

comment

‘Surely we should gather data on whether it's better than standard care?’

NO HOLDS BARRED Margaret McCartney

PPA COLUMNIST OF THE YEAR

Only data can say if new is better

Managing heart failure is often hard work for patients and professionals. Steering between fluid overload and postural hypotension, while keeping the kidneys perfused and quality of life maintained in a life limiting condition, is a difficult and draining business.

A new drug, then, would be welcomed, and LCZ696 was described to me as “the next big thing” by a cardiology specialist even before the first trial appeared. With the brand name Entresto, it’s a combination of valsartan (an old drug, an angiotensin receptor blocker) and sacubitril (a newer neprilysin inhibitor). It was going to be a bit of a revolution, we were promised. The double blind trial of valsartan-neprilysin versus enalapril in heart failure was published in the *New England Journal of Medicine* in 2014. The National Institute for Health and Care Excellence (NICE) approved it for use in 2016.

The trial was stopped prematurely because it found an “overwhelming benefit” from the new combination drug. The primary outcome was a composite of admission to hospital for heart failure and death from cardiovascular causes. After 27 months, 21.8% of patients in the test group and 26.5% of patients in the enalapril group had reached that endpoint. The difference in mortality alone was smaller: 17% in the test group and 19.8% in the enalapril group. Is this reason enough for NICE approval?

Sacubitril costs almost £100 a month, and the obvious question is why it was approved without knowing whether the valsartan (costing around



half the price) or the sacubitril was responsible for any benefits. Modelling studies by Novartis have been cited by NICE, but they can’t be considered good replacements for randomised controlled trials. Furthermore, the average age of patients in the trial was just under 64; the average age of patients with heart failure in the UK is 76. The primary endpoints were not statistically significant in the pre-

specified subgroup of people over 75. Only 22% of the trial population were women. And the dose of enalapril in the control group was a flat rate of 20 mg daily, which was not up-titrated according to symptoms.

So, are the benefits useful for our population—and how big are they, compared with usual, optimal care? A previous trial with a similar new drug showed no benefit. If we’re going to use the drug, surely we’d do better to gather high quality data on whether it’s better than standard care?

Heart failure is a disease with a high death rate—but death is not the only outcome that matters. Patients given the test drug had a higher risk of symptomatic hypotension: I suspect that, in the older UK population, the rate of this side effect will be higher.

Quality of life is of fundamental importance. If the trials of palliative care in heart failure show that it gives similar or better value, I hope that it’s funded and delivered just as quickly.

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The hackers holding hospitals to ransom

Trusts need to be prepared to avoid shutdowns

In February 2016 staff at a Los Angeles hospital noticed that their computers weren't working. Secretaries couldn't access emails and had to communicate by fax or phone. Doctors couldn't access electronic records. At least one patient had to go to another hospital. Others reported long delays. Computed tomography scans could not be done. The chief executive declared an emergency, and ambulances were diverted to other hospitals. Rumours surfaced, including that the hospital was being held to ransom for \$3.4m (£2.6m), though the hospital denied this.

Few people know what exactly occurred at the Hollywood Presbyterian Medical Center. It is likely to have been a "phishing" expedition in which the bait was a fake email message and the prey was a healthcare employee. The virus—or "ransomware"—then infected and locked hospital computers. IT experts have said that the hospital may have itself turned off all the computers to prevent the infection spreading. After 10 days the hospital paid a smaller ransom of about \$17 000 to regain use of its computers.

Like any business people, the hackers using ransomware need to appear competent so that people and organisations pay them. Victims must trust the hackers to restore their data. An undercover investigation by one antivirus company found that ransomware groups offered to extend payment deadlines and to negotiate discounts (averaging 30%). One such group offered online support that responded within minutes to queries; another group told a victim, "I am glad you got your files back... Get a good antivirus."

Hackers were paid \$1bn in 2016

Hollywood Presbyterian was the first hospital to admit paying a ransom, but other US hospitals, in California, Indiana, Kentucky, Maryland, and Texas, were targeted in 2016. The number of ransomware attacks rose fourfold from 2015 to 2016, and so did the amount of money paid to hackers, to \$1bn, according to the FBI. In the UK, a third of NHS trusts have reported a ransomware attack.

A few months ago on a Saturday night a nurse at Papworth Hospital

near Cambridge clicked on a malicious link. Malware infected her workplace computer and started to encrypt sensitive files. Fortunately, the hospital's daily data backup had just been completed. The IT director admitted that they were very lucky, saying, "Timing absolutely was everything for us."

Hospitals are ideal targets for ransomware companies. They have irreplaceable medicolegal records and data for an increasing number of day to day functions, from patients' appointments to viewing imaging. Hospitals are probably more willing than other organisations to pay for quick recovery of their data. Hospitals also hold confidential information about their patients, such as birth dates, addresses, insurance or social security details, and personal medical history. These personal data can be sold to other criminals for \$10 a patient. This is about 10 times what can be earned by selling credit card details. Loss of these data also exposes hospitals to fines and loss of reputation—incentives to keep quiet.



Hospitals are probably more willing than other organisations to pay for quick recovery of data

Reducing acute admissions—a timely reality check

In March NHS England published *Next Steps on the NHS Five Year Forward View*, a mid-term report and road map to 2020 of the plan by its chief executive, Simon Stevens, to sustain the NHS in the face of unprecedented crises in funding, demand, and workforce.

Reducing urgent care activity and hospital beds have been key themes of England's 44 sustainability and transformation plans (STPs). These are key vehicles for delivering the strategy Stevens set out in the *NHS Five Year Forward View*. They'll now be called not plans but "partnerships."



Promises are based on how much money must be saved, not on any realistic prospect of delivery

I welcome *Next Steps'* long overdue realism and tempered expectations. It acknowledges inevitable trade-offs between priorities, such as urgent care, cancer care, and elective surgery.

A crucial graph is in the section on integrating care locally. This compares data from the 12 months to December 2016 with the 12 months to December 2015 in new models of care vanguards. The growth rate of acute admissions per head was only 1.1% in primary and acute care system vanguards, 1.9% in multispecialty community providers, and 3.2% in the rest of England—a lower growth of emergency

admissions, not any kind of absolute reduction.

Sadly, many initial STPs make promises wildly at odds with these modest gains. They promise anything from 9% to 30% fewer admissions by 2020 and reductions in acute hospital beds as high as 21%. To be fair, Stevens set out a "patient care test" in response, saying we shouldn't allow further acute bed closures without alternative community capacity to ensure care wasn't compromised.

This is just as well, since nobody—neither the STPs' authors, nor the management consultants hired to tell them this nonsense, nor decision



Ancient operating systems

Many hospitals use proprietary software that runs on ancient operating systems. Barts Health NHS Trust's computers attacked by ransomware in January ran Windows XP. Released in 2001, it is now obsolete, yet 90% of NHS trusts run this version of Windows.

So what can hospitals and their workers do? Digital hygiene—that is, keeping hardware and software as secure as possible—is essential. This includes employees becoming less “click happy” when reading emails. Frequent backups are also important. Papworth Hospital now backs up data every hour and uses tape drives, which cannot be hacked digitally.

When attacks do occur, the IT

department must be informed quickly. Much like containment of an infectious disease outbreak, a rapid response can isolate infected computers. One security company provides a free “hostage rescue manual” for responding to ransomware attacks. Hospitals should share data on attacks to stop them happening again. The same ransomware used against Hollywood Presbyterian was reused in a massive scam targeting US and Asian hospitals five months later.

We should be prepared: more hospitals will almost certainly be shut down by ransomware this year.

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makers in NHS England or NHS Improvement pushing them from the centre—can believe that this is deliverable. The promises are based on how much money must be saved, not on any realistic prospect of delivery.

Meta-analyses have shown no credible evidence that admissions can be prevented on this scale. Recent history has shown annual increases in urgent activity throughout England even as bed numbers fell. Even modest plans to reduce admissions by 3% as conditions for the Better Care Fund failed to deliver.

Even if admission rates can be reduced, little good evidence shows that shifting care closer to home saves

money, according to rigorous analyses by the Nuffield Trust.

If we want to deliver more joined up, preventive care to help patients stay out of hospital or leave sooner, let's do it. But let's stop promising undeliverable and non-evidence based reductions in acute hospital admissions.

It's a shame that *Next Steps* aims for a return to 95% by 2018 for emergency departments' four hour target. Another reality check may be needed soon.

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BMJ OPINION Michael Brady

No child should be denied access to sex education

Last week, sex and relationships education (SRE) became mandatory in all schools. So from September 2019, all English secondary schools must teach SRE, and all primary schools must teach relationships education.

This follows years of campaigning from charities, including Terrence Higgins Trust, as well as from teachers, parents, and young people themselves.

Health and education have always gone hand in hand—and this legislation could have a transformative impact on the sexual and mental health of future generations. Young people have always been disproportionately affected by poor sexual health—from sexually transmitted infections and unplanned pregnancies to the modern threats from cyberbullying, sexting, and online exploitation. We know that quality SRE can delay sexual activity, reduce STIs, prevent HIV, and drive down the number of teenage pregnancies. The potential of compulsory SRE will, of course, only be realised if every young person has access to it.

Most parents recognise that talking, in an age appropriate way, to young people about sex and relationships will safeguard them

Much has been said in the media about the parental right to withdraw children from the lessons. A lot of this debate misses the point: the majority of parents do support mandatory SRE and want their children to learn about these issues from a trusted professional, in a safe environment, rather than from their peers, the internet, or pornography.

Most parents recognise that talking, in an age appropriate way, to young people about sex and relationships will safeguard and prepare them. We believe that no child should be left without the information they need to make healthy life choices. Denying a child access to this information does not help their health and wellbeing.

We know the government won't allow parents to withdraw primary school children from relationships education. However, it is worrying that parental withdrawal for secondary school pupils has been voted through by both houses of parliament.

We welcome discussions around what is an appropriate age for young people to make their own decisions to attend SRE if their parents object. We know what SRE can achieve at both a public health and an individual level. Now we must ensure every young person has the opportunity to benefit from it.

Michael Brady, medical director, Terrence Higgins Trust



ANALYSIS

The craze for “early detection”

The growing number of articles on the early detection of disease fail to give a balanced view of benefits and harms, say **Bjørn Hofmann** and **John-Arne Skolbekken**

Early detection and treatment of disease have been part of medical practice since the early 19th century. As Chisholm wrote in 1822, “Every chance of success depends on the early detection of disease and, of course, the early adoption of the treatment which experience has proved to be the only one.”¹ The opportunity to discover disease in its early development, potentially enabling reductions in morbidity and mortality, has been an incentive for doctors, and, if missed, a source of blame and litigation.² As lamentably expressed by Arnold in 1907, “The attitude of the general practitioner today toward thoracic aneurysm may be compared to his attitude a few years ago toward the recognition of pulmonary tuberculosis—he was satisfied to recognise the disease when it was fully developed.”³

Since then, early detection of disease has gained considerable attention worldwide, especially in health checks and screening programmes. Improved



Presupposed benefits can lead to aggressive interventions

diagnostic technology, innovations in biomarkers,^{4,6} new m-health applications,⁷ and “P4 medicine” (predictive, preventive, personalised, and participatory)⁸ have increased this attention. The number of articles on early detection has risen exponentially since the 1970s, and most of these articles have the same message: early detection is a good thing.

More recently, however, this presumption has been challenged. Several types of early detection have been criticised for being ineffective, futile, or even harmful.⁹ The same goes for health checks.¹⁰ The presupposed benefits of early detection can lead to aggressive interventions, the benefits of which are uncertain at best. Early detection can make people ill when it causes “shifts in the perceived severity of the disease, with ripple effects on how people experience and understand their illness and risk of disease.”¹¹ Thus, the potential harms of early detection have also gained attention.^{12,13}

We scrutinised published articles about early detection and assessed whether they tackle benefits and harms equally. We searched in Ovid MEDLINE, EMBASE, PsycINFO, and PubMed (see supplement 1 in the appendix for search strategies).

When did interest in early detection start?

We noted the year that some words and phrases related to early detection first appeared in publications registered in PubMed, as well as the total number

Appearance and number of publications in PubMed containing words and phrases related to early detection, up to 15 July 2016

Term	First appearance	Total number
Early detection (diagnosis)	1868	327 928
Early treatment	1882	581 152
Early prevention	1911	104 483
Early intervention	1927	62 454
Overtreatment	1929	9441
Futile treatment	1952	4057
Underdiagnosis	1966	1426
Undertreatment	1969	1897
Overdiagnosis	1970	8798
Overdetection	1985	77

of publications containing each term (table). Descriptive terms (such as “early”) appeared earlier and in more publications than more overtly normative terms (such as “over” and “under”), indicating that the normative language used in critiques of extended diagnostics was a late development in the medical discourse on early detection.

PubMed identified 2252 publications mentioning early detection in the 1950s (published between 1 January 1950 and 31 December 1959). In the 2000s (from 1 January 2000 to 31 December 2009) this number rose to 181 319. The average number of publications registered in PubMed per year that mentioned early detection has risen 81-fold from the 1950s (225.2) to the 2000s (18 132). This corresponds to relative growth of 0.2 per 1000

KEY MESSAGES

- The number of articles on early detection has risen exponentially since the 1970s
- Twice as many articles mention the benefits of early detection as mention the harms
- The early detection surge is still big and biased and should be balanced with more critical thinking and analysis, and monitoring

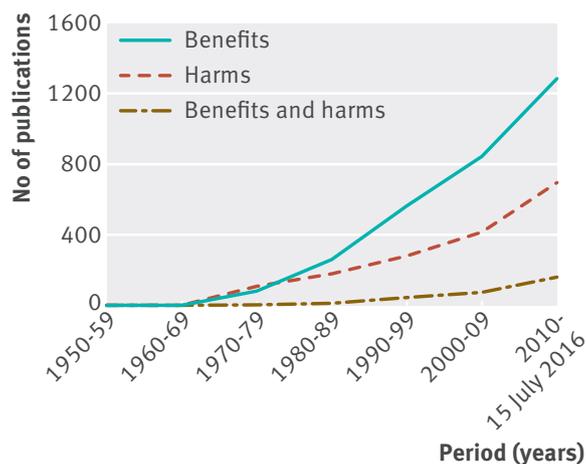


Fig 1 | Number of publications on early detection that refer to benefits, harms, and both benefits and harms per million publications registered in MEDLINE for each 10 year period.

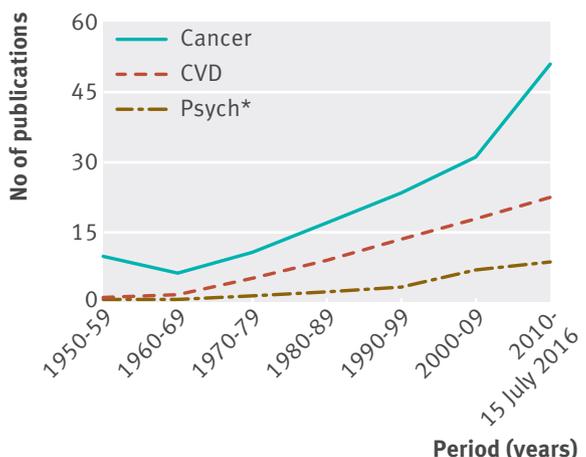


Fig 2 | Number of publications on early detection and cancer, cardiovascular disease (CVD), and psychiatry or psychology (psych*) per 10000 publications registered in MEDLINE for each 10 year period.

publications per year in the 1950s and 5.8 per 1000 publications per year in 2010s—a 29-fold increase. The rise in number of publications varies between databases. Publications on the benefits and harms of early detection have also increased in number since 1950 (fig 1). But few articles cover both benefits and harms, reflecting polarisation in the medical discourse. We found a significant difference between trends for the publications referring to benefits (only) and those referring to harms (only) (interaction time*type in linear regression, $P < 0.001$). The proportion of publications on both benefits and harms in total publications on early detection in EMBASE has increased from 1:735 in the 1970s to 1:150 in the 1990s and 1:76 in the 2010s.

Early detection is mentioned differently between specialties (fig 2); articles on cancer contain more mentions than those on cardiovascular disease or psychiatry or psychology.

“Surge” in early detection publications

Taking into account that the total number of articles published has increased, the proportion of articles on early detection published each year (and registered in all databases) has risen 36-fold from the 1950s to the 2010s.

The imbalance between the number of articles on benefits and harms implies that the advantages of early detection of disease are taken for granted while reflections on harms are lagging behind.

The damage of the surge is unknown. We do not fully know the benefits and harms of early detection, in terms of lives saved and avoided suffering, increased health anxiety, more disease (overdiagnosis, medicalisation), and unnecessary and harmful treatment. The increased vigilance against pre-diseases might also change the way we perceive life itself, slowly transforming life into what can be characterised as pre-death. Continued ignorance about its magnitude is no longer an option. Systematic and continuous monitoring is the logical next step, as with other acknowledged side effects of healthcare.

Is the early detection surge hype?

Reductions in mortality for several diseases¹⁵ have not been attributed to early detection.¹⁶ Moreover, the incidence of several diseases that tend to be detected early is increasing with no corresponding reductions in mortality.⁹ The harms of early detection are extensively reported.^{13 17} Hence, the surge in attention on early detection and the focus on benefits over harms do not seem justified. Even articles that discuss both benefits and harms mention benefits more often in the abstracts.

Tip of the iceberg?

Our search strategy might have missed a wide range of articles. There are numerous ways to formulate early detection; for example, we did not include “presymptomatic diagnosis” and “inability to detect the disease before it has progressed.”¹⁸ To our knowledge, the language of diagnostics has not changed considerably over the years, which, if it had, would have provided a systematic bias in our data. Our search strategy might also miss references in books. However, a search in Ngram Viewer (Google) for “presymptomatic diagnosis presymptomatic detection 1800-2008” gave only a few additional hits and showed the same trends as other terms for early detection. These additional searches indicate that our results represent a minimum. Our results might also include irrelevant articles; we analysed a random sample of references, which indicated that our searches were appropriate.

The meanings of the search terms we used could vary between studies. Despite differences in context, presuppositions of the value of early detection exist, namely that there is something to detect, that it will inevitably develop into something serious, and that the purpose of early detection is to avoid suffering and save lives. This is arguably an idealised situation, bypassing many important questions, such as what counts as disease, where to set cut-off thresholds, and whether early detection always reduces suffering. Accordingly, phrases such as “early detection of disease” can be laden with value and biased, implying

that early detection is a good thing.¹⁹ The ideological bearings of “early detection” are outside the scope of this paper, but the literature on early detection and cancer seems to be a prudent case for further analysis aimed at enabling better illuminated discussions of a longstanding truth in medicine; the uncontested benefits of early interventions.

We have only noted the number of articles on benefits and harms and not the quality of how harms and benefits are tackled. Studies of cancer screening indicate that harms may be underinvestigated or under-reported, despite the trials mentioning the word harms as a search term or a free text in titles or abstracts.²⁰

Quality assessment of the numerous studies we identified is beyond the scope of our study, but our sample analysis indicates that the imbalance between benefits and harms in the literature may be more severe than we report (see supplement 2 in the appendix). This underlines the need for further in-depth analysis of the literature.

We have only discussed early detection in relation to reduced mortality. Clearly, early detection might have other effects, such as reduced morbidity, increased quality of life, or reduced health anxiety. We acknowledge this and encourage further studies.

Summary and recommendations

A surge has occurred in publications about the early detection of diseases and in the proportion of articles discussing its benefits. It is also unbalanced, with twice as many articles mentioning the benefits of early detection as mentioning the harms. The surge seems to result from may, in part, reflect hype and unwarranted optimism, as mortality rates have not fallen.

In the past five years the ratio of articles discussing only benefits compared to those discussing only harms appears to have stabilised while the number of articles discussing both benefits and harms has increased. Hence, the bias of benefits may be diminishing, as the awareness of harms of early detection is rising. Still only every 76th article on early detection, however, refers to both benefits and harms. Thus, the early detection surge is still big and biased and should be balanced.

We need critical thinking and more studies that specifically target both the benefits and harms of early detection. We need initiatives for systematic monitoring of a wider set of benefits and harms of early detection technologies. We need better critical assessment of early detection strategies in clinical practice, in research funding, and in publication to avoid the persisting bias that early detection is only beneficial.

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BMJ OPINION

Politicians must not score an own goal on health



Any general election has “political football” issues. Given the importance of healthcare to all, the case for keeping the NHS ball in play—by investing in and supporting it—is compelling. The NHS’s scale and contribution to our society and economy should not be underestimated. Besides providing free care at the point of need to the whole population, the NHS is our largest single employer, providing jobs for 1.2 million people in England, and education and training for thousands of doctors and nurses.

The NHS is also in the premier league in terms of supporting the global competitiveness of the UK’s life sciences sector and as a world leading research organisation. It was at the forefront of key medical breakthroughs, such as pioneering the first combined heart, lung and liver transplant; introducing computed tomography; and the 100 000 Genomes Project.

The NHS is in the premier league in terms of supporting the global competitiveness of the UK’s life sciences sector and as a world leading research organisation

Those of us working in the NHS might know these facts already, but every political party needs to be aware that the NHS tops leagues in many ways. And politicians need to be clear about four important challenges we face if we are to stay at the top.

Firstly, demand for services is rising rapidly. The number of over 85s has increased by almost a third since 2005 to 1.3 million and will double in the next 20 years. GPs delivered around 370 million consultations in 2016, up by 70 million in five years.

But, secondly, funding is not keeping pace with demand. Demand is rising by 4% a year, just as per capita spending is falling. An extra £10bn of investment in NHS buildings and equipment is needed to support current plans to improve local health services. A lack of funding, reductions in capacity, and staff shortages have eroded health services in the community.

Thirdly, frontline services are under real pressure. Performance against key standards is deteriorating. In the 12 months to January 2017 an average of 89% of people were seen in emergency departments within four hours; the target is 95%. The target of 92% of patients receiving elective surgery in 18 weeks has not been met since February 2016.

Finally, the NHS workforce is under severe strain. All trusts report difficulties in recruiting and retaining staff. Shortages persists across key staff groups, and the many nationals of other EU countries working in the NHS face uncertainty over their future rights and status.

The public is concerned about the NHS. More than half (57%) think that its ability to deliver care and services is worsening, and they expect a continuing decline. If politicians don’t use this election to keep the NHS football in play—such as by pledging greater investment and political support for the difficult changes that need to made—they will score an own goal.

Saffron Corden, director of policy and strategy, NHS Providers

Jørgen Kieler

Cancer researcher and
resistance fighter

Jørgen Kieler (b 1919; q Copenhagen University 1947), d 19 February 2017

Jørgen Kieler was at home in the early hours of 28 April 2013 when he learnt that the Museum of Danish Resistance in central Copenhagen was on fire. His first thought was for the safety of the artefacts inside—artefacts that tell the stories of Danes who resisted their country's occupation by Nazi Germany during the second world war.

Kieler, 93 years old at the time and a former research director of the Danish Cancer Society, believed that his presence at the scene of the fire was necessary. He ordered a taxi to take him there.

Resistance

In the early 1940s, Kieler had joined the Danish resistance. He became a leader of the resistance group Holger Danske and helped Danish Jews escape to neutral Sweden by boat. After his capture in 1944 by the Gestapo, during which he was wounded by gunfire, he was sentenced to death. At the last minute, however, he was instead sent to concentration camps in Germany, where he endured physical torture, mental cruelty, forced labour, and starvation. He later said that, had he known what awaited him at the camps, he would have preferred execution.

After arriving at the museum by taxi, Kieler spoke with firefighters. He hoped that they could save all the artefacts, but he was especially concerned about three “execution stakes” that during the war had been pounded into the ground by Germans on the outskirts of Copenhagen. “Some of my friends were tied to stakes before being executed,” Kieler later explained. “It is important to me to protect this memorial for my comrades.”

The museum building was heavily damaged by the fire, later ruled by police as arson, and would have to be demolished. But rescue efforts were successful. Kieler was able to spend the last four years of his long



Jørgen Kieler was captured by the Germans in 1944

During the German occupation, Jørgen Kieler and his siblings participated in passive resistance

life knowing that the execution stakes and all the other artefacts and records had survived to tell the story of the Danish resistance.

Formative years and career

Jørgen von Führen Kieler was born in Horsens, Denmark, on 23 August 1919. His family were well off and highly educated. In 1937, before starting his medical studies, Kieler set off on a sabbatical year to improve his foreign languages: first Munich, then Paris, and finally Cambridge. On 25 September 1937 he witnessed a joint appearance of Adolf Hitler and Benito Mussolini, who spoke from a balcony in front of “mesmerised crowds” in Munich.

Germany invaded Denmark in 1940. Kieler and his siblings were opposed to their government's cooperation and participated in passive resistance. They helped publish and distribute the illegal newspaper *Frit Danmark* [Free Denmark]. In 1943 Kieler's older sister, Elsebet, helped collect nearly 1 million kroner from wealthy estates around Copenhagen to finance a mission that helped nearly 1000 Danish Jews escape to Sweden by boat.

As the German occupation continued, Kieler and his brother, Flemming, decided to participate in acts of sabotage, which led to their capture in 1944. They were sentenced to death. But after Danish citizens went on a general strike to protest the executions of members of the resistance Hvidsten Group, the two brothers were imprisoned in concentration camps in Germany instead, first at the Porta Westfalica and then in Neuengamme. Their father and two sisters were also arrested and served several months in prison in Denmark.

The Kieler brothers were rescued in April 1945 by the White Buses, an operation organised by the Swedish Red Cross and Danish government to collect Scandinavian prisoners in Germany and transport them to Sweden.

Kieler resumed his medical studies after the war but remained silent about his experiences. He graduated in 1947 and in the same year he and his wife, Eva, a general practitioner, were married. Kieler practised medicine for several years but then turned to research.

In 1952 he started a one year fellowship in the US, at the Memorial Sloan Kettering Cancer Center. On his return to Denmark in 1953 he began his long affiliation with the Danish Cancer Society's Fibiger Institute, and in 1954 received his doctoral degree from Aarhus University. In 1965 he was named director of the Fibiger Institute, stepping down in 1980 to serve four years as research director of the Danish Cancer Society. He returned to Fibiger in 1984, serving again as director until retiring in 1989.

Kieler finally was persuaded by his friend Elie Wiesel, a recipient of the Nobel peace prize, to break his silence as a survivor. He wrote several books about his experiences and gave oral histories for the Imperial War Museum and the US Holocaust Memorial Museum.

Kieler was predeceased by his wife, Eva. They had a daughter and two sons.

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OBITUARIES

Terence J Wilkin

Professor of endocrinology and metabolism University of Exeter Medical School (b 1945; q St Andrews 1969; MD, FRCP), died from metastatic colon cancer on 1 March 2017



Terence J Wilkin (“Terry”) received his MD on thyroid autoimmunity from Dundee University and spent the next 15 years with the Wellcome Trust. In 1993 he moved to the foundation chair of medicine at the Plymouth postgraduate medical school, where he helped in the planning of the new Peninsula Medical School. Terry’s research interests have sought to question, where appropriate, major tenets in endocrinology. Evidence has been gathered for the various hypotheses that his research generated, and the most contentious of these—the accelerator hypothesis for type 1 diabetes—is currently being tested in a randomised controlled trial. Terry was still active in this specialism until a month before his untimely death. He leaves his wife, Linda; three children; and seven grandchildren.

John Carter

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John Davies

Consultant physician and cardiologist Royal Gwent Hospital, Newport, south Wales (b 1950; q University College Hospital, London, 1973; OBE, FRCP, FACC, FESC), d 10 December 2016



After completing his training in London, John Davies returned to his native Wales as a singlehanded cardiologist in 1983. During his 28 years in general medicine and cardiology at the Royal Gwent Hospital, he played a leading part in the development of Welsh ambulance staff into highly trained paramedics. He was cofounder and past president of the Gwent Cardiology Fund, which raised more than £1m for local NHS cardiology services. John had a national reputation for medical education, hosted courses in many specialties in Oxford and Cambridge, and received an OBE in 2009. A keen fisherman and a polymath, he gave lectures on the history of medicine. He died suddenly and unexpectedly, but peacefully. He leaves Cathy, four children, and five grandchildren.

Miles Allison

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Charles David Lacey

General practitioner (b 1925; q St Thomas’ Hospital Medical School 1951), died from prostate cancer on 30 March 2017



Born in India, Charles David Lacey was educated at Rugby School, the Diocesan College in Cape Town, and Cape Town University. He studied natural sciences at King’s College, Cambridge, before training at St Thomas’ Hospital in London, where he met Vivien Ball, a Nightingale nurse, whom he married in May 1953. In the same year he joined a medical practice in Chichester and served as a general practitioner in the nearby village of Bosham for 30 years. He left general practice in 1985 and in 1987 was appointed the first medical director of St Wilfrid’s Hospital (which he helped found) in Chichester, from where he took his second retirement in 1990. Predeceased by Vivien in August 2015, David leaves four children (Diana, Graham, Elizabeth, and Joanna) and 10 grandchildren.

Graham Lacey

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Thomas George Price

Consultant in obstetrics and gynaecology (b 1935; q Liverpool 1959; FRCOG), d 1 March 2017



Thomas George Price was a general practitioner in Cheshire until he joined the Royal Army Medical Corps in 1963. He was posted to Malaysia, Borneo, Singapore, Hong Kong, Woolwich, Germany, and Gibraltar. After another posting to Germany, he left the army to work again as a GP in the Midlands. In 1982 he went to work with the British Overseas Development Agency in Mbeya, Tanzania, where he assisted the development of a new hospital. He was particularly proud of improving access to fistula repairs in this area. He re-entered the army as a lieutenant colonel in 1985 and was stationed at 32 field hospital during the first Gulf war in 1991. Predeceased by a son, he leaves his wife, Elsie; three children; and seven grandchildren.

Douglas Price

Cite this as: [BMJ 2017;357:j1739](#)

Joanna Louise Richardson

General practitioner trainee (b 1971; q 2008), d 4 March 2017



Joanna Louise Richardson (“Jo”) came to medicine late, after a successful career in telecommunications. She gained a place on the graduate entry medicine course in Derby and graduated in 2008. Foundation and then core medical training posts in the East Midlands led to Jo’s taking up the post of patient safety fellow at King’s Mill Hospital, Mansfield—a role in which she excelled and where her exemplary interpersonal skills were put to great use. In 2016, after finally finding her soulmate, Jo took the courageous step of starting a new life in Scotland and embarked on GP training. Plans to marry, travel, and spend time with her family were tragically cut short when she had a haemorrhagic stroke after finishing a shift at Wishaw General Hospital. She leaves her partner, parents, brother, and two much loved nieces.

Kate O’Kelly

Cite this as: [BMJ 2017;357:j1927](#)

Robert Chapple

Principal medical officer HQ Royal Air Force Support Command; consultant adviser in public health medicine to the RAF (b 1934; q St Mary’s 1958; MRCS Eng, DPH, MFCMI, MFOM), died from non-Hodgkin’s lymphoma on 12 December 2016



Retired Air Vice Marshal Robert Chapple (“Bob”) funded his way through medical school and did a year’s internship in the US before embarking on a 34 year career in the Royal Air Force. He attained high rank, was made Companion of the Most Honourable Order of the Bath, and became Honorary Physician to the Queen. He loved clinical medicine, history, old English churches, sport, Spurs, wildlife and pets, travel, golf, wine, and the company of friends. He retained a strong faith and was gifted a gentle and dignified death, befitting the man he was. He leaves his wife, Ann; two children; and four grandchildren.

Robert David Chapple

Cite this as: [BMJ 2017;357:j1968](#)

MEASLES IN ADULTS

Are Koplik's spots really pathognomonic?

Cockbain et al write that Koplik's spots "are pathognomonic for measles" (Easily missed? 25 February). Yet later they write that the positive predictive value for Koplik's spots is 50%. Surely these two statements are contradictory?

I note that the paper they reference for the positive predictive value states that "while not 'pathognomonic' as initially described by Henry Koplik, [they] can significantly improve the accuracy of clinical diagnosis."

David Spitzer, GP, London

[Cite this as: BMJ 2017;357:j2167](#)

Prophylactic antibiotics should be recommended

I was surprised that Cockbain et al's review on the management of measles (Easily missed? 25 February) did not mention prophylactic antibiotics. Controlled trials, published in *The BMJ*, have shown that antibiotics reduce the incidence of pneumonia and other infections.

The authors of the relevant Cochrane review acknowledge that the evidence indicates "a beneficial effect... in preventing complications such as pneumonia, purulent otitis media, and tonsillitis in children with measles" but say that they are unable to recommend "definitive guidelines." They call instead for more evidence from high quality randomised controlled trials.

Based on the available evidence, I would want prophylactic antibiotics, and I suspect that many others would want the same. Nearly 80 years have passed since the benefits of prophylactic antibiotics were shown in a controlled trial. Given the serious morbidity and mortality of measles, how do



LETTER OF THE WEEK

Expanding medical education—at whose cost?

The BMA has criticised the government's plans for expanding the medical workforce (This week, 25 March). We too read the consultation document with alarm and were particularly distressed by plans to make new medical students from overseas (outside the European Economic Area) pay their own placement tariff, a fee paid to healthcare providers to cover costs of a clinical placement.

This tariff is, on average, £36 000 a year and is currently subsidised by the government. Under the new plan, an overseas medical student at the University of Sheffield would see a 72% rise in total fees for their medical degree—from about £148 000 to more than £255 000.

This dramatic hike in costs will have an equally dramatic effect on the number and quality of applications to UK medical schools from overseas students, who bring not only diversity and an international reputation, but also a global outlook and fresh perspectives in solving the challenges of globalisation that the UK is facing, including an increasingly diverse NHS patient population.

A considerable rise in tuition fees might change students' decisions of where to work and what specialty to train in. The UK needs doctors who have graduated from UK medical schools to serve long term in the NHS in undersubscribed specialties instead of going overseas or choosing careers that pay well enough to make the fees worth it.

Ahmed Soualhi, medical student, London
Ayiesha Ahmad, medical student, Sheffield

[Cite this as: BMJ 2017;357:j2162](#)

infectious disease specialists defend the lack of clinical guidelines and trials?

Iain Chalmers, coordinator, Oxford
[Cite this as: BMJ 2017;357:j2172](#)

Authors' reply

Koplik's spots are still thought to be pathognomonic for measles, but oral lesions, similar in appearance, can be found in other illnesses. Zenner and Nacul's study included reporting by clinicians with variable levels of experience and did not include independent assessment, so misattribution is likely.

We hesitate to recommend prophylactic antibiotics for all adults with measles in the UK based solely on the Cochrane review, the main evidence for which was from the 2006 Guinea study. This study was stopped prematurely owing to war and had a small cohort with a median age of 5.2.

The pathogen load of children in Guinea, many of whom were malnourished, is different from that of older children and adults without comorbidities in developed countries. So supportive management with fluids and fever control are

still recommended in the UK. Antibiotics can be started if bacterial infection occurs, but guidelines must be followed to prevent antibiotic resistance.

Beatrice Clare Cockbain, foundation year 2 doctor, London
Tehmina Bharucha, specialist registrar in combined infection training, London
Dianne Irish, consultant virologist, London
Michael Jacobs, consultant in infectious diseases, London
[Cite this as: BMJ 2017;357:j2197](#)

RESPECT PLANS

ReSPECT is a personal emergency care summary

An effective advance plan to guide decision making in an emergency must be concise, clear, and universally recognised. The recommended summary plan for emergency care and treatment (ReSPECT), which was developed collaboratively by many stakeholders (www.respectprocess.org.uk), aspires to be these things (Letter of the week, 8 April). It records emergency care and treatments that should be considered and would be wanted for adults and children. It can apply to any emergency, including those from which full recovery is expected.

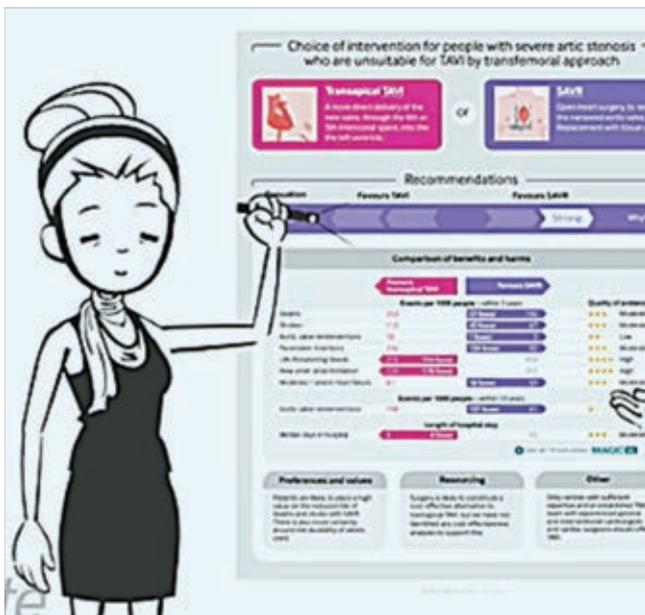
ReSPECT allows qualification of an adult's decision about cardiopulmonary resuscitation (CPR), and the different probable causes of cardiorespiratory arrest in children are reflected in an option for "modified" CPR. ReSPECT is not legally binding but must not be ignored in an emergency.

Shared decision making shows respect for the patient's wishes, preferences, beliefs, and values. ReSPECT is a personal emergency care plan summary that can be used in all care settings.

Zoe Fritz, member
David Pitcher, co-chair
Claud Regnard, member
Juliet Spiller, co-chair
Madeleine Wang, patient and carer representative, ReSPECT expert working group, London
[Cite this as: BMJ 2017;357:j2213](#)

DIGITAL HIGHLIGHTS

Rapid Recommendations: Accelerating evidence into practice



This week's issue features the latest article (p 276-79) in our Rapid Recommendations series, which aims to translate emerging research into user friendly recommendations and decision aids. Previous articles in this series include research and guidance on low intensity pulsed ultrasound for bone healing, and transcatheter versus surgical aortic valve replacement for patients with severe, symptomatic, aortic stenosis. You can read all previous articles and watch a video of how Rapid Recommendations are made at bmj.com/rapid-recommendations

MOST READ ONLINE

Long term gluten consumption in adults without celiac disease and risk of coronary heart disease

• *BMJ* 2017;357:j1892

Brexit's Great Repeal Bill will axe the right to health

• *BMJ* 2017;357:j2013

David Oliver: Fighting pyjama paralysis in hospital wards

• *BMJ* 2017;357:j2096

Ongoing vomiting in an infant

• *BMJ* 2017;357:j1802

Association between active commuting and incident cardiovascular disease, cancer, and mortality

• *BMJ* 2017;357:j1456



FROM THE ARCHIVE

Abuse of hospitals

With the NHS facing growing demand, and after emergency departments experienced the worst winter pressures on record this year, the question of when and how patients should access care is a great source of debate. A look back through *bmj.com*'s archive, to May 1893, shows that inappropriate admissions to hospital for conditions that could be managed in the community were also a sore point for Victorian practitioners.

Sidney Davies of Plumstead (*BMJ* 1893;1:1035) complains that "general practitioners continually, if not

daily, hear of their patients (or those who should be their patients) going to be treated gratuitously by consultants at the different hospitals." He continues to lay out his grievance that "all the classes which form the backbone of most general practices go to the hospital as a matter of course whenever it suits their purpose and consider they have a perfect right to do so; and, if it were not for the inconvenience of the crowded and dirty waiting rooms, they would do so much more than they do now.

"In a large proportion of cases,"



he argues," I venture to say it would be better for them to be treated by a local 'pay doctor.' For at any rate the patient is not likely to get harm from the latter's treatment, if he derives no benefit, while it is very probable that the long journey to hospital and wearisome waiting, without proper food, will cause considerable harm. I have repeatedly known patients return from the outpatient

department to take to their bed and die."

This subject continued to vex Sidney Davies (a prolific letter writer to *The BMJ*) who in 1894 (*BMJ* 1894;1:1276) wrote of "the too prevalent hospital abuse" and again in 1897 (*BMJ* 1897;1:559) of the "many evils entailed by the existing indiscriminate medical relief provided by the hospital outpatient departments."

One small step towards the repeal of Obamacare

Last week a revived version of Donald Trump's American Health Care Act passed the US House of Representatives. In a *BMJ* Opinion piece, Allan M Joseph and William H Seligman look at the amendments that saw the bill win enough support to pass, and at the remarkable speed with which these amendments were drafted before the house voted. In an extraordinary break from procedure, they say, Republicans adopted and voted for these amendments well before the Congressional Budget Office, Congress's non-partisan "scorekeeper," could prepare analysis on them. Therefore, they argue, key questions are still unanswered—not least how many people with pre-existing conditions will lose their coverage—and the government is, in essence, "flying blind" in enacting these policies.

• Read the full article at bmj.co/AHCA_smallstep