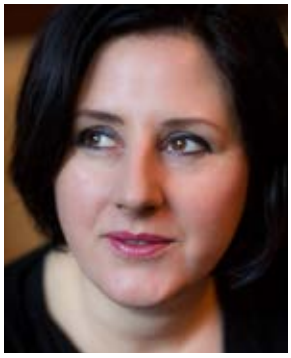
> How much can GPs, consultants, staff grade doctors, nurses, and physiotherapists reasonably be expected to do safely?

NO HOLDS BARRED Margaret McCartney

Report on NHS fixes, not failures



The Care Quality Commission's chief inspector of hospitals, Ted Baker, told the *Daily Telegraph*, "We need a model of care that is fit for the 21st century and the population as it is now."

Baker wrote to English hospital chief executives, who are doubtless feeling the shivers of winter. He explains the rules to them: people who arrive in ambulances should be timed from when they arrive in the car park, not the emergency department; "corridor care" should not be normal care; and staff should be led effectively and consistently.

"For many trusts," he writes, "their greatest risks to patient safety are likely to be in their emergency departments." In due course, Baker intends to share lessons learnt from staff working at trusts that the CQC has deemed good or outstanding.

He's right: the NHS isn't fit for purpose. And, in a relatively rich country, with the NHS constitution standing, this is inexcusable. Waiting lists for consultant led treatment are 25% longer than three years ago. Vacancies in the NHS are up 10% on 2016 figures.

But why? Regulators are in a powerful position, but placing blame and the locus of control for the safe running of hospitals is not in the gift of single chief executives. Baker's interview in the *Telegraph* was followed by an interview with David Behan, CQC chief executive, on the *Today* programme.

Behan identified demand and complexity as reasons for the system struggling. He cited a GP project at Yeovil Hospital whose "impact is a 30% reduction of admissions into hospital," and the *Today* programme's John Humphrys seized on this as an example of a failure to roll out an obviously good idea. But these statistics in fact relate to a group of 200 patients with high care needs, not to the population in general, and no cost effectiveness calculations or absolute risk of admission reductions are available.

Preventive healthcare initiatives can be valiantly pursued, but they don't seem to affect emergency admissions. Case management is also unproved as a way of reducing admission rates significantly. We know that hospital admissions often happen because cuts mean that social services can't meet needs, especially in deprived areas. But we don't know what's going on behind closed doors. I hope that the higher echelons of the CQC are taking the prime minister to task on the political leadership failures that led to this mess.

Notably, Baker has asked the medical royal colleges to identify safe workload standards for junior doctors. But the CQC shouldn't stop there. How much can GPs, consultants, staff grade doctors, nurses, and physiotherapists reasonably be expected to do safely? And what resources do we need to do that work?

Poor care due to healthcare workers being lazy or disorganised is very different from poor care due to an understaffed, under-resourced, overwhelmed NHS. And the treatments for each are remarkably different. I don't want "transformations" based on speculative evidence that doesn't look for harms. I want us to get the basics right.

Enough of scolding reports telling us what we're failing to do: tell us instead how much time, resources, and staff we need if we're to expect safe, humane care as standard.

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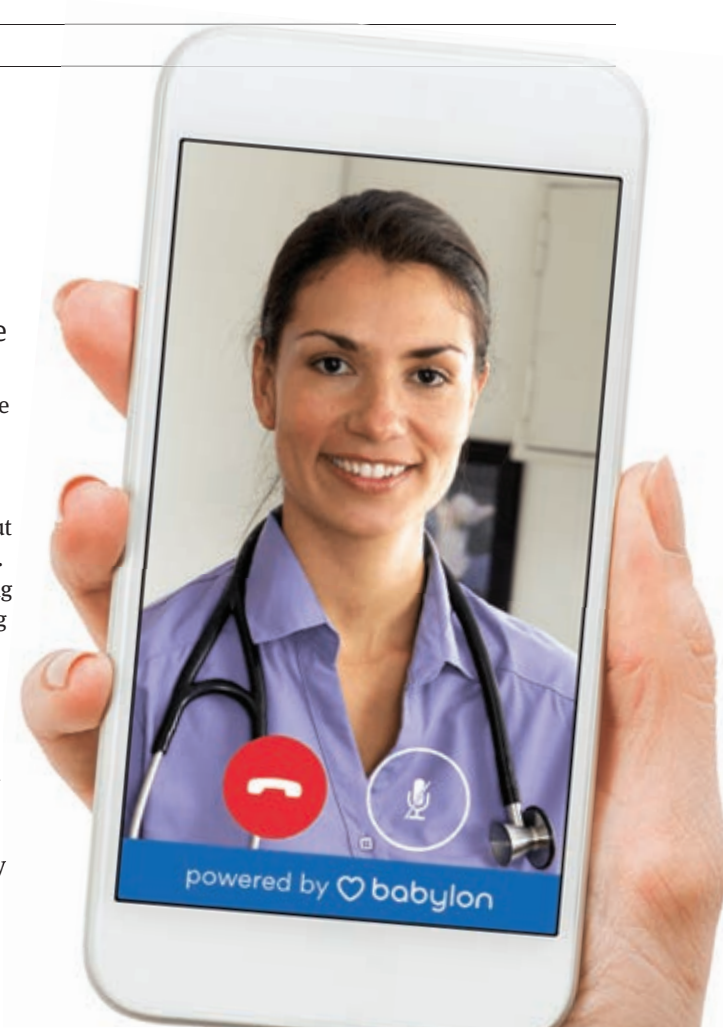
PERSONAL VIEW Rebecca Rosen

Are innovators in GP services strengthening or weakening the NHS?

GP at Hand speaks to fans of "segmenting" general practice



The launch of GP at Hand has triggered a mass of Twitter activity, much of which has focused on the cost of this tech driven new service. GP at Hand suggests, at the NHS's request, that the service may not be appropriate for patients with complex needs.

There has been a fair bit of maths in the tweets, including whether being paid six times more to treat older people than working age adults will tackle GP at Hand's challenge to traditional practices if some (probably younger) patients move to the app.

This misses the point. The majority of the population falls into the 15-64 age bands that attract lower funding. While this group is formed of mostly healthy adults (hence the lower payment), it contains many who move in and out of the kinds of illness and states of health that GP at Hand says are less appropriate for their service. Those who are pregnant or with a bout of depression are two of these groups.

It also contains people with ongoing lifestyle challenges—particularly drug and alcohol use—who cannot easily be managed with apps, as well as those with undifferentiated symptoms and health anxieties who may be frequent users of services and drive higher overall costs.

The Carr-Hill formula (which is used to calculate GP payment rates by adjusting registered patient numbers for characteristics such as age, sex, and deprivation) has never been ideal, but over a large population it can accommodate average use.

ACUTE PERSPECTIVE David Oliver

Telehealth and telecare need a different approach

"Technology and innovation are key to saving the NHS," the former health secretary Alan Milburn recently wrote in the *Observer*. Milburn, who now chairs PricewaterhouseCoopers' health insight industries oversight board, said that "the world is on the verge of a huge leap forward in healthcare . . . an influx of mobile and bio-devices will mean we will be able to check—and take greater control over—our health in a way never previously possible."

Milburn is not alone in this mantra. Many commentators and politicians are pushing digital remote healthcare as a brave new world with less need for trained health practitioners or face-to-face contact. Private industry, not the NHS, is developing the technology, and this demands a potential return on costly upfront investment. The hands of marketers and lobbyists, including former NHS ministers, are all over the rush towards "remote healthcare."

Private industry demands a potential return on costly upfront investment

Deploying these technologies makes sense for some patients in some circumstances. Anything that helps people remain at home, retain their independence, manage their health, or avoid acute admissions is worth trying—although technologies should be subject to the same standards of evidence as other innovations.

Too often, however, the tail has wagged the dog. Look at the coalition government's "3 Million Lives" project, which promised this many people would benefit from remote healthcare. It's not clear to me where this figure came from—though I note that a 2012 report, *Remote Care PLC*, set out a speculative calculation full of heroic assumptions that arrived at this figure. Around this time, government officials were plugging technologies as a panacea. For instance, the Department of Health's Jim Easton (now of the private provider Care UK) wrote, "Telecare transforms lives, saves money and is backed by evidence. So what's stopping us?" He was referring to the government sponsored "Whole Systems Demonstrator" clinical trials. As they'd been neither published nor peer reviewed at the time, this was disgraceful. Yet the department published "headline findings" pushing the claims, well before peer review.

Sadly, the results of the Whole Systems Demonstrator clinical trials were largely null in terms of

Those of the "mainly healthy adult" population with certain conditions and characteristics that GP at Hand says may be less appropriate for its service are the subgroup who use more services and therefore cost more.

Skimming patients

So Twitter challenges to Carr-Hill adjustments miss the fundamental point—skimming patients from within population segments will leave other practices to care for those from the same segment for whom there is evidence of higher cost.

This argument also works the other way around, however. The queueless system will create demand induced by supply (estimated in previous studies to be around 16%) and may act as a magnet for people with health anxieties (estimated to be around 9% of patients presenting with new symptoms) who book multiple appointments for the same problem. These patients could add to the cost of delivering GP at Hand—though not necessarily in a way that the NHS wants to encourage or pay for.

The launch of GP at Hand speaks to enthusiasts for "segmenting" general practice—breaking off chunks of care to be delivered to different subgroups in different ways. Questions about pricing, continuity, and potential to undermine other forms of general practice highlight the risks of disrupting an ecosystem that is recognised to add value to the NHS.

Some people may be rubbing their hands with delight at the prospect of the destabilisation of the traditional model of general practice. Frustrated by the inflexibility of the GMC contract, they could see this as an opportunity to force a new model for GP services. But traditional general practices have proved remarkably cost effective. Studies reported in the *Lancet* concluded that GP workload has increased by 16% over a period when funding decreased from 11% to 8% of the total NHS budget. It seems unlikely any alternative form offering care to all comers could achieve this.

We need to collect data to track the impact of GP at Hand on patient outcomes and the wider NHS, then we'll be in a better position to judge whether Carr-Hill needs an overhaul and whether disruptive innovators in GP provision are strengthening or weakening the NHS as a whole.

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the technology's effectiveness or cost effectiveness. It may still have tremendous potential. But why rush to premature conclusions?

This October, a crucial evidence review passed under the medical community's radar: the Health Innovation Network's "Technology-Enabled Care Services," commissioned by NHS England. The 45 studies of video consultations it identified showed "no difference" in patients with chronic physical illness. In remote telemonitoring it found decent evidence but only in people with diabetes, hypertension, heart disease, and COPD. In text messaging, 26 reviews had some evidence in glycaemic monitoring and substance misuse. And, in health apps, evidence across 25 reviews was inconclusive.

As Tim Burdsey concluded in the *Health Service Journal*, "There is limited evidence and the evidence for cost effectiveness is particularly scant." He added that "the evidence base hasn't caught up with the pace of innovation and technology."

I accept the second argument. Commercial companies can invest in whatever technology suits them, whereas the NHS has an obligation to use scarce public money wisely and to base decisions on robust evidence.

Ideally, we want more randomised controlled trials. Failing that, large, pragmatic quality improvement studies with independent scrutiny, release of all data, and no marketing speak. Integrity, transparency, and realism will better convince NHS sceptics than overoptimistic promises.

David Oliver is a consultant in geriatrics and acute general medicine, Berkshire
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BMJ OPINION Matt Morgan

WhatsApp risks are real, but so are its benefits

The pager buzzes in my pocket. I'm walking down an empty corridor on my way to speak to a patient's family so I pop into the nearest ward, only to find all three phones in use. The bleep goes again. I walk back up the corridor and lean over a reception desk to borrow a free phone. I call the number displayed on the pager's screen—engaged. My bleep goes again as the same number flashes up. I call again and this time it is answered.

"Hi, this is Matt, one of the ICU consultants," I say.

Silence.

"How can I help you?" asks the voice on the other end.

"Someone paged me."

"Oh, I'm not sure who that was, hold on . . ."

I hear the sound of the receiver being dumped on a desk.

"Anyone paged ICU?" someone shouts.

"Yes! It was me, give me a minute I'm just dealing with a patient," I hear.

A few minutes pass.

"Hi Matt, the family of bed 3 have arrived. They said they were supposed to speak to you five minutes ago."

"I'm on my way . . ." I say.

I retrace my steps along the corridor to speak to the family—the same one that I was walking towards five minutes ago.

In my pocket, I have a device one million times more powerful than the computers that delivered the Apollo moon landing. On this device is a piece of software with encryption that the CIA are unable to crack—WhatsApp. A recent paper has shown that over a third of doctors have used mobile software to share confidential clinical information. There are huge incremental benefits to using technological solutions, including WhatsApp and other platforms. They all also bring substantial risks. Although end-to-end encryption allows messages to remain secure in transit, unlocked devices may still allow information to leak.

There is a growing tension between patient safety and confidentiality

The advice from the NHS is clear. Do not use WhatsApp to transfer confidential information. There is a growing tension, however, between patient safety and patient confidentiality. The doctors who use WhatsApp do so to improve communication and deliver better healthcare.

In my job, I use fax machines, Windows 98, 1980s pagers, and landlines. As I cross the hospital exit, I use mobile data, WhatsApp, and secure banking apps. It is right for the NHS to recognise the risks, but it also needs to recognise the risks of sticking with the status quo. Restricting app use is fine but it must provide a viable alternative.

Matt Morgan, consultant in intensive care medicine and head of research and development at University Hospital of Wales

ANALYSIS

Focusing exclusively on weight loss ignores the other benefits of lifestyle interventions and may contribute to society's obsession with body image and weight, argue **Elizabeth Sturgiss and colleagues**

Challenging those hard to shift, big fat obesity myths

We have a problem in obesity research—clinical trials continue to prioritise weight loss as a primary outcome and rarely consider patients' experience, quality of life, or adverse events.[1-3] Weight loss in people with obesity can be positive,[4] but interventions that strive for weight reduction at any cost and without regard to the patient's personal, social, and environmental context,[5] are not in anyone's best interest.

In clinical practice and research, patients are our best teachers. During a recent feasibility trial of an Australian obesity intervention in primary care,[6] a patient made us question our understanding of weight management: "I've got a friend with stomach cancer; she's had all her stomach removed—you know, she's thin as thin. People with cancer, thin as thin; they're sick. Or their husbands have left—fantastic, you get really thin. You have a bit of trauma and illness and you'll lose weight like it's going out of style."

It is inaccurate to assume that weight loss always means an improvement in health, even for someone with obesity.

Choice of research outcomes has a ripple effect on how obesity is viewed in the general population. Trial results trickle down into guidelines and on into clinical practice, thereby influencing what clinicians suggest to their patients and the way patients regard obesity. Social scientists work with the principle of double hermeneutics whereby, unlike in natural sciences, the act of research involving humans and human behaviour can itself influence the group that is studied. If we apply the principle of double hermeneutics to obesity research, when weight loss is given central importance it contributes to how clinicians think about obesity and fuels society's obsession with body image and weight. It is a cycle that we see repeating through obesity academic discourse, clinical practice, and patient stories.[7] Below, we analyse the incorrect assumptions underlying the use of weight loss as a sole primary outcome.

KEY MESSAGES

- The health of people with obesity can benefit from lifestyle interventions even if weight remains stable
- Persisting with weight loss as the primary outcome in obesity research does a disservice to patients
- Obesity researchers need to widen the outcomes to include true wellbeing and health

"Weight loss is always consistent with better health outcomes"

As highlighted by our patient, weight loss can indicate serious physical illness or psychological distress. Interestingly, there is no research on when weight loss should be a "red flag" in people with obesity, despite the known increased risk of some cancers. At best, weight loss is a surrogate marker for improved health outcomes. Trials in patients with diabetes show that weight loss is associated with improved cardiovascular risk factors, but it is less clear if this is from the weight loss itself or associated lifestyle changes.[8] We continue to measure weight in obesity research not because it accurately reflects an individual's health but because it is simple to measure.

The Edmonton obesity staging system (EOSS) provides a more accurate prediction of health

GETTY IMAGES

outcomes than weight alone.[9] As well as anthropometric measures the EOSS includes symptoms associated with obesity and comorbidities and can be used to stratify risk of death whereas body mass index (BMI) cannot.[10] It is more useful than BMI for measuring health risks in an individual patient, but it may not be suitable for assessing obesity interventions because many of the included measures, such as comorbidities, are not readily modifiable.

An alternative would be to use the cardiometabolic disease staging system (CMDS), a validated framework for predicting a person's risk of diabetes as well as cardiovascular and all cause mortality.[11] The CMDS score is independent of a person's BMI and includes waist measurement and serum metabolic markers. In contrast to the EOSS, the factors that are included are potentially modifiable at the individual level. This provides a framework for health risk that is independent of BMI and weight.

'All people with obesity can lose weight'

Obesity results from a complex web of psycho-socio-biological factors that can promote weight gain. Once weight is gained, neuroendocrine mechanisms serve to defend the body against weight loss, which makes it difficult to maintain weight loss long term. Longitudinal studies of people who are obese show that weight loss and maintenance are not the normal experience, and that they rarely return to a lower weight range.[12]

With the multitude of factors that affect obesity, each person might have a weight range that is possible and healthy for them, and this range may not be in line with the recommendations for the population. Although not everyone might be able to achieve a weight within a specific range, they can improve their health and wellbeing with lifestyle intervention.

'Weight reduction is prerequisite for better health"

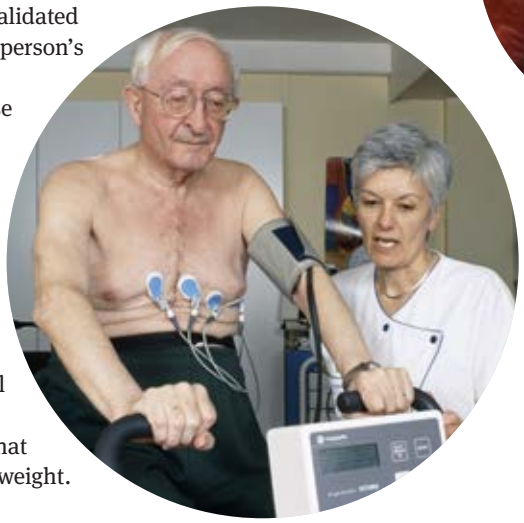
Many factors influence a person's health, and body weight is only a small part of the picture. Not all body weight is equal, with adiposity in the central trunk more harmful for health than fat distributed elsewhere on the body. Epidemiological studies examining the cardiovascular risk conferred by excess body weight show that obesity increases relative risk by only about 20% when known risk factors are controlled for. This compares with a roughly 100% increase in relative risk with smoking.[13,14] A person with obesity who reduced their weight but continued to smoke would achieve only a minimal reduction in absolute risk of a cardiovascular event. An overemphasis on reducing body weight misses the point of minimising overall morbidity for the individual.

Research should not add to the harms of fat shaming and rising levels of body dissatisfaction

Furthermore, health and wellbeing can improve even without weight reduction. For example, cardiorespiratory fitness, mental health, and blood glucose control can all be improved with physical activity, even if the person's weight does not change.[15] By using only the surrogate marker of weight loss, we don't recognise the health benefits of a change in lifestyle behaviours. People are labelled as "unsuccessful" because their health gains are unnoticed. With this sense of failure, individuals are likely to lose motivation and cease the changed lifestyle behaviour and in doing so lose the health benefits.

"Every person with obesity wants to lose weight"

Most obesity interventions were developed and tested in the US, where there is a strong culture, promoted through the media and film industry, that values a lean physique.[16] The promotion of lean body types in western media is associated with rising body dissatisfaction.[16] However, the value placed on body shape and size differs across cultures,[17] and in less socioeconomically developed settings heavier body shapes are more attractive.[16] In obesity research we cannot assume all patients value lean physiques, and research should not add to the harms of fat shaming and increasing levels of body dissatisfaction. Research that promotes weight loss as the only successful outcome is at risk of doing harm.



Blood glucose (above) control can improve with physical activity, but can be overlooked if weight is used as a surrogate measure

"Focusing solely on weight loss is not harmful"

Lifestyle interventions aimed only at weight can increase the psychological burden of people with

obesity, adding to the stigma experienced in everyday life and healthcare settings.[5 18] Stigma can lead people to avoid medical visits and opportunities to exercise. An increased psychological burden reduces ability to lose weight and, even more worryingly, increases the trajectory of weight gain.[19] Obesity programmes must tackle stigma and work to reduce the psychological burden on their participants.

Exercise can improve a person's health, even if it does not lead to weight loss

Defining weight loss as a success without exploring the behaviours that led to the loss is also harmful. For example, purging behaviour, laxative use, or severe starvation are not healthy behaviours that should be encouraged to reduce weight. Similarly, rapid weight loss in a person with obesity, even as part of a lifestyle intervention, should be seen as a red flag. Cancers are often diagnosed later in patients with obesity, and the effect of misdiagnosis of weight loss has not been explored. Finally, for elderly people, especially those with a BMI in the lower end of the obesity range, weight reduction may not result in better overall health outcomes.[20] Weight loss for every patient at any cost does not reflect the ethical principle of "first do no harm."

"Population health benefits supersede individual experience"

Most patients with obesity will be cared for in the primary healthcare system and so we need interventions that will work in primary care. People consult primary healthcare for various reasons and, importantly, primary healthcare helps them to prioritise what matters most. This is especially relevant for people with chronic conditions such as obesity.

As in all trials of clinical interventions, the reported weight loss outcome is an average of the results—some participants will have lost more, some will have gained. Often studies of obesity lifestyle interventions find a small weight loss but report that there would be a larger benefit at the population level.[2] Ethically this is a challenging proposition, and any intervention targeted at individuals should also provide them with benefit.[21] In primary healthcare, interventions that do not affect what is bothering a patient most and have an undue emphasis on weight loss may backfire by adding to the stigma of obesity and negative self perception. Reducing the outcomes of an obesity programme to the kilograms on the scale does not fit with person centred care and may hinder efforts to determine best practices for care of patients with obesity.

Focus on health

Obesity research would be improved by broadening the focus from weight loss alone to outcomes that reflect a person's health and wellbeing. First, patients recruited for clinical trials of behavioural interventions should have impaired health—for example, as measured by the EOSS. Limited health resources should be focused on those at actual risk of increased morbidity, including people with metabolic risk factors but a BMI of less than 25.

The experience of participants in trials of lifestyle interventions must be a core part of the research outcomes. This could be captured in mixed methods data that seek to understand what it was like to participate in the trial. Adverse event monitoring should be a standard part of any research intervention, regardless of the researchers' perception of the risk of the intervention.

The outcomes measured in obesity research need to reflect overall health and wellbeing of participants

Patient reported outcome measures (PROMs) have become standard practice in trials of chronic disease, and obesity researchers urgently need to partner with patients to develop appropriate PROMs. The core outcome measures in effectiveness trials (COMET) initiative provides a tested framework for developing meaningful and standardised outcomes that incorporate the wisdom of patients, researchers, and clinicians.[22]

We continue to measure the size and weight of patients, simply because it is easy

Methods for assessing the health benefits of an intervention could include measures of behaviour change (eg, physical activity tracking with accelerometers or inclinometers, self reported dietary change or food photo diaries, goal attainment scaling score, and smoking cessation rates), metabolic risk factors (eg, blood pressure or lipid and fasting blood sugar levels), quality of life measures (eg, impact of weight on quality of life), and ultimately longer term follow-up to assess effects on morbidity and mortality. The outcomes measured in obesity research need to reflect overall health and wellbeing of participants.

Get a new perspective

The goal of any health intervention is to extend life while also increasing wellbeing. Weight loss does not always equate with an improvement in quality of life and physical health. Lifestyle interventions for managing obesity have lost this perspective and have often settled on weight loss as the ultimate goal without considering overall wellbeing. We need a new approach to outcomes in obesity research that reflect person centred care by truly measuring the health of the individual and not a surrogate marker that is measured for ease.

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Chris van Weel, emeritus professor of family medicine, Radboud University, Nijmegen, Netherlands, and Australian National University, Acton, Australia

Cite this as: *BMJ* 2017;359:j5303

MACULAR DEGENERATION

Time to ask patients about treatment

Two of the three treatments we have for wet adult onset macular degeneration are manufactured by the same company. Now that non-inferiority of outcomes is known, the extreme difference in price continues to cause consternation (Investigation, 4 November).

European law stipulates that when a drug with marketing authorisation exists for a particular condition, cost alone is not an adequate reason to substitute it with a drug that lacks marketing authorisation. This prevents NICE or the GMC from supporting the cost effective use of bevacizumab.

The original EU patent of bevacizumab expires in April 2018, and the UK could decide to manufacture it. We should consider enacting new legislation, whereby bevacizumab prepared for intravitreal injection is defined as a "unique special."

We need greater public understanding of this matter, and our patients with adult onset macular degeneration deserve clear information about cost effective treatment. Debate in parliament is the legal way forward.

John W Mackenzie, consultant anaesthetist, Reading

Cite this as: *BMJ* 2017;359:j5426

The NHS must act on bevacizumab

The Royal College of Ophthalmologists has taken a definitive view on bevacizumab for macular degeneration (This Week, 11 November). Four further actions could be taken.

Firstly, the law might be clarified, either in court or by the Department of Health. The GMC could be asked to clarify its position.

Secondly, the secretary of state might consider a referral to apply for market authorisation of bevacizumab in ophthalmic indications. The Gulf war vaccine sets a precedent.

Thirdly, the secretary of state could refer bevacizumab for consideration in a NICE technology appraisal for all the indications that ranibizumab or aflibercept are currently recommended for.

Finally, we should all reflect on the billions of pounds that have possibly been spent. The drug companies have been acting in the interests of their shareholders. The NHS must act in the interests of the population, and the opportunity cost of not using bevacizumab just can't be justified.

Greg Fell, director of public health, Sheffield

Cite this as: *BMJ* 2017;359:j5427

LETTER OF THE WEEK

Goodhart's law applies to waiting times

At the beginning of this century, Tony Blair, then prime minister, announced that health expenditure would be increased. This was met with concern from the Treasury. I remember Alan Milburn, then secretary of state for health, telling a television news reporter that the NHS would willingly meet Treasury demands for the NHS to meet targets. This led to the development of targets for emergency departments and other services.

In *The BMJ* Campbell argues, and Boyle and Higginson confirm, that emergency departments have been able to invest to ensure that the target is met (Head to Head, 28 October). Similarly, targets for surgical waiting times and cancer referral have encouraged investment in those services.

No targets were set for mental health services. So even in 2005, when we knew that mental health policies were not being implemented, a major health trust "was asked to make savings to make up for budget overspends by other trusts." Underprovision of mental health services remains a problem. That is how the meeting of targets could have been funded.

Goodhart's law is summarised as, "When a measure becomes a target, it ceases to be a good measure." Waiting times were a good way to measure provision of healthcare but after targets were set, this ceased to be the case.

S Michael Crawford, clinical lead for research, Airedale NHS Foundation Trust

Cite this as: *BMJ* 2017;359:j5425

NEONATAL DRUG WITHDRAWAL

Call for pharmacovigilance of gabapentin

Neonatal drug withdrawal is increased when gabapentin and opioids are co-prescribed (Research, 5 August).

We found that sustained overuse (›120 days) of gabapentin alone increased the odds of all cause inpatient hospital admission, hospital admission possibly related to drugs, and hospital admission or emergency department use associated with adverse drug reaction, addiction, or detoxification. Sustained concomitant gabapentin/opioid overuse quadrupled the odds.

Hospital admission related to respiratory depression occurred in 3.5-4.8% of overusers of more than one drug; twice the rate of gabapentin/opioid non-overusers (1.9%) and eight times that of non-overusing opioid users (0.6%). For sustained gabapentin/opioid overusers, the odds of admission or emergency department use related to respiratory depression were fourfold. Co-prescription of gabapentin/opioids also significantly increases the odds of death, compared with opioids alone.

We call for pharmacovigilance to mitigate the opioid overdose epidemic.

Alyssa M Peckham, assistant professor, Glendale, Arizona
Kathleen A Fairman, adjunct assistant professor, Glendale
David A Sclar, professor and chair, Glendale

Cite this as: *BMJ* 2017;359:j5456

PRIORITISING NUTRITION

Training in eating disorders could save lives

Womersley and Ripullone say that nutrition should be prioritised in medical education (Personal View, 28 October). This is essential not only for prevention, but also for recognising and managing malnutrition. Eating disorders are often overlooked in medical education and thought of as rare and self limiting conditions.

The number of eating disorder psychiatrists in the UK is small, and people with eating disorders are often first seen in primary care or in acute hospitals. If all doctors were appropriately trained in the recognition and treatment of malnutrition and eating disorders, many lives could be saved.

Severe malnutrition is an acute medical emergency, which is entirely reversible. We need to make sure that future doctors are confident in managing nutrition related disorders.

Agnes Ayton, consultant psychiatrist, Oxford
Ali Ibrahim, ST4 Trainee in CAMHS, Croydon

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OBITUARIES

Samuel Erl Annesley

General practitioner Keyworth, Nottinghamshire (b 1934; q Queen's University Belfast 1958), died from heart failure on 27 September 2017

Samuel Erl Annesley ("Erl") joined the Keyworth practice in 1961. As chairman of the parish council and later on Rushcliffe district council, he was involved in setting up community leisure facilities. He also served in the Territorial Army. A keen journalist, writing regularly for *World Medicine*, *GP*, *Pulse*, and others, he campaigned for patient self certification in the 1970s. After the 1997 NHS reorganisation, he was the first chairman of Rushcliffe primary care group. In the 1990s he was a travelling doctor for overseas British Davis Cup matches. He enjoyed golf, tennis, squash, and fly fishing on the Dove. After retiring in 2002, he did GP appraisals and worked for Citizens Advice. His second wife, Dee, died in 2000. He leaves his third wife, Tricia; three children; two stepchildren; and five grandchildren.

Samuel Erl Annesley, Nick Annesley

Cite this as: *BMJ* 2017;359:j5286

Juliet Foweraker

Consultant microbiologist Papworth Hospital (b 1955; q Cambridge 1979; PhD, MRCPath), died from ovarian cancer on 1 August 2017

Juliet Foweraker was the first girl from Romford Grammar to go to Cambridge. An academic at heart, she achieved a PhD in immunology but was ultimately drawn into medical microbiology, securing her "dream job" at Papworth in 1995. There, while managing general microbiology services, she also developed a first class service for the new adult cystic fibrosis team, contributing to internationally reputed research. Intelligent, honest, hugely knowledgeable, and very hardworking, Juliet was held in high esteem by her colleagues. Her kindness, generosity, and madcap sense of humour endeared her to all. Her outside interests included fencing, rowing, cross country skiing, running (she completed three marathons), bird watching, and, latterly, wood carving. Juliet leaves her husband, Gordon Fuller.

Debra Smith

Cite this as: *BMJ* 2017;359:j5293

Janet McLelland

Consultant dermatologist (b 1957; q University College London Hospital 1981; FRCP), died from disseminated adenocarcinoma on 5 October 2017

Janet McLelland ("Jan") moved to her long term consultant post in Newcastle in 1995. She became clinical director for dermatology in 1998, at a time of threats to the service and of ward closures. As a result of her influence, the department expanded from eight to 14 consultants, and the future of clinical and academic dermatology in Newcastle was secured. Jan became clinical director of plastic surgery, ophthalmology, and dermatology in 2010 and associate medical director of the trust, with responsibility for the Royal Victoria Infirmary, in 2014. She took early retirement in 2015 and travelled widely with her husband. After her diagnosis in May 2017, she organised her 60th birthday party, as well as her own funeral. She leaves her husband, Paul, and a son.

Aileen E M Taylor, Nick J Reynolds

Cite this as: *BMJ* 2017;359:j5270

Nils Albert Regan

General practitioner and hospital practitioner (b 1925; q 1948; FRCOG, MD), died after a short illness on 9 August 2017

In 1957 Nils Albert Regan entered general practice with his father in law in Pimlico, where he remained until his retirement. He also worked for some 30 years in genitourinary medicine, gynaecology, and family planning at St Stephen's and Westminster hospitals, which led to his appointment as a hospital practitioner. Nils served as vice chairman of the local medical committee and the Kensington and Chelsea and Westminster family practitioner committee. He was involved in opening the first GP practice for homeless people and was an ardent campaigner for birth control. He supported Chelsea Football Club for 70 years. He leaves his widow, Doreen Thelma Gurrie; three children and their families; a brother in law; and a large family across the globe.

Carolyn Regan

Cite this as: *BMJ* 2017;359:j5291

Robert Cleghorn Robb

Medical officer of health Sark (b 1922; q Glasgow 1946; OBE, MFCM, DPhysMed, DPH, DIH), died from old age on 12 May 2017

Robert Cleghorn Robb joined the Royal Air Force in 1946 to take up his national service commission, which became permanent in 1948. His career included postings within the UK and abroad. Having reached the rank of air commodore, he became deputy director of general medical services. In 1976 he took up his first post in the NHS since qualifying, as community medicine specialist for the Borders Health Board in Melrose. In 1980 he took a position as island doctor and medical officer of health on the island of Sark and cared singlehandedly for the inhabitants of the island and the many visitors, carrying out visits on his bicycle. Predeceased by his wife, Helen, in 2004, Robert leaves two daughters and four grandchildren.

Sheila Martin, Rona Clayton-Robb

Cite this as: *BMJ* 2017;359:j5289

Peter Sykes

Consultant psychiatrist (b 1930; q Sheffield 1953; DPM (RCP&S London), FRCPsych), died from dementia with parkinsonian features on12 March 2017

Peter Sykes championed a person oriented approach to the care of patients with severe mental health problems and learning difficulties, moving away from the "asylum" principle of care towards a more integrated, community based approach that still recognised the important role of residential units. He saw medicine as an art rather than a science and had an open mind about new approaches to psychiatric care. Colleagues would often refer their complex patients to him, and he used new techniques to bring about dramatic improvements. His approach is best summed up by his motto, "When all else fails, read the instructions." He leaves his wife, Jean; four daughters; seven grandchildren; and five great grandchildren.

Emma Savin

Cite this as: *BMJ* 2017;359:j5287

Daniel Federman

Endocrinologist, teacher, and pioneer of problem based learning

Daniel Federman (b 1928; q Harvard 1953), died after a fall on 6 September 2017

Daniel Federman, who has died aged 89, spent 60 years at Harvard, starting as a student and going on to become dean of the medical school. It was here that he introduced problem based learning in 1985. Rather than the standard US medical school regime of up to 33 lectures a week, classes were broken up into groups of eight students with one tutor, and encouraged to discuss and work through problems, researching information on their own initiative.

"The overall goal was to produce lifelong learners," Federman recalled in an interview with the Endocrine Society in 2010. "Science was changing so fast that if graduates didn't learn to learn, they weren't ready to be in medicine."

Harvard's new pathway curriculum, based on experience at McMaster medical school in Hamilton, Ontario, was one of the first US programmes to teach through case examples. "The diminution of lectures and the elevation of small group teaching and the responsibility on students to ferret out knowledge on their own was terrific," said Federman. "Previously students were frustrated and too passive. They weren't involved in discussion and discovery, and weren't involved with each other. Sitting there looking up at the teacher wasn't intellectually exciting." He found teaching through problem based learning "an absolutely electric experience."

Life and career

Federman was born in New York and brought up in the Bronx, where his father, Louis, worked as a travelling jewellery salesman and his mother, Frances Cohen, taught piano. After De Witt Clinton High School, he went to Harvard College, aged 17, and graduated summa cum laude in psychology, sociology, and cultural anthropology in 1949, and then magna cum laude from Harvard Medical School in 1953.

Federman did his internship and residency at Massachusetts General Hospital (MGH), where he met his wife, Betty (née Buckley), who was working as a nurse. He then became a clinical associate at the National Institute of Arthritis and Metabolic Diseases, where he studied the effects of androgens on thyroid disease and thyroxine metabolism, and where his early interest in pulmonary medicine preceded his career in endocrinology.

In 1957 he went to University College Hospital Medical School in London for two years. Back in Boston he became chief of the endocrine unit at MGH. Apart from a period between 1973 and 1977 when he was physician in chief and chair of the department of medicine at Stanford, Federman remained at Harvard until he retired in 2006.

"Be kind"

Throughout his teaching, Federman emphasised the importance of the doctor-patient relationship. "At its best, this pairing brings science, kindness, and moral power to the care of a single being in need," he wrote in *Academic Medicine* in 1990. "No other experience duplicates the intimacy, candor, physical access, and vulnerability of seeing a doctor."

He also stressed the need for medical education to take into account the student's talents and interests. "As dean of students I was dazzled by the stories and accomplishments of entrants," he said. "We need to keep that alive, allowing ample scope for individual achievement and growth."

"Dan had an ability to connect with people at all levels and was brilliant at turning controversy into collaboration," Edward Hundert, current dean of Harvard Medical School, told *The BMJ*. "He was always ready to question the status quo and took an imaginative, innovative approach to individual students."

HARVARD MEDICAL SCHOOL

"His mantra was 'think out loud, stick to basics, and be kind'"

"His mantra was 'think out loud, stick to basics, and be kind,' and he was a wonderful mentor to everyone he came across," said Hundert.

Richard Kogan, who was at Harvard Medical School in the 1970s, said that Federman was key in encouraging him to continue his career as a concert pianist without giving up medicine. "Instead of telling me I had to choose between medicine and music, Dan Federman took an imaginative approach and devised a pragmatic programme for me to complete over five years instead of the usual four. This allowed me to take time off and play concerts between rotations and clerkships," he said.

Now clinical professor of psychiatry at Weill Cornell Medical College and artistic director of the Weill Cornell music and medicine programme, Kogan told *The BMJ*: "Federman came from a humanistic background and was way ahead of the curve in getting the arts introduced to the medical curriculum."

Predeceased by his wife, Betty, in 2008, Federman leaves two daughters.

Joanna Lyall, London
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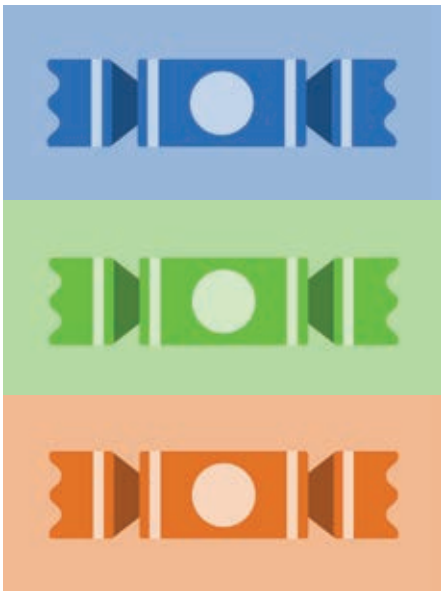
Christmas is coming: Celebrate with some cracking *BMJ* articles

Join *The BMJ* in an advent of knowledge and entertainment with our Christmas Crackers. For more than 30 years *The BMJ* has embraced the festive season by publishing a seasonal issue that answers quirky research questions, investigates bizarre phenomena and peculiar moments in medical history, and offers other entertainment.

This year we'll be quizzing readers with a different question every day from 1 December—the answer to which can be found in one of our Christmas articles (new and old). We kickstarted this with yesterday's question: "Does eating turkey make people especially drowsy?"

Find Christmas Crackers at http://bit.ly/BMJcrackers



MOST READ ONLINE

Coffee consumption and health
BMJ 2017;359:j5024

Coffee gets a clean bill of health
BMJ 2017;359:j5356

GMC to push for erasure of paediatrician convicted of manslaughter
BMJ 2017;359:j5223

Non-hormonal treatments for menopausal symptoms
BMJ 2017;359:j5101

Margaret McCartney: Are physician associates just "doctors on the cheap"?
BMJ 2017;359:j5022

WHAT YOU'RE TWEETING ABOUT

Brewing up good news on coffee

The news agenda of 2017 hasn't exactly been dominated by good news stories, so it's unsurprising that the findings of a recent study in *The BMJ* (see most read were greeted with such jubilation. This paper's conclusion that "coffee consumption seems more likely to benefit health than harm it" was met with a flood of celebratory messages, emojis, and gifs.

Phew, more coffee then
Jane Dacre @DacreJane

Thank goodness—the NHS runs on coffee powered staff!
AllisonHibbert @gp_kernow

The news I've been waiting for
Medic Tom @Tommymgbv8

I'm on call this week so this is GREAT news!
John F Pohl @Jfpohl

Finally a lifestyle modification we can all get behind #3CupsComingUp
Ishwaria Subbiah, MD MS @IshwariaMD

Best article I've read all year!
Abena Amoah @AbenaPhD

Waiting for the rigorous results that prove a skim latte a day will make me seriously healthy forever. Come on science!
Tracey Koehlmoos @DrTraceyK

You can follow *The BMJ* on Twitter @bmj_latest and join in the latest discussions there

PODCAST

A model for shared decision making

In one of our most popular podcasts in November, Glyn Elwyn joined us to explain how he and his team devised a framework to help clinicians think about how shared decision making can most usefully take place. Here he asks whether the context in which clinicians are working matters, for example, when doctors have a very short window for a consultation.

"We've actually had quite a few studies now where we've used some simple tools… and we're finding that they hardly lengthen the consultation. They give it more structure. Most good clinicians are explaining and giving a lot of information anyway… I admit that not every consultation has a shared decision in it: there are sometimes very effective treatments that you need to recommend.

"But more often than we think it's possible to wait or do nothing or to compare possible alternatives, and in those situations I think that patients really value being considered a partner in that decision. And especially for long term decisions, where you're going to start a medication for your lifetime, it takes more than 10 minutes to make that decision and justifiably so… So investing in good decision making (in my view and we're beginning to see evidence of this) leads to better adherence and much better confidence of patients in the decisions that they've made. I would argue that even in situations of short consultations, the investment in the right decision is a really worthy investment because it leads to gains later in your journey with that patient."

Listen at http://bit.ly/sdm_podcast