remain in research in some parts of the system, notably social care.

We must ensure that the learning from covid-19 will be systematically applied to other global challenges

The practice of knowledge mobilisation needs to be evidence based²⁸ and to incorporate advances in innovation diffusion and implementation that help embed knowledge mobilisation mechanisms into research and avoid "superficial and wide" or "deep but localised" implementation.²⁴

We must ensure that the learning from covid-19 will be systematically applied to other global challenges to avoid both duplication of effort and repeatedly missing opportunities. The Recovery trial investigators, for example, are now involved in the NIHR commissioned and funded clinical trial for potential treatments for monkeypox. However, the ZOE study has lost government funding. This seems a missed opportunity for transformational change to increase use of patient generated data, which could have a key role in strengthening research and public involvement and ownership.

We also appreciate that this pandemic has provided a greater awareness of the uncertainty of our knowledge and of the consequences of our actions.³¹ We must ensure that future knowledge mobilisation processes are mindful not to force extreme positions but learn how to communicate the continuum of evidence and be transparent about uncertainty.³²

Raheelah Ahmad, lead in knowledge mobilisation **raheelah.ahmad@city.ac.uk** Anthony C Gordon, chair in anaesthesia and critical care Paul Aylin, professor of epidemiology and public health Julian Redhead, national clinical director for urgent and emergency care Alison Holmes, Imperial College London, London, UK David Price Evans, chair in infectious diseases and global health, University of Liverpool

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LETTERS Selected from rapid responses on bmj.com

LETTER OF THE WEEK

NHS privatisation is real



Cowper says, "Health campaigning during the Corbyn era was largely against fictional NHS privatisation" (Opinion, 8 October).

Privatisation of the NHS is not fictional. US Centene is now the largest single provider of GP services in England. It also majority owns Circle and shares in US Babylon. US UnitedHealth recently bought EMIS, and it and McKinsey have regularly advised the government and steered sustainability and transformation plans, accountable care organisations, and integrated care systems on NHS "transformation." Hospital Corporation of America owns most private sector hospitals. Private health companies pull out of contracts if they're not profitable enough.

Increasing the number of medical students needs more training places, supervised and taught. We need doctors, nurses, beds, and hospitals, but how that care is delivered is the other half of the problem facing the NHS. Extra funding to increase Centene's profits is money wasted. Extraordinary sums and contracts fly freely out the to private sector, while public sector provision is cut further.

The Conservative government's plans to submit NHS drug pricing in a US-UK trade deal to the extortionate US market was a clear warning sign that was ignored because it was Corbyn who said it.

If Labour thinks that it can restore the NHS, it needs to avoid further enabling Tory policy—what reform? The digital landscape is a mess: piecemeal private IT and false belief in Digital First as desirable or as a solution; professional influence over care delivery is absent; "prevention" meaning unwarranted screening instead of actual public health policy. The NHS mechanism has been disabled and heavily loaded with industry interests. It needs restoration, not election ticketing.

Privatisation is real, impactful, and here. We move towards the poorer provision of less but more expensive—healthcare. Denial and accusations of factionalism are unfounded and unhelpful. Patients, all of us, deserve better. Nick Mann, GP, London Cite this as: *BM*/2022;379:02668

BOOM IN PRIVATE HEALTHCARE AND NHS GPs

ADHD deserves better

Howard bemoans private ADHD assessments (Cover, 8 October).

"Dumping" work (private or NHS) on primary care is problematic, but it is unfair to compare ADHD to commercial health checks or "warts and lumps and bumps." ADHD is not an optional inconvenience: untreated ADHD reduces longevity by 12.7 years.

ADHD affects patients' education, employment, relationships, and finances. It is not that patients can afford the luxury of private treatment: they cannot afford to endure another year without treatment. Such patients are often being treated for anxiety, depression, or functional disorders. NHS services benefit from these patients getting correct, effective ADHD treatment, as well as "saving" the costs of NHS assessment.

We should not blame patients for having ADHD or specialists for diagnosing it. We should not reject patients because they have had private care. We should demand that the NHS provide cost effective care and fairly allocate funds according to workload. Laurence Leaver, GP, UK Adult ADHD Network

Ulrich Müller-Sedgwick, consultant psychiatrist, UK Adult ADHD Network Cite this as: *BMJ* 2022;379:02663

GPs should refuse to provide aftercare for private surgery

GPs remain pivotal in the safe provision of all healthcare to their patients by ensuring that private procedures are recorded in the patient's NHS health record and that the private consultant is aware of the patient's medical history, as they would with an NHS referral.

In Bristol, however, GPs refuse to remove sutures or to provide direct NHS aftercare for private surgical episodes, including "routine" prescribing. This is part of the private episode of care, especially the immediate aftercare of patients who have had surgery, which should be provided by the private consultant and the private hospital.



A GP might agree at the outset of the episode of care to provide their practice's NHS care for the patient. But if not, GPs have the absolute right to politely decline such requests from private consultants. It is inappropriate for private consultants to use hard pressed GPs as their junior staff.

Nigel S G Mercer, consultant plastic surgeon, Bristol

Cite this as: *BMJ* 2022;379:02652

Private screening has no clarity of purpose

Commentators have compared commercial health checks to routine screening offered by the NHS. But there is a key difference. The NHS Healthcheck measures a small number of variables for a clearly defined purpose—cardiovascular risk estimation. The blood tests offered in private screening typically have no such clarity of purpose.

I have had patients referred to me by private providers who have identified borderline abnormalities of liver function tests, blood count indices, and vitamin B₁₂ without any clinical features to justify testing. Am I willing to accept the clinical risk of reassuring the patient that these deviations are unlikely to be of any significance? Or am I going to use NHS resources to investigate them further? Or worse, instigate a lifelong treatment programme that is probably unnecessary?

It is hard not to resent that the private company is getting paid to provide this "service" while the NHS picks up the downstream costs. Dylan J Summers, NHS GP, York Cite this as: *BMI* 2022;379:02654

CLIMATE CRISIS: FINDING HOPE AMID DESPAIR

DOCTORS AGAINST CLIMATE CRISIS

Bringing health professionals together to call for action

Mahase's article on how doctors can combat the climate crisis does not mention the UK Health Alliance on Climate Change (News Analysis, Climate Special Issue, 15 October). The alliance brings together 35 health organisations, representing about 970 000 health professionals, including doctors, surgeons, nurses, paramedics, psychologists.

The alliance has shown the effect of health professionals coming together to call for action. Examples include a joint call for amendments to embed targets for net zero in the Health and Social Care Bill, a fifth domain on sustainability in the GMC's *Good Medical Practice*, and safer air pollution targets.

There is great strength in health professionals communicating a positive message on the health benefits of climate change mitigation and adaptation. The need for collaboration and leadership is critical—as is hope.

Elaine Mulcahy, director, UK Health Alliance on Climate Change Cite this as: *BMJ* 2022;379:02649

10 things a doctor can do to combat climate change

The need for a sustainable approach must be embedded into delivery of care, not simply added on. The enormity of the task seems overwhelming, and, as non-experts, many of us question where to start. The Royal College of Physicians of Edinburgh is producing a resource outlining 10 immediate, achievable changes we can all make:

- Practise preventive medicine
- Prescribe carefully
- Reduce the investigations you request
- Use telephone consultations and low carbon meetings
- Reduce use of personal protective equipment
- Switch it off
- Walk, cycle, or use public transport
- Bring your own food and drink (locally produced) in reusable containers
- Learn, and audit your practice
- Join discussions in your board or trust about the big things.

Marion Slater, consultant physician and co-chair; Sarah Bartlett specialty registrar and cochair, Advisory Forum on the Environment, Royal College of Physicians of Edinburgh

Cite this as: *BMJ* 2022;379:02650

A plant based diet benefits personal and planetary health

Changing to a plant based diet is thought to be the biggest single contributor to our personal impact on the planet. It also significantly reduces chronic disease risk, so for health professionals and patients it is a big win-win. We need better training to help health professionals undertake and encourage plant based diets, such as that provided by the Plant Based Health Professionals UK and recommended by the GMC and Education for Sustainable Healthcare Curriculum.

Behaviour change is possible, and health professionals should demonstrate it themselves and facilitate patient change towards a whole foods, plant based, or plant centred diet. You can't separate personal health from planetary health, and this is the only diet that makes a difference to both.

Mark F Craig, GP lifestyle medicine doctor, Auckland Cite this as: *BMJ* 2022;379:o2651

MOBILISING HOPE TO OVERCOME CLIMATE DESPAIR

Hope is not action

Frumkin and colleagues discuss the importance of hope in the face of climate despair (Editorial, Climate Special Issue, 15 October). Hope can be motivating. But hope is just a feeling. It might predispose to action,



but it is not action. It is easy for people to hope for something; they are "hopeful" for a good outcome. But they have had no effect except on their emotional state. They have not done anything to make that outcome become a reality.

Hoping does not make anything happen except in the hopeful person. In my experience, it is often a covert form of procrastination or denial, used as a reason to escape accountability.

George L Spaeth, physician; Louis J Esposito, research professor, Philadelphia

Cite this as: BMJ 2022;379:02641

Seeking coherence to nurture hope

Time to tackle climate change is running out, and hope must be nurtured by immediate and visible changes in society. Why is the topic of coherence so little emphasised? Policies need to be more coherent and based on reliable data.

Many of the messages delivered in the media and in everyday life also lack coherence. Shouldn't a television journalist who emphasises the seriousness of the climate crisis, for example, act accordingly by turning off the air conditioning in the studio and dressing in weather appropriate clothes?

The search for greater coherence in discourse and action is needed at all levels of society. Achieving this should substantially enhance the hope of climate activists and help to further protect human wellbeing and planetary health.

Nicolas Faure, GP, Le Bouscat

Cite this as: BMJ 2022;379:02642

You can't manage what you don't measure

Ward and surgical environments are not geared to combat the climate crisis. Waste is rampant. Staff shortages, bed pressures, and stress fuel the misuse of single use supplies.

In the words of management guru Peter Drucker, "If you can't measure it, you can't manage it." Data are needed to drive change. The non-profit organisation Practice Greenhealth has a free cost of ownership calculator, designed to look at costs beyond the price tag and evaluate hidden expenses to make more informed choices. Such financial incentives are needed to drive top-down change from governments and medical directors.

Data are also needed to quantify the scale of the problem. Only then can we conduct audits to assess the greenness of our practice, driving change from the ground up.

Isabelle Justine Monique Williams, foundation year 2 doctor, London Cite this as: *BMJ* 2022;379:02647

OBITUARIES

Richard John Cook

GP Ross on Wye (b 1947; q Oxford/London, 1973. MRCGP), died from Parkinson's disease on 9 September 2022 After training posts Richard John Cook moved to Ross on Wye with his



wife, Jenny, and their young family. He joined what was to become Alton Street Surgery in 1977 and eventually became senior partner. Richard was the epitome of a local GP, contributing fully to the community in so many ways. He was a passionate advocate of preventing poor health, and in particular the benefits of staying active and keeping to a healthy weight. A map on the waiting room wall marked out walks of different lengths with leaflets to encourage patients to take up exercise. He practised what he preached, enjoying and leading walks for patients and practice staff. He was ahead of his time in many ways. Richard leaves Jenny, three children, and six grandchildren. Philip Clayton, Simon Lennane Cite this as: BMJ 2022;379:02594

Edward Allen Martin

Consultant neurologist Adelaide Hospital Dublin, lecturer in neurology Trinity College Dublin, and neurologist to St Vincent's Hospital Dublin (b 1927; q Trinity College Dublin 1950; MD Dub, FRCPI,



FRCP Lond), died from old age, dementia, and covid-19 on 4 February 2022

Edward Allen Martin ("Eddie") did postgraduate work at the Radcliffe Hospital, Oxford, and Maida Vale Hospital for Nervous Diseases before returning to Dublin. He was one of the few neurologists in the city, and as well as his main posts he had appointments to St Patrick's Hospital and to Harcourt Street Children's Hospital. He was a gifted teacher and held Saturday morning teaching sessions, which were extremely popular with students from different hospitals. Eddie retained an interest in all things neurological well into his retirement. Predeceased by his wife. Mary, in 2008, he leaves four children, six grandchildren, and three great grandchildren.

Raymond P Murphy Cite this as: BMJ 2022;379:02596

Beresford Roger Melville Crook

Consultant cardiologist (b 1936; q Cambridge/ Westminster Hospital Medical School, London, 1962; MRCP), died from dementia and a myocardial infarction on 11 August 2022



Beresford Roger Melville Crook ("Berry") trained as a cardiologist in several London hospitals and carried out research with the British Heart Foundation and the Medical Research Council. He moved to Rotterdam. Netherlands, in 1977, where he introduced many new techniques, such as pacing, ablation, tilt testing, catheterisation, and electrophysiology. On returning to England in 1991 he worked part time as a consultant cardiologist in the Bristol area until 2007. He enjoyed gardening and cooking. His last publication was in 2009. Latterly he had dementia, and died from a myocardial infarction at home, leaving his wife, Priscilla, who was an anaesthetic theatre sister. **Richard Thompson**

Cite this as: *BMJ* 2022;379:02616

Miles Fox

Consultant urologist Royal Hallamshire Hospital, Sheffield (b 1927: q Manchester 1950; FRCS, MD), died on 25 August 2022 After general surgical

training in the

Manchester area, Miles Fox took up urology as his specialty. A Medical Research Council scholarship in Edinburgh and experience as research fellow at Harvard, USA, with renal transplant pioneers enabled him to set up the first renal transplant unit in the north of England in Sheffield in 1967. He established a basic transplant research team encompassing, among other subjects, pancreatic transplantation. As a result he was elected Hunterian professor at the Royal College of Surgeons. He continued to be an acknowledged expert in his specialism, with country wide referral, for a further 10 years after retiring from the NHS in 1992. He leaves his wife. Valerie (author of this obituary), and four daughters from two previous marriages. Valerie Fox

Cite this as: BMJ 2022;378:02229

Sudhir Kumar, Stuart Kumar, Gordon Kumar Cite this as: BMJ 2022;379:02597

Aileen Hazel Telfer

GP Edinburgh (b 1967;

MRCP, DRCOG, MRCGP),

died from a spontaneous

cerebral haemorrhage on

In January 1991 Aileen

Hazel Telfer started a

q Edinburgh, 1990;

6 September 2022

Amber Elizabeth Young

Consultant paediatric anaesthetist and professor of burns care. University of Bristol (b 1963: a Bristol. 1987; PhD, FRCA), died from breast cancer on 17 September 2022 Amber Elizabeth Young



was appointed consultant paediatric anaesthetist at Frenchay Hospital in 1999. In 2014 she took a leading role in managing the complex project required to move her services safely to Bristol Children's Hospital. She became a regional, national, and an international authority on children's burns, all in a remarkably brief period of time. Amber was also a talented paediatric neuroanaesthetist and under her stewardship, paediatric neurosurgery in Bristol achieved national designation in epilepsy, spasticity, and craniofacial surgery. It was the greatest pleasure to have known and worked with Amber. She made a huge difference to the lives of countless sick children. She leaves her mother; siblings; niece and nephews; and her husband, Norman. Mike Carter

Cite this as: *BMJ* 2022;379:02618



she met her future husband. They married in 1993. She found her lasting professional home at Southfield Medical Practice in Edinburgh, which she joined in 2005 as a partner. She was well regarded by her patients, colleagues, and practice staff. An excellent communicator and an attentive listener, she was honest and had a knack for making her views known on various clinical and administrative matters, providing advice on sometimes challenging topics with tact and respect. Aileen was passionate about GP training, which she started shortly after joining Southfield. She leaves her husband and two sons.

house officer post in Dunfermline, where

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OBITUARIES

David Marsh

GP and leading golfer who won a "small chunk of immortality"

David Max Marsh (b 1934; q Cambridge/Liverpool, 1960; FFOM), died after a stroke on 19 August 2022

The acclaimed golf writer Herbert Warren Wind reported in the *New Yorker*: "Dr David Marsh, a general practitioner of great personal charm, earned himself a small chunk of immortality when he hit the shot [in 1971] that won the Walker Cup for Britain—a picture-postcard 3-iron to the 17th green that covered the flag every yard of the way."

Two putts gave the modest Marsh a winning par four. He clinched the match on the 18th, giving Great Britain and Ireland a 13-11 victory and only their second Walker Cup win since the inaugural championship in 1922.

Wind's commentary stands out because it is rare for a sportswriter describing the thrilling climax of a sporting triumph to focus on an athlete's charm. But this was perhaps appropriate. As a doctor, Marsh was (to quote Michael Balint, a student of the dynamics of doctor-patient relationships) "a therapeutic instrument in his own right." Colleagues said he even remembered things that patients themselves had forgotten.

Golf

But pity any golfing opponent seduced into thinking that the gentle, bespectacled doctor was a pushover. Fiercely competitive with a reliable swing and a cool, unflappable temperament, he had a sporting killer instinct.

He also had his indiscreet moments—such as when he reprised the "picture-postcard 3-iron" so elegantly described by Wind at 3 am on the morning after. He is reported to have

Medical training and starting a family left Marsh little time for golf, but he later insisted that he was a doctor first and a golfer second



missed the ball after swinging wildly and falling with a splash into the famous Swilcan Burn at St Andrews. He later returned to the home of golf as captain of the Royal and Ancient Golf Club (R&A), one of the most prestigious posts in global sport.

Marsh undertook his preclinical studies at Cambridge University, where he captained the golf team in 1956, winning all three of his 36 hole single matches against Oxford, the smallest margin of victory being remarkably—eight and seven (eight holes in front with seven to play). Unlike his Cambridge peers who completed their medical degrees in London medical schools, Marsh went to Liverpool.

Three years later he was selected to make his Walker Cup debut—along with the American Jack Nicklaus, later one of the greatest golfers of all time. But Marsh was not selected for either the singles or the foursomes. This might have been a bitter disappointment, but Marsh was relieved. Exams had left little time for essential practice.

Medical training and starting a family left little time for golf—he was later to insist that he was a doctor first and a golfer second, but the *Daily Telegraph* suggested the contest in golfing terminology might have been declared "a halved (drawn) match."

His first wife, Jennifer, who played off a six handicap, encouraged him to start playing again in 1964. In a spectacular comeback, he won the English Amateur Championship at Hollinwell in Nottingham. In a thrilling finish he holed three consecutive birdies. He triumphed on the 36th green, after being behind most of the time. He attributed his newfound success to enjoying the game more after an enforced break. In 1970 he won the English Amateur title again, this time at Royal Birkdale, only a mile or so from his home in Southport. In between rounds, he made home visits to patients. One of the few players to have won the English Amateur title twice, he made 75 international appearances, mostly for England. He captained the Great Britain and Ireland Walker Cup in 1973 and 1975 without replicating the "miracle" of 1971.

His listening and diplomatic skills, sharp intelligence, and affable nature propelled him into golf administration. In 1967 he became the youngest ever captain of the Southport and Ainsdale club. As well as captaining the R&A (1990) he was also president of the Lancashire Golf Union (1985), English Golf Union (1998), and the Oxford and Cambridge Golfing Society (2003). He was also chair of the European Golf Association technical committee responsible for overseeing championships and expanding the game.

In 1988 he became a director and in 1991 chairman of Everton football club. The headlines declared him to be "a good doctor for a sick patient," but he did not emulate his success as a golf administrator, and stood down in 1993.

It wasn't just golf that took Marsh away from his practice. A fellow of the Faculty of Occupational Medicine, he was medical officer for Kodak and the Maghull Epilepsy Care Homes. He also worked for the Health and Safety Executive.

Predeceased by Jennifer in 2001, Marsh leaves his second wife, Katie, and three children from his first marriage.

John Illman, London john@jicmedia.org Cite this as: *BMJ* 2022;378:02342