comment

> If a secondary care service is now staffed with people who do not prescribe, refer, and interpret results, the work is often transferred back to primary care

NO HOLDS BARRED Margaret McCartney

Passing the patient

Epilepsy services managed by nurses. Heart failure services run by pharmacists. General practices staffed by nurses who do almost everything, save for a GP here and there. Have expensive doctors outlived our usefulness in some (or many) quarters?

What happens to a patient who gets intermittent mild breathlessness and chest ache sometimes, but not always, on exertion? History, examination: a little bit of ankle swelling indicates several possibilities. Some basic tests, and a process of exclusion.

A chest pain clinic offers to diagnose cardiac chest pain. A low risk exercise test suggests a low probability of angina. I still don't know why this person is breathless.

A heart failure clinic offers to diagnose heart failure. It takes another few weeks, and then heart failure is excluded. I still don't know why this person is breathless.

There is outpatient spirometry. And so on.

The staff at these clinics are often not doctors. They work to protocol ("Test serum B-natriuretic peptide; if raised, do an echocardiogram"). This is part of a broader enterprise to streamline medicine: the care many people receive from the nurse or pharmacist they see will be excellent and entirely what they need.

But this approach risks deskilling generalist doctors who may feel compelled to involve more staff, thus disrupting continuity, for what used to be regarded as bread and butter medicine.

A general adult psychiatry service may decline to see patients if they're being seen by the addictions team—even though the addictions team member is not a specialist in addiction or general adult psychiatry. This has a knock-on effect on GPs. If a secondary care service that was delivered by a doctor who could prescribe, refer, interpret results, and place symptoms in context is now staffed with people who don't do some or all of these things, the work is often transferred back to primary care.

Sometimes it feels as if we're playing "pass the patient," with parameters for referral set so narrow as to be restrictive. Additionally, general practice is shifting to a model in which GPs retain clinical responsibility by leading teams of people. This will mean fewer GPs carrying more risk, for more staff doing new work. Is this wise? Is it what we trained for? And is it primarily about meeting waiting list targets or saving money?

With potentially worrying symptoms and no clear diagnosis despite initial testing in primary care, I often refer for assistance. Yet this wander through the NHS can end up being diagnosis centred, rather than patient centred. An evidently old fashioned thing—a clinical opinion from a specialist who has broad based training and will make a clinical judgment—is something I value. But does the modern NHS?

Margaret McCartney is a general practitioner, Glasgow
margaret@margaretmccartney.com
Follow Margaret on Twitter, @mgtmccartney
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ONLINE RESOURCES FOR PATIENTS

- Twitter: Follow Rosamund Snow, *The BMJ*'s patient editor, @*BMJ*PatientEd
- Read articles written by patients at bmj.co/patient_authored
- Find out more about *The BMJ*'s patient partnership initiative at bmj.com/campaign/patient-partnership

ANALYSIS

Overspending driven by oversized single dose vials of cancer drugs

Peter B Bach and colleagues call for an end to contradictory regulatory standards in the US that allow drug manufacturers to boost profits by producing single dose vials containing quantities that increase leftover drug

Even though reducing waste in healthcare is a top priority, analysts have missed the waste that can be created when expensive infused drugs are packaged containing quantities larger than the amount needed.[1 2] This is particularly true for drugs for which dosage is based on a patient's weight or body size and that come in single dose packages. These drugs must be either administered or discarded once open, and because patients' body sizes are unlikely to match the amount of drug included in the vial, there is nearly always some left over. The leftover drug still has to be paid for, even when discarded, making it possible for drug companies to artificially increase the amount of drug they sell per treated patient by increasing the amount in each single dose vial relative to the typically required dose.

Regularly and systematically discarding expensive drugs is antithetical to efforts to reduce spending

Increasing the amount of drug sold per treated patient also increases profits to doctors and hospitals in the United States. Under a system nicknamed "buy and bill," doctors and hospitals buy single dose vials of drugs and then bill insurers or patients when they are used. The bill includes a percentage based mark-up which can vary widely.

Although doctors and hospitals sometimes use leftover drug to treat a subsequent patient, thus reducing the amount of leftover drug for which they bill, this practice is very limited. Safety standards from the US Pharmacopeial Convention permit sharing only if leftover drug is used within six hours, and only in specialised pharmacies.[3-5]

We analysed spending on cancer drugs that are packaged in single dose vials and dosed based on body size in the United States to estimate the extent of the problem. We focused on the US because, unlike in most other Western countries, the government plays no role in how drugs are priced and doctors and hospitals can profit from leftover drugs.

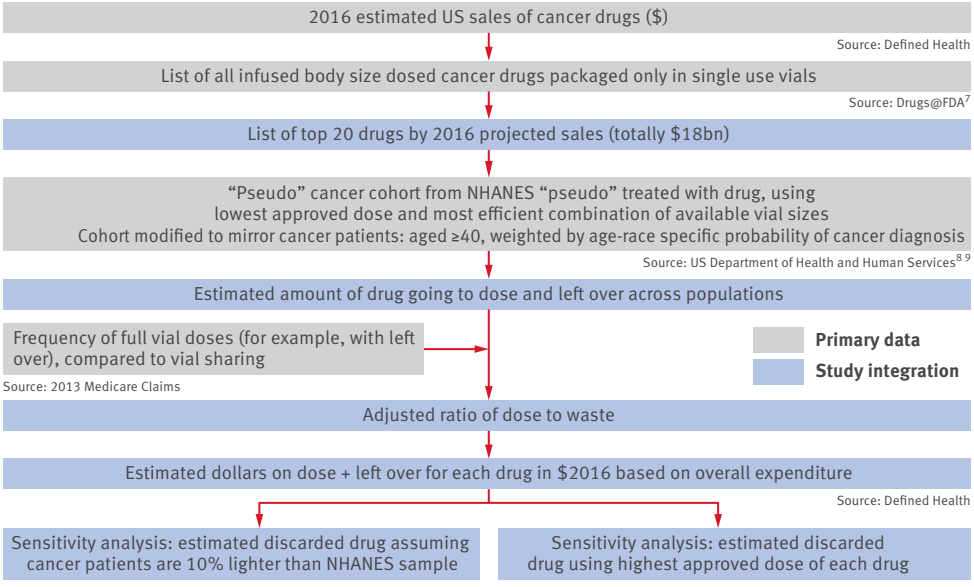
How big is the problem?

We examined the top 20 cancer drugs that are dosed by body size and packaged in single dose vials (based on 2016 projected sales), which collectively account for 93% of all sales of such drugs. We calculated the total amount of leftover drug and resulting 2016 US revenues for each drug using the method shown in the figure.

The table shows the leftover drug from the packaging approaches for the 20 drugs (see thebmj.com). We estimate total US revenue from these drugs to be $18bn (£12.5bn) in 2016, with 10% or $1.8bn from discarded drug.

WHAT YOU NEED TO KNOW

- Many infused cancer drugs are packaged in single dose vials but dosed based on body size, often resulting in leftover drug
- All the drug in the vial has to be paid for, making wasted drug a source of unnecessary spending
- Around $1.8bn will be spent on leftover cancer drugs in the United States in 2016
- Manufacturers should be required to package drugs in quantities that allow better matching with required doses or enable virtual return of leftover drug



How drug quantity affects profits and waste

The effect of different approaches to packaging for single dose vials is illustrated by the two drugs bendamustine and bortezomib. Bendamustine, a drug for leukaemia, is sold in a broad array of single dose vials (25, 45, 100, and 180 mg) that can be combined to reach its dose of 100 mg/m^2 nearly precisely. Vial combinations cover every 5 mg interval across the typical adult dose range of 110 mg to 310 mg, with the exception of 130 mg and 155 mg. We calculate that only 1% of bendamustine is wasted. Bortezomib on the other hand, a drug to treat multiple myeloma, is available in the US in only a 3.5 mg vial, much larger than the average required dose, which we calculate to be 2.5 mg based on the drug's dose of 1.3 mg/m^2 and the average weight of a cancer patient. Our estimate is that 27% to 30% of bortezomib sales in the US are related to leftover drug equating to $309m. The large vial size of bortezomib seems to be unique to the US market. The drug is sold in 1 mg vials in the UK.[11]

Pembrolizumab provides another example of how vial sizes can influence revenues. When it was initially approved in the US in September 2014, the drug was sold in 50 mg vials. But in February 2015 the manufacturer introduced a larger 100 mg vial and stopped distributing the 50 mg vials to the US market. The increased revenue from the change is substantial. Consider a 70 kg patient who requires a dose of 140 mg. When the drug was sold in 50 mg vials, reaching the desired dose would require three 50 mg vials and leave 10 mg unused. But with only 100 mg vials available, 60 mg is left over. According to the Medicare Not Otherwise Classified October 2015 file, which lists Medicare's reimbursement rates for these drugs, each milligram of pembrolizumab costs around $50. The change in vial size alone increases the revenues for the company from leftover drug by sixfold, from $500 to $3000, for a single dose. We estimate that the additional revenue to the company from the packaging change over the next five years will be $1.2bn, which comes on top of the $1.2bn they would have gained from leftover drug with the 50 mg package (see table 2 on thebmj.com).

How can we stop the waste?

Regularly and systematically discarding expensive drugs is antithetical to efforts to reduce spending on healthcare services that provide no value. Policy makers should therefore explore approaches that would reduce or eliminate paying for leftover drug. Current regulatory standards could be viewed as contradictory, or at least as ambiguous (see box on thebmj.com). The FDA calls on companies to balance vial contents so that leftover drug is minimised yet they should also provide enough drug that more than one vial is rarely needed for a single dose.[17] Guidance on vial sharing is also inconsistent. The Centers for Medicare and Medicaid Services essentially encourages it; the Centers for Disease Control and Prevention states that it is unsafe.[18 19]

Several policy options merit exploration. Regulators could require manufacturers to provide drugs in a reasonable set of size options to ensure the amount of wasted drug is low, say 3%. An alternative would be to leave manufacturers free to select their vial sizes but also require them to refund the cost of leftover drug. This could be achieved through certified disposal and a virtual return. Such steps could lead to savings for our healthcare system without sacrificing health outcomes. Opportunities to eradicate waste of this kind are rare.

Selected infused cancer drugs based on projected 2016 sales sold in single dose vials and dosed based on patient

Drug (brand name), year of FDA approval	Dose of first approved indication (highest approved dose at any time)	Amount of drug in available single dose vials (discontinued vial sizes)*	2016 expected sales ($m)	2016 expected spending on leftover drug ($m)
Paclitaxel protein bound	Breast 260 mg/m^2	100	960.77	76.72
Brentuximab vedotin	Lymphoma 1.8 mg/kg	50	292.18	29.15
Bevacizumab	Colorectal 5 (15) mg/kg	100, 400	3159.32	284.49
Cabazitaxel	Prostate 25 mg/m^2	60	127.96	26.89
Pembrolizumab	Melanoma 2 mg/kg	(50), 100	943.07	197.94
Carfilzomib	Myeloma 20 (27) mg/ m^2	60	697.65	231.45
Filgrastim	Neutropenia 5 (10) µg/kg	300, 480	623.85	106.01
Rituximab	Non-Hodgkin's lymphoma 375 (500) mg/ m^2	100, 500	3852.75	253.85
Bendamustine	Chronic lymphocytic leukemia 100 (120) mg/ m^2	25, 45, 100, 180	563.44	7.38
Bortezomib	Myeloma:1.3 mg/ m^2	3.5	1160.64	308.74
Total	—	—	18 498.86	1836.11

*All amounts in mg except for filgrastim (µg) and asparaginase (IU). Filgrastim also sold in single dose prefilled syringes.
†Based on (discarded percentage assuming full vials×proportion of full vials)/((discarded percentage assuming full vials×proportion of full vials)+average dose).

Peter B Bach, professor director, Center for Health Policy and Outcomes, Memorial Sloan Kettering Cancer Center, New York, USA

Rena M Conti, associate professor, Departments of Pediatrics Hematology/Oncology and Health Studies, University of Chicago, Chicago, IL, USA

Raymond J Muller, associate director of pharmacy services, Research Pharmacy, Memorial Sloan Kettering Cancer Center, New York

Geoffrey C Schnorr, project coordinator, Center for Health Policy and Outcomes, Memorial Sloan Kettering Cancer Center, New York, USA

Leonard B Saltz, professor chair of pharmacy and therapeutics committee, Center for Health Policy and Outcomes, Memorial Sloan Kettering Cancer Center, New York, USA

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Anna Maria MacCarthy

Former clinical medical officer (audiology) Sheffield (b 1919; q Galway, Ireland, 1943), died from cerebrovascular disease on 12 November 2015.

Born in County Sligo, Anna MacCarthy came to work in wartime England. In 1950 she married Jerry MacCarthy, a chest physician, and settled in Sheffield. When Jerry died suddenly in 1961, leaving her with a young family, she returned to work in community child health, subsequently becoming clinical medical officer in audiology. In her retirement, she provided counselling and marriage guidance, and ministered to sick and dying people in her parish. She leaves six children and seven grandchildren.

Anne Dorow

Cite this as: *BMJ* 2016;352:i607

Alexander Gordon Mackinnon

Retired consultant anaesthetist (b 1924; q Liverpool 1948), d 23 December 2015.

During part of his national service in the Royal Army Medical Corps, Alexander Gordon Mackinnon ("Alec") was medical officer on the troop ship *Empire Test*, making journeys between Liverpool and the Middle East. Afterwards, he specialised in anaesthetics, leading to a career of over 40 years as a consultant anaesthetist. He kept up his military association with the Territorial Army for many years. Alec's outside interest was music. A widower for more than 30 years, he leaves a daughter, a son, and three grandsons.

Colin Mackinnon

Cite this as: *BMJ* 2016;352:i512

Martin Spiro

Consultant diagnostic radiologist Waltham Forest and Manor House hospitals (b 1922; q University of Durham at Newcastle 1945; DMRD), d 13 January 2016.

Martin Spiro was called to national service as specialist radiologist, serving for two years in military hospitals and ending with the rank of major. He then continued his training as registrar at Hammersmith Hospital, West Middlesex Hospital, and Central Middlesex Hospital. In 1958 he was appointed consultant radiologist to the Connaught Hospital in the Waltham Forest group and Hornsey Central Hospital. He also had long association with Barking, King George, and Manor House hospitals and was a lecturer and examiner at the British College of Naturopathy and Osteopathy. He leaves Sylvia, his wife of 66 years; two daughters; three grandchildren; and two great grandchildren.

Jane Spiro

Cite this as: *BMJ* 2016;352:i509

John Rimington

Former consultant chest physician and director of the Greater Manchester Mobile Chest X-ray Service (b 1923; q Manchester 1947; MD, MFCH), d 19 December 2015.

As tuberculosis physician in Stockport John Rimington enlarged his remit to cover all of Greater Manchester. He established five mobile and static x-ray centres and changed to selective examination of high risk and symptomatic cases. He carried out and published several investigations into the relation between tobacco smoking and chest disease. He retired to the Isle of Man in 1983. He leaves Ruth, his wife of 63 years.

John Rimington

Cite this as: *BMJ* 2016;352:i510

Sabina Jeannette Strich

Former consultant in child psychiatry Croydon (b 1925; q Oxford 1949; DM, MRCPath, MRCP Lond, 1967; FRCPsych), died during a short hospital admission for respiratory infection probably associated with mitral valve disease on 23 May 2015.

Sabina Jeannette Strich was consultant child psychiatrist in Croydon from 1977 to 1984, and shortly after retiring moved to Oxford, where she established a private practice in individual, family, and group psychotherapy. She was a voluntary associate at an NHS counselling facility. Within the Institute of Group Analysis, she worked on the qualifying course, and conducted groups for psychoanalysts in Germany. She maintained an interest in music, sculpture, and involvement in the Council for Christians and Jews. Sabina leaves her sister and her family.

David W Millard

Cite this as: *BMJ* 2016;352:i508

David Hedley Wilson

Dean of postgraduate medical education and consultant in accident and emergency medicine Leeds (b 1928; q Leeds 1951; FRCS, FFAEM), d 4 October 2015.

David Hedley Wilson worked as a missionary surgeon in the Congo for 12 years during the chaos of civil war. On his return to the UK in 1967, he developed an interest in the work of what was at the time referred to as the casualty department. In 1986 he was appointed dean of postgraduate medical education in Leeds. He retired in 1991. Predeceased by his first wife, he leaves his second wife and five children from his first marriage.

Michael Flowers

Cite this as: *BMJ* 2016;352:i443

D J Tony Rose

Consultant anaesthetist Blackburn (b 1954; q Liverpool 1977; FFA RCS Eng), d 12 November 2015.

D J Tony Rose moved to a consultant job in Blackburn in 1986, where he stayed until he retired in April 2015. He combined a great love of people with a deep knowledge of how things worked—both human bodies and machines. His main interest at work was in obstetric anaesthesia, and he introduced the subspecialty to Blackburn. He set up the epidural service and introduced many changes to promote safe anaesthesia in childbirth. His interests outside work were cricket and motorbikes. He leaves Therese, his wife of 36 years; three sons; and two grandchildren.

Sarah Clarke

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CORRECTION

The Obituary of John Delwyn Thomas (*BMJ* 2015;351:h5922, print publication 30 January 2016, p 152) contained an error.

In the submitted original copy, the second sentence read: "His national service was with the Royal Army Medical Corps in Hong Kong, where he met his future wife, who was a QA nurse." This means, of course, that she was a member of Queen Alexandra's Royal Army Nursing Corps—nothing to do with quality assurance, as the obituaries editor assumed.

Marcus Klingberg

Israeli epidemiologist and spy for the former Soviet Union

Marcus Klingberg (b 1918; q Minsk 1941), died in Paris on 30 November 2015.

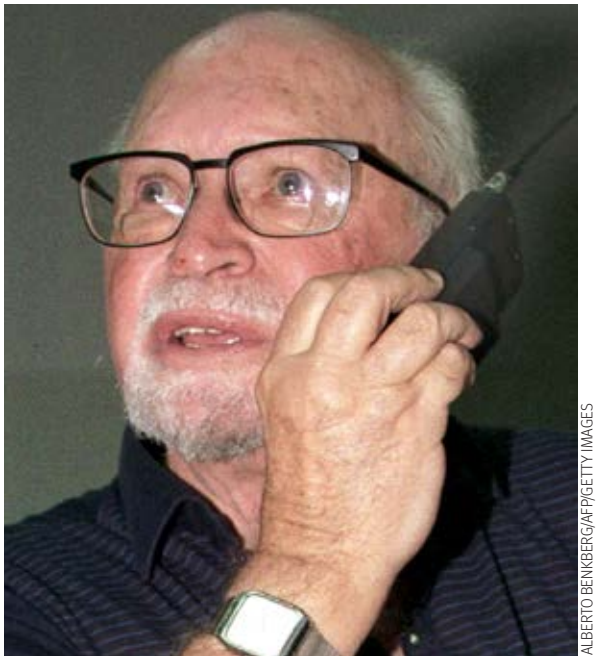
The medical research career of Marcus Klingberg, a Polish born citizen of Israel, ended abruptly, unexpectedly, and forever on 19 January 1983. An epidemiologist with an international reputation, Klingberg, on that day, stepped into a car that he thought would take him to the Tel Aviv airport for a flight to Malaysia. There had been a chemical explosion there, he had been told, and his expertise was needed.

The car, however, had been sent by Israel's domestic security agency, Shin Bet, and Klingberg was not driven to the airport. Instead he was taken to an isolated apartment and accused of being a spy, of passing classified information to the Soviet Union, in whose army he had served during the second world war. After days of interrogation he broke down and confessed that he "had provided highly secret scientific information to the Soviet Union." He was tried in camera before a military tribunal, convicted of espionage, and sentenced to 20 years in prison.

His case would remain a state secret for the next decade. Klingberg was given a false name and was held in solitary confinement during the first 10 years of his sentence. His family were forbidden to publicly reveal the case, as was the Israeli press. In 1985 a journalist writing for the UK's *Observer* newspaper travelled to Tel Aviv to try to interview Klingberg. He was told Klingberg had had a breakdown and was in a clinic in Europe.

Campaigns for his release from prison

In 1995 psychiatrist Ruhama Marton, founder of Physicians for Human Rights-Israel, wrote a letter to *The BMJ* saying that Klingberg, whose wife, Wanda, had died in 1990, was in extremely ill health. Marton urged the "international human rights community" to support Klingberg by lobbying the Israeli government "to grant an amnesty for an old man, a distinguished doctor and scientist, so that he can spend his remaining days with his daughter."



ALBERTO BENKBERG/AFP/GETTY IMAGES

In late 1982 his spying was finally betrayed by a double agent

Speaking to *The BMJ* in December 2015, Iain Chalmers, founder of the Cochrane Collaboration, says that he first met Klingberg in 1978 when Klingberg was on sabbatical at Wolfson College at Oxford University. After reading Marton's letter to *The BMJ*, Chalmers and Josephine Weatherall, an epidemiologist colleague of Klingberg's, organised a petition asking for Klingberg's release from prison. Amnesty International also appealed for Klingberg's release, as did 39 members of the Knesset.

In 1998 Klingberg was allowed to leave prison to serve the remaining five years of his sentence under house arrest. In January 2003 he left Israel for Paris, where his daughter and her son lived. He lived in a one room flat and received a pension from the Israeli Army on condition that he did not speak about his secret work.

Klingberg was born with the name Avraham Mordechai Klingberg on 7 October 1918 in Warsaw into an ultra-Orthodox Jewish family. He began medical studies in 1935 at Warsaw University. In September 1939, when Germany invaded Poland, his father, wanting to ensure the survival of at least one family member, insisted that Klingberg go to the Soviet Union. He obeyed and ended up in Minsk, now the capital of Belarus. He resumed medical studies there, and in 1942 his father, mother, and brother died at the Treblinka extermination camp.

Career in epidemiology

Klingberg qualified in 1941. In June 1943 he was sent to Moscow to train under Lev Gromashevski, the so called master of Soviet epidemiology. By the end of 1943 portions of Belarus had been liberated from the Nazis, and Klingberg was appointed chief epidemiologist of the country. After the war he returned to Poland to do antiepidemic work as deputy high commissioner in the Ministry of Health. He and his wife, microbiologist Wanda Yashinskaya, emigrated to Israel in 1948. He initially worked in preventive medicine in the Israel Defence Forces, rising to lieutenant colonel and chief epidemiologist. He encountered outbreaks of what later would be called West Nile fever and was the coauthor of papers on the disease. In 1953 he began to direct the military medical research laboratories, and in 1957 he left the army for the Israel Institute for Biological Research.

During the 1950s he increasingly became interested in the use of epidemiology for problems other than infections. During the 1960s and 1970s his international reputation grew. But there was another side to Klingberg's life. In the 1950s he was recruited by the KGB to spy for the Soviet Union. In late 1982 his spying was finally betrayed by a double agent. A self professed committed communist, Klingberg never apologised.

Klingberg died in Paris. He leaves his daughter and grandson.

Ned Stafford, Hamburg
ns@europefn.de

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PERSONAL VIEW Andrew Spooner

Guidelines require me to advise care that I think is wrong

Rigid adherence to rules diminishes doctors' and patients' autonomy

I am a GP in a small town. I am besieged by rules in the form of guidance from the National Institute for Health and Care Excellence (NICE), professional bodies, specialist colleagues, pharmacy advisers, and many others.

During my career I've aspired to improve the care I provide and also the healthcare system. I have felt successful at this: I see myself as doing a good job for the patient, and clinical interactions with "my" patients are an important part of how I feel about myself.

Reports of litigation, communications from medical defence societies, and stories of missed cancer diagnoses lead to the fear that a perceived error could result in criticism. I no longer feel as though I have the autonomy to offer guidance suited to individual requests. I still explain to patients how drugs work and the benefits and problems of treatments. This takes longer; appointments over-run. I was already being asked to see more people, and the pressure to do ever more is taking its toll.

I no longer feel as though I have the autonomy to offer guidance suited to individual requests

It is appropriate to hear the views of others and to update practice accordingly. Recently, the system requires me to recommend care that I think is wrong. For example, tight treatment of HbA_{1c} below 9% in elderly people should be a patient choice[2] and not enforced by a Quality and Outcomes Framework financial penalty or regulatory criticism (rating penalty from the Care Quality Commission) for non-compliance. Informing patients of evidence that a guideline or requirement is incorrect would be professionally dangerous and could confuse them.

I am left with the feeling that I can't provide the best care for patients or appropriately advise them to make their own decision. This creates conflict between my personal drivers of providing good clinical care, autonomy, and professional achievement—and a fear of professional failure. When I strive to follow system requirements, patients become unhappy and I am blamed for not delivering personalised care.

The current solution for an unsustainable workload is delegation. I can see the logic, and I value my colleagues, but other professions can substitute for me only if they follow tight protocols, further reducing the patient's autonomy.

Restoring the balance

How would I counteract all of this? Increase personal continuity by moving to overlapping uni-professional and multi-professional micro-teams so that patients know their clinician before decisions are required. Make a holistic assessment of each patient. Ensure that I had sufficient knowledge of common diseases to advise patients from first principles. Involve patients in joint decisions and record it in their notes. I would need sufficient clinical autonomy to make the decision

YANKEE DOODLING Douglas Kamerow

Bottled water for all, all the time?

Doctors should follow some US cities in discouraging bottled water

Current US headlines about unsafe municipal drinking water in Flint, Michigan, and elsewhere are likely to scare even more people away from drinking good old tap water. These rare cases, where it is actually appropriate to reach for bottled water, may lead to widespread increases in consumption of bottled water. That is bad news.

Here in Washington, DC, everyone seems to be drinking bottled water all the time. People bring water with them to meetings (coffee is out of favour). They carry it when they walk around. They have it with them in the gym, of course. And now it is even allowed (and encouraged, by sales) at theatres and cinemas. It infuriates me.

When asked why they chug water, people say to "remain hydrated," as if they were going across the desert instead of across the office suite. Often they will cite the folk wisdom (well debunked) that humans need to drink eight glasses of water a day to maintain health.

If this were just tap water in a refillable bottle I wouldn't really care. More often than not, though, the water comes in a "recyclable" plastic bottle sporting a fancy label and a foreign pedigree. Water from New England springs. Water filtered through volcanic rock in Fiji. Water with added vitamins. There is, of course, no evidence that such water is better for you, though it may taste different.

Remind patients that water from a tap is fine to drink

Not all bottled water comes from exotic locales or with additives. Coca-Cola and Pepsi's US water brands, Dasani and Aquafina, respectively, are actually sourced from municipal water supplies. It must be the extra filtration that makes them worth the premium price. And you don't have to pay a lot for bottled water, either. All the discount stores sell gigantic plastic wrapped water bundles for as little as 18 cents (£0.13) a bottle. (That is only about 15 times what it costs to produce; I guess that's a bargain.)

ROSE LLOYD

stick. When I think back, these were the reasons why I chose a career in practice.

Support for that style of practice requires the following actions. Change the format of NICE guidance to make the underlying evidence available to explain to patients. Limit guidance to the most effective. Do not audit to 100% compliance with guidance. Reverse the one way trend in the skill mix, to retain or increase the number of senior professionals delivering healthcare. Allow professionals to make decisions with patients about treatments while recording the reasons for the patient's decision. Change the governance system from an audit of compliance with processes to one of peer and patient reviews of anonymous examples of the decisions taken.

Compliance versus responsiveness

By wishing to apply evidence to improve quality, we have also reduced variation by enforcing a defined version of "best practice." This has hampered our ability to meet patients' requests; we favour compliance over responsiveness.

Person centred care to a known group of patients has been the best job in the world. Working as a scared professional, who slavishly follows rules while ignoring patients, is neither good practice nor rewarding.

Andrew Spooner is a general practitioner, Grosvenor Medical Centre, Crewe CW1 3HB
andrewspooner@btinternet.com

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But let's leave aside the bogus health claims and focus on the plastic bottles for the real source of the problem.

Americans use about 50 billion plastic water bottles a year. That's more than 150 bottles for each adult and child living here. This seems like a bit more than we need, especially when we consider that only 20-30% of the bottles are actually recycled, leaving billions of bottles to be discarded as trash. More than two million tons of plastic water bottles end up in US landfills. Not a pretty sight.

Then there is the energy and, yes, water needed to manufacture, fill, ship, and deliver 50 billion plastic water bottles. Energy estimates range up to 17 million barrels of oil a year, enough to run over a million cars for a year. The amount of water needed in this entire process dwarfs the amount of water actually in the bottles themselves. It takes from 3 L to 26 L of water for each litre bottle, depending on whether the bottle comes from the US or Fiji.

Some US cities and our national parks are beginning to outlaw sales of bottled water. That is a good sign. Maybe it is time for doctors, and not just public health doctors, to get into the act and remind their patients that water from the tap is fine to drink and better for the world than lugging around disposable plastic bottles filled with filtered, purified, flavoured, imported, vitaminised—water?

Douglas Kamerow, senior scholar, Robert Graham Center for policy studies in primary care, Washington, DC; professor of family medicine, Georgetown University, Washington, DC; and associate editor, *The BMJ*
dkamerow@aafp.org

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ACUTE PERSPECTIVE

David Oliver

Stand up for nursing

In my 27 years as an NHS hospital doctor, my admiration for nurses in hands-on clinical roles has only grown. Whether staff nurses, ward sisters, charge nurses, specialist practitioners, or consultants, they're dedicated, skilled, underpaid, and often undervalued. I can't muster such consistent respect for their senior managers.

One advantage of medical career structures is that senior doctors can remain in clinical roles without losing status or income. This flexibility to return from management gives them independence; not so in nursing. Once they've left the bedside, nurses generally won't return and would lose out if they did.

I think this is a big problem. Advocacy for your profession is hard if you haven't practised it recently.

The Department of Health ducked Francis's recommendations on minimum safe nursing levels.[1] It belatedly asked the National Institute for Health and Care Excellence (NICE) for an independent review of the evidence,[2] but it stopped the work, perhaps because its implications looked inconvenient.[3] The chief nurses of the Shelford Group of big teaching hospitals responded with a public letter opposing standardised safe staffing guidance.[4]

Outspoken resignations from government nursing roles would set an example

NHS England's chief nursing officer agreed to lead the safe staffing work instead, defending the moves in a letter to chief nurses.[5] Against a backdrop of 90% of acute NHS hospitals being short of their own safe nursing establishment,[6] the Care Quality Commission told hospital wards they were short of nurses.[7] Most chief nurses have, to be fair, protected the front line by prioritising nursing numbers over finance. But now, NHS planning guidance tells hospitals to reduce their "head count" and agency spend.[8]

The government has proposed withdrawal of bursaries from nursing students[9] and the planned creation of non-graduate nursing associates.[10] Yet evidence links the nursing skill mix, training, and numbers to patient safety and quality[11]—surely a principal concern for nurses in top jobs. Outspoken resignations from government nursing roles would set an example, as would condemnation from chief nurses of large trusts. What we've had instead is silence as the clinical profession they used to practise is run into the ground.

David Oliver is a consultant in geriatrics and acute general medicine, Berkshire davidoliver372@googlemail.com
Follow David on Twitter, @mancunianmedic

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MEDIA DEPICTION OF SCIENCE

Use of the media to promote health products

McCartney highlights the problem of the media oversimplifying, dramatising, and rehashing medical science (Comment, 13 February). Such "churnalism" benefits the media, in revenue if not reputation, often at the expense of public understanding. It is sobering that clinical trial authors often initiate the "spin" cycle.

Another concern is the skilled use of the media by vested interests to promote drugs and other health products. Such promotions are widespread, biased, and effective, particularly when cloaked in respectable language and presented as scientific news rather than advertisement. Cherry picked scientific "findings" are an analogous feature of direct to consumer advertising of prescription drugs, banned in most Western countries, but not the US and New Zealand.

Patients, doctors, and the public have a shared stake in the benefits of health literacy. Commercial distortion of medical science by the media compromises patients' ability to usefully participate in clinical decision making.

David B Menkes
(david.menkes@auckland.ac.nz)
Joel Lexchin

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IBUPROFEN FOR UTI

Non-antibiotic effects of ibuprofen

I wonder why Gágyor and colleagues (Original research, 9 January) did not take into account the fact that ibuprofen is a non-antibiotic, and that it has antimicrobial activity like many other such drugs. Mention of this in the protocol and results sections would have led to a clearer understanding of the observed benefits of ibuprofen described in the conclusions. The use of ibuprofen for "symptomatic treatment" implies that its analgesic activity is most important, whereas in practice its broad spectrum antimicrobial activity might be the most important factor. The possibility of the development of microbial resistance to ibuprofen should have been discussed, even it was used "only" as a painkiller.

The antimicrobial activity of the large and diverse groups of non-antibiotics is often overlooked when treating patients with non-infectious diseases.

Jette E Kristiansen (malthe@dadlnet.dk)

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Authors' reply

We agree with Kristiansen that the potential antimicrobial properties of ibuprofen are an important factor, but that this area is still under discussion. For *Escherichia coli* (the main cause of urinary tract infection) no inhibition zones were obtained in a disc diffusion assay with ibuprofen. Thus, the antimicrobial effect of ibuprofen with regard to urinary tract infection remains unclear. Further research in this area is planned in a Scandinavian trial.

Jutta Bleidorn
(bleidorn.jutt@mh-hannover.de)
Ildikó Gágyor
Eva Hummers-Pradier

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LETTER OF THE WEEK

News coverage of clinical research

Suggested components of a structured press release

We share McCartney's concerns about health reporting (Comment, 13 February). Media reports of research findings provide "impact" for academics and institutions, increase journals' visibility and status, and accrue customers for news agencies. However, poor quality reporting causes unwarranted alarm or unrealistic expectations, promotes ineffective or unsafe health behaviours, and decreases faith in medical research when subsequent findings are contradictory.

High quality randomised research is less likely than observational research to elicit journal press releases. It is unclear how journals select studies for a press release, but *The BMJ* favours newsworthiness over study design.

Reporting of non-randomised studies is often poor. Limitations are buried within manuscripts. Authors base treatment recommendations on low quality evidence. Press releases seldom mention limitations of observational or preclinical studies and infer clinical benefits from preclinical data. Journalists may lack sufficient training to deal with the complexities of health research. News agencies rush to publish stories on preliminary or hypothesis generating research.

Media reporting of health research might be improved by reducing academic rewards for featuring in the news, more acknowledgement of research limitations, preferential coverage of randomised research, better training of health journalists, and a less frenetic approach by news agencies. High quality press releases may improve news coverage. *The BMJ* is ideally placed to test this idea by conducting a randomised trial of a structured press release.

Andrew Grey (a.grey@auckland.ac.nz), Michael T M Wang , Mark J Bolland

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NEW ALCOHOL GUIDELINES

Drunk on risk: new guidelines demonise drink

The new alcohol guidelines miscommunicate the risks of drinking (Comment, 13 February). The warning that "no alcohol is safe" will probably be counterproductive—people might be happy to cut down but not to eliminate alcohol completely. And why should they try to adhere to the new limits if even these are not safe?

The risk rationale is as follows. In every 1000 women, 110 will get breast cancer without drinking. Drink up to these guidelines and an extra 20 women will get cancer; double the limit and an extra 50 women will get cancer.

But this fails at an individual level. The absolute risk increase from drinking double the guidelines versus not drinking is 0.5 in 10—only a 5% chance of cancer.

Good guidelines give balanced information on risk and let people make their own choices. It is scaremongering to say that there's no safe amount when having a small or moderate amount increases risk only marginally.

David M Shaw
(davidmartinshaw@gmail.com)

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