

this week

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GP recruitment drive fails to deliver

An international recruitment programme that aims to appoint 500 GPs from overseas has so far recruited only 38 doctors, NHS England has said.

In April 2016 NHS England published the *General Practice Forward View*, which included plans to “create an extra 5000 additional doctors working in general practice by 2021.”

As part of this overall target NHS England said that it would create a “major new international recruitment campaign” to attract as many as 500 extra GPs from overseas, and established the International GP Recruitment Programme. However, figures from NHS England shared with *The BMJ* show that the programme has so far recruited only 28 GPs to Lincolnshire and 10 GPs to Essex, the areas selected as phase 1 pilot sites in the programme.

This week Simon Stevens, chief executive of NHS England, said that the programme now aimed to recruit 2000 GPs from abroad as part of “a significantly expanded industrial scale international recruitment programme.”

Speaking to the *Health Service Journal*, Stevens said that the current target of 500 GPs “probably needs to be four times more than that, from international sources—

[from the] rest of the EU and possibly New Zealand and Australia.”

Despite these plans the second wave of pilot sites, which were due to be announced in April, have yet to be launched. NHS England said that it was still “working through applications and will announce successful sites in due course.”

Richard Vautrey, acting chair of the BMA's General Practitioners Committee, said that the figures showed a contrast between the government's ambitions and reality. “It's a sign of how significant the gap is between achieving the [extra] GPs and what has actually been the reality,” he said.

More must be done to tackle working conditions in general practice to retain any new recruits, said Vautrey. “The big issue remains that, from wherever prospective GPs are found, we need to address the fundamental issues within general practice itself that are both turning off prospective GPs from within the UK and encouraging current GPs to leave,” he said.

Vautrey added, “Unless we do something about the job itself it's going to be very difficult to retain any GPs, no matter where they have come from.”

Abi Rimmer, *BMJ* Careers

Cite this as: *BMJ* 2017;358:j3462

Simon Stevens, chief executive of NHS England, said that the scheme to recruit overseas GPs needed to expand on an “industrial scale”

LATEST ONLINE

- GP is suspended after tribunal decides erasure would be “disproportionate”
- Cost of achieving WHO development goals by 2030 is \$58 a head
- Tobacco plan for England aims to produce first smoke-free generation



MEDICINE

Cancer

UK survival rate is worse than European average

The UK lags behind the rest of Europe in diagnosing and treating cancer, a report commissioned by the Association of the British Pharmaceutical Industry showed. British patients have worse five year survival rates than the European average in nine in 10 cancers, and the only rate exceeding the EU average is melanoma. The UK has the second worst survival rates in lung cancer and pancreatic cancer (right), ahead of only Bulgaria and Iceland, respectively.

Breast cancer care for older women must improve

The first National Audit of Breast Cancer in Older Patients found that around 90% of women aged 50-69 with breast cancer had surgery, but this fell steadily with increasing age to around 15% in women over 90. Responses from 129 units showed that only 84% of units had a formal assessment process for patient comorbidities, 69% had a formal frailty assessment, and 46% had a formal assessment of cognitive impairment.

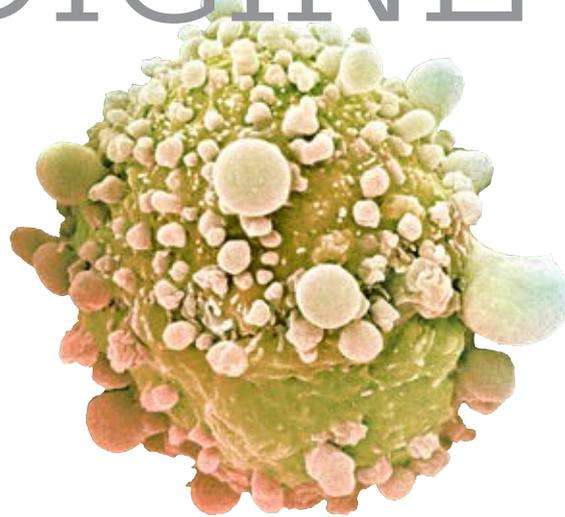
Public health

Council spending will fall by £85m this year

Councils plan to cut spending on public health services such as sexual health testing and substance misuse treatment



by £85m this financial year, an analysis by the King's Fund showed. Spending on sexual health services such as testing and treatment for sexually transmitted infections will fall by



£30m from last year, down 5%, and spending on stop smoking services will fall by £16m (15%).

US health

Panel unanimously backs first gene therapy

The US Food and Drug Administration recommended approval of CTL019 (tisagenlecleucel), a gene therapy for young people with refractory leukaemia. Five year survival in refractory leukaemia is typically under 30%, but four fifths of patients treated with CTL019 achieved remission after three months, and overall survival was 89% at six months.

Over 100 health workers are charged in fraud case

US law enforcement officials charged 412 individuals in more than 30 states, including 115 doctors, nurses, and other medical professionals, for allegedly participating in healthcare fraud schemes involving more than \$1.3bn (£1bn) in false billings. Many cases involved prescription and distribution of opioids and other narcotics. In Florida, the owner and operator of a fake drug treatment centre and home for recovering addicts allegedly recruited addicted patients to move to the state and filed \$58m in fraudulent claims.

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DEATHS

The biggest killers of women are now Alzheimer's disease and dementia (15.3%),

followed by heart disease (8.8%).

Among men heart disease is still the largest cause of death

(14.2%), followed by dementia and Alzheimer's disease (8%)

[Public Health England]

SIXTY SECONDS ON... 999 CALLS



IS THIS THE ANNUAL "BONKERS CALLS TO 999" STORY?

Like the woman who called the ambulance service to find out whether the green part of a potato was poisonous? Unfortunately not, as I enjoy reading about the stupidity of the great unwashed. This is about NHS England overhauling the 999 response service.



WHAT'S THE PLAN?

Well, you'll be given short shrift next time you drop the TV remote control and need someone to pick it up (this was a genuine 999 call). In the new system there are four new categories of call, which will mean that just 8% will be classed as life threatening, instead of the current 50%.

WHAT ARE THE CATEGORIES?

"Life threatening" calls will be events such as cardiac arrest or serious allergic reactions; "emergencies" for cases such as stroke; "urgent" for things such as late stage labour; and "less urgent" for things such as diarrhoea and vomiting, where the caller may be advised to contact another service.

WHAT IF I DISCOVER A BRUISE ON MY FOOT? (GENUINE 999 CALL)

You cannot be serious! Under the new system, call handlers will be given more time to assess the situation and respond appropriately. Ambulances will be expected to reach the most seriously ill patients in seven minutes, rather than the current eight, and the "clock" will stop only when the most appropriate responder arrives on scene, rather than the first. Someone who has had a stroke is now likely to get a slower response.

THAT SOUNDS CONTROVERSIAL

The Stroke Association has endorsed the changes, which have been piloted in 10 areas. Taj Hassan, president of the Royal College of Emergency Medicine, welcomed the fact that call handlers had longer to assess the situation to "make sure we are not sending that ambulance immediately to someone with a broken leg, when it could be going to someone who may be bleeding out."



WHAT IF MY WEDDING RING GETS STUCK? (GENUINE 999 CALL)

Soap or oil should do the trick. How was that for a response time?

Anne Gulland, London

Cite this as: *BMJ* 2017;358:j3467

Drug strategy will fail without new investment

The government's plans to reduce illicit drug use and improve rates of recovery from dependence are unlikely to succeed without new investment, as local councils struggle to provide services with reduced budgets, experts have warned.

The new drug strategy, published on 14 July by the home secretary, Amber Rudd, is the first since 2010, but it seems to carry no new funding.

Balanced approach

Rudd will chair a new cross government drug strategy board to oversee a supposedly more balanced approach, designed to ensure that fewer people use drugs in the first place, prevent escalation to more harmful use, and provide more effective treatment options.

"I am determined to confront the scale of this issue and prevent drug misuse devastating our families and communities," she said.

"[Ministers] have dodged the hard questions: drug law reform, social inequality, poverty... racism, the pointlessness of banging up people in jail for personal possession of drugs"

The strategy proposes better monitoring of people in treatment, and a new national recovery champion will make sure that adequate housing, employment, and mental health services are available, to "help people turn their lives around."

Drug service specialists have welcomed elements of the strategy but highlighted significant omissions and the need for more investment.

Ian Hamilton, a lecturer in mental health at York University who works with people who have drug and alcohol problems, told *The BMJ*, "It's difficult to know where local authorities are going to find the money to meet the ambitions that the strategy lays out. What we're going to see is less drug treatment, not more efficiently provided drug treatment."

Adam Winstock, a consultant psychiatrist and specialist in addiction medicine at University College London, told *The BMJ*, "They

[ministers] have dodged the hard questions: drug law reform, social inequality, poverty, racism, the pointlessness of banging up people in jail for personal possession of drugs. All the things that might suggest the government is fundamentally willing to look at drugs differently, there's nothing there about that."

Deaths increased

In 2015-16 around 2.7 million people (8.4%) aged between 16 and 59 in England and Wales took illegal drugs, down from 10.5% a decade ago. But the number of deaths from drug misuse rose by 10.3% to 2479 in 2015 from the year before. Deaths related to heroin, which accounted for around half the deaths, more than doubled from 2012 to 2015.

The new drug strategy said that there had been a decline in the proportion of opiate users completing treatment and much variation

Paediatric rotas more difficult to fill



REX/SHUTTERSTOCK

Paediatrics and Child Health said, "The impact of the contract is to make working hours and conditions less attractive and therefore likely to deter doctors from wanting to enter the specialty of paediatrics."

Of the 211 inpatient paediatric and neonatal units in the UK, clinical directors or workforce leads from 132 responded to the college's seventh survey on rota gaps and vacancies (response rate 63%), carried out between January and April 2017.

It found that the overall proportion of rota vacancies was almost one in five (18.6%), up from 14.9% in January 2016. Vacancies for rotas requiring middle grade doctors

were higher, with nearly a quarter (23.4%) unfilled. The highest vacancy rate was in Northern Ireland (32.3%).

Of the vacant posts, 41% were filled by locums, down from 47% in 2016. Four fifths (83%) of respondents said that the cap imposed by the government on how much trusts could pay locums had had a negative or moderately negative effect on staffing. One service lead said, "As a unit a long way from most locums... the cap means we can't offer a rate that is attractive to locums. They were difficult to attract without a cap and almost impossible with."

The college called for more strategic workforce planning, and an increase in the number of paediatric trainee places to 465 posts a year (there were 437 in 2016, with 400 filled).

Zosia Kmietowicz, *The BMJ*

Cite this as: *BMJ* 2017;358:j3471

UK has best health system in developed world, finds analysis

The UK's healthcare system is the best out of 11 of the world's most developed countries, despite having one of the lowest levels of funding.

The US health think tank the Commonwealth Fund ranked the UK number one, closely followed by Australia, then the Netherlands, New Zealand, Norway, Switzerland, Sweden, Germany, Canada, France, and the US. This is the second time in a row that the UK has come at the top of the ranking, carried out every three years.

The US came last, despite spending by far the most on health: 16.6% of its gross domestic product, nearly double that spent by Australia, at 9% the smallest proportion among the 11 countries, and the UK, at 9.9%. The US spent more than twice

THE HIGHEST overall vacancy
rate was in Northern Ireland (32.3%)



Drug testing facilities can save lives, and a criticism of the report has been their omission from it

between local authorities in outcomes. It aims to reduce demand for illicit drugs by deterring use and through education programmes, and to restrict supply through strong law enforcement and border controls.

Hamilton said that the strategy excluded measures that would reduce mortality, such as assisted treatment for heroin use, drug consumption

rooms, or supervised injecting rooms.

Tom Freeman, a senior academic fellow at King's College London, said: "The government's new strategy misses a crucial point. Drug testing facilities have the potential to save lives and should have been incorporated into the strategy."

Matthew Limb, London

[Cite this as: BMJ 2017;358:j3460](#)

per person on healthcare in 2016 than the UK: \$9364 (£7220) versus \$4094.

The UK came top on care process and equity and third on access and administrative efficiency. However, it came 10th on healthcare outcomes, mainly because of poorer five year survival from breast and colon cancer than its counterparts. The UK also had the second highest rate of deaths amenable to healthcare after the US, with 85 deaths per 100 000 in the population. Switzerland had the lowest rate of all the countries, with 55 per 100 000.

However, the report said that the UK had seen the biggest improvement in this area over the past 10 years, with a 37% decline in mortality amenable to healthcare between 2007 and 2016, whereas the US had only a 16% decline.

The report put the UK's improvement down to major investment in the NHS from the early 2000s, with an increase in spending as a share of GDP from 6.2% in 2000 to 9.9% in 2014.

The report described the US as an outlier, spending much more overall but falling short of the performance

achieved by other countries. "The results suggest that the US health care system should look at other countries' approaches if it wants to achieve an affordable high-performing health care system that serves all Americans," it said.

Anne Gulland, London

[Cite this as: BMJ 2017;358:j3442](#)

THE COMMONWEALTH FUND'S ANALYSIS RANKED HEALTH SYSTEMS ACROSS FIVE AREAS

CARE PROCESS, which includes preventive care, safe care, coordinated care, and engagement and patients' preferences

ACCESS, which looks at affordability and timeliness

ADMINISTRATIVE EFFICIENCY, which includes barriers to care and time and effort spent on paperwork

EQUITY, which compares the experience of lower income and higher income patients, and

HEALTHCARE OUTCOMES, which looks at areas such as mortality and morbidity.

Increase in life expectancy in England has halted

The increase in life expectancy in England has almost "ground to a halt" since 2010 and austerity measures are likely to be a contributor, a leading expert on public health has said.

The warning came from Michael Marmot, director at University College London's Institute of Health Equity, after new indicators showed that the rate of increase in life expectancy in England has almost halved since 2010 and is close to stalling.

The institute's analysis showed that life expectancy at birth in England was 79.38 years in males and 83.06 in females in 2013-15. This is only a slight increase from 78.31 in males and 82.33 in females in 2010. Until now, life expectancy has risen steadily over time for the past hundred years.

Deep concerns

The analysis found that life expectancy at birth increased by one year every five years in females and by one year every 3.5 years in males from 2000 to 2015. Since 2010, however, this has slowed to one year every 10 years in females and one year every six years in males.

Marmot said that he was "deeply concerned" by the figures. He said that government policies such as cuts to social care and public health and reduced NHS spending per person may have affected the trend and needed re-examining.

Older people with dementia and Alzheimer's disease, now the leading causes of death among women in England and the second leading causes in men behind heart disease, were especially affected. Marmot argued that "standing still" in terms of funding and support was not a sufficient response to the rapid rise in dementia rates.

Political will

"The cuts in social spending and the failure of the NHS to continue to rise in spending per person is having a significant impact on health and social care for the very old," he said.

"When people say to me, we haven't got the money to do all of those things—well, we've made a political decision to reduce the proportion of our national income that goes into public expenditure. That, other things equal, will have an adverse impact on health."

Gareth Iacobucci, *The BMJ*

[Cite this as: BMJ 2017;358:j3473](#)



Doctors are being denied time off for non-clinical work

Doctors are finding it increasingly difficult to secure time away from their trusts to undertake national work with organisations such as the General Medical Council and the Care Quality Commission. Last month Terence Stephenson, chair of the GMC, Bruce Keogh, national medical director for NHS England, and the UK's chief medical officers wrote to employers asking them to look "favourably" on requests from doctors applying for absence to undertake non-clinical work.

Phil de Warren-Penny, consultant psychiatrist and member of the BMA consultant's committee, told



National work doesn't lend itself to clear trust objectives
de Warren-Penny

The BMJ that trusts were less willing to allow consultants time off for work that was not aligned with their own objectives.

"National work, even if it's within a job plan, doesn't lend itself to clear objectives that are aligned with the trust objectives and the job planning process. If we knock on from that, it becomes a lot harder in many trusts to get that agreement from the employer organisation," said de Warren-Penny.

"If we look at the broader NHS at the moment and think about the financial pressures, if you are allowing an individual to go and spend time doing things for the royal college, they are not delivering your clinicians' objectives."

He said that it could become even more difficult for doctors to undertake national work as more services fell under the scope of sustainability and transformation plans. "I can see chief executives on trust boards thinking that if there is a shift in the environment then we want our staff in with us, rather than



Some colleagues take annual leave to do some of their duties on behalf of the wider NHS

Liam Brennan

taking any of the broader roles."

Liam Brennan, president of the Royal College of Anaesthetists, agreed that the landscape for sanctioning non-clinical work was changing. "It's definitely getting tighter," Brennan said. "Fortunately, there are still many [trusts] that are supportive and see the wider benefit, but unfortunately there are some who say, 'If there is no direct benefit for my organisation today then I don't want to know.'"

He added, "I've got colleagues both on [the Royal College of Anaesthetists'] council and examiners who

have to pay back time to do this sort of work, who have to do extra shifts at weekends and evenings to fulfil their contractual obligations. Some of them even take annual leave to do some of their duties on behalf of the wider NHS."

Another concern, Brennan said, was that doctors might be deterred from doing non-clinical work because their employer did not support them. "All we can say to our members is ask your employer before you apply," he said.

A spokesperson for the GMC said that support for important national initiatives or roles

SPEND ON LOCUMS IS FALLING

The amount that NHS trusts in England spend on locum staff has fallen, figures show, after the introduction in November 2015 of a cap on the hourly rate that trusts could pay locums. Trusts can still hire staff above the cap when there is a legitimate patient safety requirement.

1 LOCUM SPEND

Liaison, a company that manages staff payment systems, gathered data on locums' pay and agency commission rates paid by 61 NHS trusts between April 2016 and April 2017, and compared the figures with the previous year. It found that the total bill for agency staff in NHS trusts in England decreased by £700m, from £3.64bn in 2015-16 to £2.94bn in 2016-17.



2 MEDICAL LOCUMS

Liaison estimated that spending on medical locums accounted for £942m (32%) of all NHS spending on agency staff in 2016-17, little changed from the 33% of agency spending in 2015-16. Some trusts still paid more than the cap for locum consultants and ST3s during core hours.

3 CONSULTANTS

Locum consultants accounted for 40% of all medical locum spending and saw the biggest cut to their pay, which fell by 2.3% from an average of £94.08 an hour in 2015-16 to £91.89 an hour in 2016-17. Hourly pay for year 2 foundation doctors (F2s) fell by 2%, from £45.59 to £44.67 in the same period, as did hourly pay for staff grade doctors, from £60.83 to £59.54.

4 WORKING HOURS

Since 2015-16 the number of hours worked by consultants and staff grade locums rose by 21% and 37% respectively, the data showed. Conversely, the number of hours worked by F2s and year 3 specialty trainees (ST3s) fell by 46% and 15%.

such as college examining, committee work, or invited college safety visits was being affected by the shortage of doctors coming forward. “We have also found it difficult to secure the services of busy clinicians to support our work such as quality assuring doctors’ training,” she said.

In March Sue Bailey, chair of the Academy of Medical Royal Colleges, wrote to Keogh setting out her concerns about the “declining participation of doctors and other clinicians in recognised activity for the benefit of the wider NHS outside of their employing organisations,” which she feared “will damage the quality of work undertaken.”

In April, NHS Improvement published new guidance on consultant job planning, which is being challenged by the BMA. The guidance said that trusts “generally supported” external work, such as work for the royal colleges, NICE, and the GMC, but that the work should be agreed in advance, something that is not currently required.

“We were not consulted with on the guidance, and it creates a shift in the contractual provisions from the 2003 contract,” de Warren-Penny said.

Abi Rimmer, BMJ Careers

Cite this as: [BMJ 2017;358:j3470](#)

5 SERVICE PRESSURE

When asked why they had employed a locum, 85.8% of trusts said that it was because of a substantive vacancy, while 3.9% named service pressures. Asked why they had agreed to pay above the pay cap, 51.4% of trusts said that they did so to employ someone with specialist skills.

Dementia research focuses on prevention, as drugs fail to deliver

With no new drugs for dementia on the horizon, researchers are turning to prevention, and the results are promising. **Jacqui Wise** reports

This week the world’s largest gathering of dementia researchers met in London for the 2017 international conference of the Alzheimer’s Association. But anyone anticipating news of new drug options will be disappointed: of the 3000 abstracts (www.alz.org/aac), only about a dozen involved drug treatments, and none indicated a breakthrough.

Clive Ballard, professor of age related disease at the University of Exeter, said that more trials in dementia were needed. “If you look at ongoing trials of treatment for cancer there are 2000 to 4000, but if you look at Alzheimer’s disease it is more like between 25 and 100,” he told a press briefing in London ahead of the conference.

There are new discoveries to report, however, though the emphasis is on the possible risk factors for dementia. And here the message is positive: it seems that much can be done to reduce the risk of dementia with tools already at our disposal.

A new report from a *Lancet* commission presented at the conference estimated that a third (35%) of cases of dementia might be prevented if nine different risk factors could be eliminated. Researchers modelled the potential effect of eliminating established risk factors such as hypertension, obesity, smoking, physical inactivity, diabetes, depression, and lack of education in early life.

The study also looked at the growing evidence linking hearing loss in mid-life and social isolation in later life to a higher risk of dementia. It found that the three risk factors with

the largest potential effect were hearing loss, low education in early life, and smoking.

Sleep quality

Several studies presented at the conference examined the relation between sleep disruption and risk of dementia. One found that healthy people with self reported sleep disordered breathing had higher concentrations of amyloid in the brain. And over time amyloid accumulated at a faster rate in people with sleep disordered breathing. Another study in people with mild cognitive impairment found that those who had obstructive sleep apnoea showed a faster increase in amyloid build up than those who had no sleep problems. Dean Hartley, from the Alzheimer’s Association in the US, said, “Through early diagnosis and treatment of these sleep disorders, there is the potential to improve cognition and possibly reduce dementia risk.”

Hearing loss

One reported study of 783 people from Wisconsin who were followed for four years found that participants who had a diagnosis of hearing loss were more likely to score poorly on cognitive tests and were three times as likely to have mild cognitive impairment.

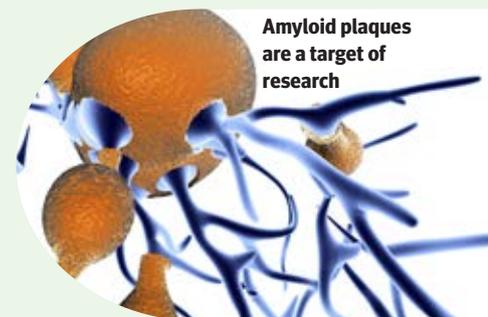
Rosa Sancho, head of research at Alzheimer’s Research UK, said, “Dementia and hearing loss often go hand in hand. Treating hearing loss can make life easier for people living with dementia,

but we don’t yet know whether it could help reduce the risk of developing diseases like Alzheimer’s in the first place.”

Diet

One study of 5907 healthy older people found that those who ate a Mediterranean diet, or even a modified version of this, were 35-40% less likely to perform poorly on cognitive tests than people who ate less healthily.

Ballard said that there has been a 10% reduction in the number of new people developing dementia over the last decade, probably due to better treatment of hypertension



Amyloid plaques are a target of research

and cholesterol with drugs and lifestyle changes. “This is a brilliant story,” he said.

Ballard pointed out that cognitive rehabilitation delivered by occupational therapists could improve functioning in people with early stage Alzheimer’s disease while untreated anaemia seemed to accelerate decline.

He said, “A lot of the time we are thinking of the big amazing new treatments, but there are simple things that we can test for and treat. Slightly more vigilant testing and checking of things we know how to treat will make a difference as well.”

Cite this as: [BMJ 2017;358:j3466](#)

THE BIG PICTURE

Protesters show support for assisted dying campaigner

More than 200 people took to a boat on the Thames outside the Houses of Parliament last week to show their support for Noel Conway, who is attempting to overturn the ban on assisted dying in the UK.

Conway, a retired college lecturer from Shropshire, was given a diagnosis of amyotrophic lateral sclerosis, a form of motor neurone disease, in November 2014, and is not expected to live more than 12 months.

He was too ill to attend the High Court in London on 17 July, where three senior judges began to consider a judicial review of the 1961 Suicide Act, which criminalises assisted suicide.

Lawyers acting for Conway will seek a declaration that the act is not compatible with the Human Rights Act 1998, which confirms that individuals' private and family life should be respected. They will argue that, as a terminally ill, mentally competent adult, Conway's right to a private life—including the right to make decisions on the end of his life—is unnecessarily restricted by the blanket ban in the 1961 act. Conway has been supported in his case by Dignity in Dying, a national campaign for assisted dying for terminally ill, mentally competent adults.

Dignity in Dying said that the demonstration aimed to raise awareness of the case and to highlight that Conway is not alone in his fight. Participants held up placards with the hashtag #ImWithNoel, each showing solidarity for the movement for their own personal reasons.

Commenting on his case, Conway said, "My family and I have come to accept that I will die. But what I cannot accept is being forced to die either at the hands of motor neurone disease or by taking drastic measures to end my own life. If I choose the former, I may be left completely paralysed and unable to communicate; that is, if I don't suffocate or choke to death first.

"If I choose the latter, my condition has deteriorated so far that I would need assistance—whether it be here at home or travelling to Dignitas in Switzerland—thereby opening up my loved ones to criminal prosecution. What kind of a choice is that?

"To have another choice—the option of an assisted death in this country—would provide me with great reassurance and comfort, as I am sure it would to many other terminally ill people. It would allow me to live out the rest of my life and die on my own terms."

The High Court hearing is expected to last four days, with a decision due in the autumn.

Abi Rimmer, BMJ Careers

Cite this as: *BMJ* 2017;358:j3475





CAMPAIGN FOR DIGNITY/INDYING

The district nurses who aim to be superfluous

A Dutch model of coordinating care at home for elderly and vulnerable people could revolutionise healthcare, say enthusiasts. **Tony Sheldon** asks whether Buurtzorg, a not-for-profit company, lives up to the hype

By 2006, Jos de Blok had spent nearly two decades working as a district nurse and homecare manager in the Netherlands. He had watched the care being offered getting gradually, and seriously, worse.

Reorganisations and mergers of social care and district nursing, starting in 1994, had imposed new layers of management. He had witnessed district nurses' work being concentrated on the more complex cases, fragmenting the delivery of care as a whole. Links with local neighbourhoods, with their networks of volunteers, and health promotion had disappeared.

"I knew how it could be," de Blok told *The BMJ*. So in 2006 he cofounded a not-for-profit homecare provider called Buurtzorg, which means "neighbourhood care" in Dutch. It began with a team of four district nurses, in Almelo, a small city in the east of the country. Today it has 900 teams with 10 000 staff who care for 90 000 clients a year.

De Blok is being heralded as the leader of a revolution in the way that elderly and vulnerable people are cared for. His model is receiving international interest, including from the UK, US, China, Sweden, and Germany.

Buurtzorg's principles

Buurtzorg aims for its professionals "to make their patient stronger and independent." Good district nurses, de Blok argues, should aim to make themselves superfluous.

Professional nurses are trusted to be professional, working in small self governing teams, providing the whole range of care from medical to support services such as help with washing

and feeding—tasks normally done by cheaper, less qualified, staff.

Hours are clocked but nurses are not answerable to managers. There are no team leaders; decisions are made collectively. Instead teams can seek advice on aspects of patient care or how the team functions from 20 senior nursing staff ("coaches") spread throughout the country.

Buurtzorg differs from traditional homecare organisations, says de Blok, in "creating solutions, not delivering services." Each team cares for an average of 50 clients from a catchment population of 15 000. Nurses offer considerable input during an initial intensive assessment of clients' needs before gradually withdrawing as their clients, encouraged by the Buurtzorg team, develop as much independence as possible.

Staff are expected to keep time spent on administration to a minimum by using computerised systems to deal with scheduling medical appointments, updating patient records, billing, and assessments. This means that at least 60% of their time is spent directly with clients. Back in Almelo, just 50 core staff handle salaries, contracts, and finances.

Buurtzorg has grown rapidly. de Blok believes that part of his success over

You have to have the space, continuity, and expertise to actively and preventively do things to change the patient's situation

traditional homecare organisations is that smaller, autonomous teams can get a better overview of problems and make local connections.

"You should limit the number of people [in each team], make room for what you see, do what is necessary," he says. Rather than follow diktat from head office, staff should apply their "own judgment."

"Teams, therefore, should be no larger than 10, aimed towards a neighbourhood where you can develop links with other services, volunteers, and family who can offer solutions to achieve the client's independence," he said. Traditional teams have up to 30 district nurses.

His approach is simple, but other organisations have had decades

EVIDENCE FOR THE BUURTZORG APPROACH

In 2015, health minister Martin Van Rijn reported to the Dutch parliament the results of a study by KPMG comparing Buurtzorg with 600 other homecare providers. Van Rijn said the government commissioned the study to see if Buurtzorg really did offer "better quality and efficiency."

The results showed Buurtzorg featured consistently among the top 10 for client satisfaction. On costs, at €54.74 (£48), Buurtzorg charged higher hourly tariffs, but worked fewer hours on average per client each year—108 rather than 168, leaving its average

annual costs per client at €6428 compared with €7995. Van Rijn concluded Buurtzorg's philosophy allowed it to offer a high quality of care for less than average costs. No large scale comparative research comparing clinical outcomes with those of other providers is available.

A survey last year of around 250 nurses and nursing assistants by the Netherlands Institute for Health Services Research looked at self management in homecare. It found four fifths of staff believed such an approach contributed to the attraction of their work.





Jos de Blok says:
 “You have to look at it upside down, from the client’s viewpoint”

of education promoting top-down management, strategic plans, and visions while losing touch with why they are there, de Blok says. “I say you must look at it upside down, from the point of view of the client. In this situation which is the best solution, who is the best professional to offer a solution? As a district nurse it is very clear: you have your neighbourhood, you see what needs to be done and, at the same time, how you can prevent problems.”

Better outcomes

De Blok argues that by offering greater expertise and continuity of care, Buurtzorg can produce better outcomes than traditional models of homecare in, for example, the rehabilitation of stroke patients or managing the care of patients with motor neurone disease (amyotrophic lateral sclerosis).

In practice, this means Buurtzorg district nurses know how to motivate clients to start stroke rehabilitation immediately. With motor neurone disease, a network of family, friends, and local contacts can be brought together and trained to offer support from an early stage.

“But if you have just half an hour and go home it doesn’t work. You have to have the space, continuity, and expertise so you can actively and preventively do things to change the patient’s situation.”

And Buurtzorg’s founder argues it can achieve this using fewer, more highly trained staff, an initial intensive assessment of needs, followed by actions to promote independent living.

Studies consistently suggest that Buurtzorg’s principles work: patients prefer them, staff enjoy the independence and responsibility, work faster, and cost less (box).

Promote independence

The Dutch Patients Federation in 2015 surveyed 150 clients about what they found important in homecare nursing. The results looked very much like the Buurtzorg model. Clients wanted small, permanent teams of expert staff who take responsibility for decisions, fit it with how they wanted to live, and promote their independence.

Petra Schout, the federation’s manager for long term care, said, “Clients experiencing illness or disability of ageing just want a professional who can listen to them,

Could the model work in the UK?

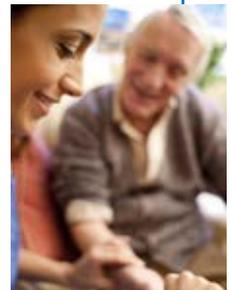
Buurtzorg may have evolved to meet the unique needs of the Netherlands: a largely wealthy, urban society that pays for both health and social care from compulsory health insurance. However, its performance has attracted international interest.

In the US, the University of Minnesota began designing a pilot study in 2014. In 2015, a team including the Scottish Royal College of Nursing visited the Netherlands. Cornerstone, a charitable homecare provider in Scotland, is set to launch its first pilot project based around Buurtzorg principles by the end of July. In England, the East of England Local Government Association is currently recruiting nurses for a 12 month Buurtzorg pilot launching in September. Meanwhile Buurtzorg’s UK partner, the Public World consultancy, this month launched the Buurtzorg Academy, which supports the transition to self organising teams among health and social care providers.

However, Buurtzorg will need to fit into the UK system, which distinguishes between social care (tasks related to everyday living) that is means tested and paid for by the local authority and district nurses’ clinical tasks, paid for by the NHS. Patrick Hall, fellow in social care policy at the King’s Fund, believes Buurtzorg is somewhere between the two.

But he also says his research is showing that more home workers are doing what would be considered low level clinical tasks such as dressings, stoma bags, complex medication, while district nurses are doing more homecare, giving someone a shower or making them a meal, picking up where there has been a deficiency in homecare commissioning. Hall says: “There is a big crossover. There is lots to be learnt in terms of very local organising, but it does run counter to the prevailing commissioning approach.” And as such, he fears, the Buurtzorg model may struggle unless the commissioning of services allows it to operate.

“The Buurtzorg pilots may unearth evidence of the dysfunctioning of the system from nurses’ perspective. They are saying: ‘This is ridiculous: we want to do for the patients what needs doing.’ That could be medication review or driving them to the pub to see an old mate. Both could promote patient wellbeing.”



The ethos may struggle to translate to the UK

think together how they can pick up their lives, what help they need, and what other people can do for them.” She believes that Buurtzorg understands this and, though not the only such provider, has “set the standard for others to follow.”

However, she warned that involving family and friends in patient’s support was not always an option as social networks aged with the client and children often lived far away. Instead, she stressed such help was “an option but must never become an obligation.”

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Mandating childhood immunisation continues to be contentious in the UK, and a motion on the issue was fiercely debated at the BMA's annual representatives meeting last month.

The motion, which called on the BMA to look at the advantages and disadvantages of making childhood immunisation mandatory, was proposed by Farah Jameel, a general practitioner in London. "Parents who willingly choose not to vaccinate their children, despite the safe evidence base, are displaying negligent behaviours that are in some cases seriously harming the health of children, who have no say or control over this decision, and in extreme situations costing lives," she told the meeting.

The motion, which also included a clause stating that the meeting "condemns anti-vaxxers who deny immunisations to their children," was passed as a reference, rather than as a substantive motion. This means that the delegates have asked the BMA to look at the issue and decide how to take it forward. The clause condemning "anti-vaxxers" was also passed as a reference after hot debate, by a margin of 54% to 46%.

Current BMA policy is to support voluntary vaccination, and a spokeswoman told *The BMJ* that the BMA would now consider producing a summary of previous work on vaccination policies.

Speaking as BMA chairman at the meeting, Mark Porter said the UK was already achieving immunisation levels high enough to achieve herd immunity. "The World Health Organization target for measles vaccination in order to induce [herd immunity] is 95%," he said. "The latest figures in the UK from March 2017 indicate that 95.4% of children have received primary MMR vaccination on the schedules that are normally published. So, to that extent, we already exceed the WHO recommendation for measles vaccination in this country."

Education not legislation

Those speaking against the motion at the meeting argued that education, rather than legislation, was the most appropriate way to help improve vaccination rates. Junior doctor Kiara Vincent said that many parents who decided not to have their children vaccinated had not had access to the appropriate information to make that decision. "We need to educate them, support them, and ensure the correct



UK measles vaccination exceeds that required for herd immunity

HERMIEN LAM/LAUNY

COMMUNICABLE DISEASE

UK doctors mull mandatory vaccination

What is the best way to persuade all parents to protect their children from preventable disease, asks **Tom Moberly**

information is available to parents," she said. "These parents already distrust the medical community. They are often scared of their children being harmed by medical intervention, and we shouldn't alienate them further."

David Smith from the BMA's Yorkshire regional council also said that doctors should be seeking to build trust rather than looking at making immunisation mandatory. "This is a group of people who

"If we go to war with these concerned parents, they will never bring their kids to us again"

are deeply distrustful of us," he said. "This is a battle for their hearts and minds. And how are we choosing to do this? How are we choosing to battle for them? We're going to ask this government whether we think it's right to force treat their children. This is not the way."

Smith said that listening to parents' "ideas, concerns, and expectations over and over again" would enable doctors to win them around to the benefits of vaccination. "If we go to war with these concerned parents, they will never bring their kids to us again," he said. "When those kids get ill and we can do something, we will not be given that opportunity."

Avoidable harm

After the vote Jameel told *The BMJ* that she would now like the BMA to produce a position paper examining vaccination rates and resultant mortality and morbidity.

Eleanor Draeger, deputy chair of the BMA's consultants committee, also spoke at the meeting in favour of the motion. Her son contracted measles when he was 10 months old, before he was eligible to be vaccinated against the disease, and continues to face health risks as a result. "We need to understand that these illnesses are completely preventable by vaccination," she told the meeting.

After the meeting, Draeger told *The BMJ* that there were several options if mandatory vaccination should ever be introduced.

"I would support options such as not being able to attend state education, but I would not support any cut to benefits or fines," she said. "Another option would be to replicate the policy in Australia, where vaccination is not compulsory but there is a financial reward offered to those whose children complete the vaccination programme."

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Metal-on-metal hip replacements

Manufacturers should share the financial burden of new follow up requirements

The Medicines and Healthcare Products Regulatory Agency (MHRA) has revised its advice for follow-up of all patients who have received metal-on-metal hip replacements.¹ The new, more stringent guidance is based on consultation with its independent expert advisory group and evidence from the 13th annual report of the UK National Joint Registry, which suggests a continuing risk of adverse soft tissue reactions to metal particulate debris in recipients.²

Types of implant

More than 65 000 metal-on-metal prostheses were implanted in the UK, and, although most continue to function well, more than 17 000 patients have ongoing symptoms and a large number have required revision surgery.³ The best way to monitor and advise patients is still debated. Essentially there are two classes: non-stemmed surface replacements, which have metal bearing surfaces that can produce wear particles from the articulation, and stemmed replacements, which have a metal taper junction between head and stem and a metal bearing surface. In stemmed replacements metal debris can arise both from wear at the articulation and from wear and corrosion at the taper junction.

Within these two broad classes, some designs of implant have greater risk of causing adverse tissue response—for example, DePuy's articular surface replacement.⁴ Women have a significantly higher risk of soft tissue responses than men.

A direct causative link to systemic complications has not been established and seems unlikely from

Will this substantial expansion of patient surveillance identify soft tissue complications at an earlier stage?

the evidence to date.⁵ Indeed, other evidence suggests that matched patients with metal-on-metal replacements have reduced mortality at 10 years compared with those receiving conventional replacements.⁶

Although plain radiography can identify some abnormalities, metal artefact reduction series (MARS) magnetic resonance imaging (MRI) or ultrasonography is needed to detect early changes. Patients are likely to achieve better outcomes after revision surgery if the soft tissue changes are less advanced. High circulating metal ion concentrations are associated with a greater likelihood of adverse soft tissue response, but the absolute level associated with risk is not established.

Arguably, this problem has arisen partly because the regulatory approval pathways did not require evidence of safety and effectiveness before metal-on-metal hips were marketed.⁷ Regulatory changes have subsequently been made to the introduction and monitoring of these implants. The US Food and Drug Administration issued a safety communication in 2013 recommending regular clinical evaluation of patients with symptoms and consideration of soft tissue imaging and metal ion testing.⁸

The FDA also issued a final order requiring evidence of clinical outcomes to be submitted by

18 May 2016 if a manufacturer wanted to continue marketing its metal-on-metal total hip replacement or market a new metal-on-metal implant.⁹

More stringent follow-up

In 2012, the MHRA issued a medical device alert and recommended a schedule of follow up that depended on patient symptoms and the design of the implant.¹⁰

The recent MHRA update introduces recommendations for much more stringent follow-up.¹ This includes annual use of patient reported outcome measures (the Oxford hip score) to assess pain and function; annual universal blood ion testing regardless of patient symptoms; and imaging with plain radiography, MARS MRI, or ultrasonography. The level of increase of metal ions and deterioration in the Oxford hip score required to trigger a change in management is unclear.

The MHRA's imaging recommendations seem inconsistent, particularly for symptomatic patients: all those with lower risk implants have MRI or ultrasonography whereas patients with higher risk implants do so only if the blood ion concentrations and the Oxford hip score are worsening.

It remains to be seen whether this substantial expansion of patient surveillance will identify soft tissue complications at an earlier stage, so that outcomes can be improved. Regular assessment of asymptomatic patients will require careful handling of patients' concerns and expectations. The new requirement for review of more than 45 000 asymptomatic patients will also be costly.¹¹ There is a strong case for manufacturers bearing some, if not all, of this burden.

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Watching and waiting



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WHO downgrades status of oseltamivir

Important lessons from the Tamiflu story

Oseltamivir (Tamiflu) was approved by the US Food and Drug Administration in 1999 for the treatment of uncomplicated influenza within 48 hours of the onset of symptoms. The manufacturer's press release stated that the drug was studied in two randomised trials enrolling a total of 849 patients with influenza and reported a 1.3 day mean reduction in the duration of symptoms.¹ The drug was described as safe, and was approved by the European Medicines Agency in 2002.²

On the basis of these limited (and ultimately revealed as incomplete) data, governments acted. Concerned about a possible outbreak of avian influenza, as well as the H1N1 pandemic in 2009, the UK government stockpiled oseltamivir at a cost of over £600m from 2006 to 2014. Similarly, the US government has spent over \$1.5bn stockpiling the drug, based on recommendations from the Centers for Disease Control and Prevention (CDC).³ And in 2010, in the wake of the worldwide pandemic of H1N1 influenza, oseltamivir was added to the World Health Organization's list of essential medications.⁴

As recently as 2014, the director of the CDC stated that oseltamivir can "prevent serious complications; if you have influenza and get the medicine early, you may not need to be admitted to a hospital... Antiviral flu medicines save lives, but they're unfortunately underutilized."⁶ Yet, the FDA had long concluded that there was no evidence that oseltamivir reduced complications, hospital admissions, or mortality and actually prevented the manufacturer from making such claims in their promotional materials.

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So, what is the truth? An editorial in *The BMJ* described a "multisystem failure,"⁷ which is an apt description for the series of decisions based on flawed evidence made by the EMA, CDC, and WHO. These include the failure to publish all available evidence, to make the data available at the individual patient level, and to recognise the limitations of observational data. Among the factors in play in these failures were Roche's desire for profit, public fear of pandemic influenza, and politicians wanting to be seen as "doing something" to protect their constituents.

Published data

To date, only three trials of oseltamivir in adults have been published.⁸⁻¹⁰ After publication of their 2009 Cochrane review,¹³ Tom Jefferson's team was alerted to the existence of several unpublished trials.¹⁴ Following requests from *The BMJ*, the clinical trial reports were eventually made available to researchers.

A meta-analysis published in 2013 found only a 20 hour mean reduction in symptoms and no evidence of a reduction in the likelihood of pneumonia, hospital admission, or complications requiring an antibiotic.¹⁵ Jefferson's Cochrane review, using an even larger set of unpublished studies, confirmed these findings and provided additional evidence of the drug's harms, such

as nausea, vomiting, and psychiatric events.¹⁶ Individual patient data have still not been made available to researchers. Withholding these data was a serious breach of research ethics by Roche: suppressing information obtained from patients enrolled in trials of a then experimental drug, who thought that they were contributing to the medical knowledge base.⁷

Direct harm

The manufacturer may not push back against the WHO decision to downgrade oseltamivir from a "core" drug, since the first generic version of the drug was recently approved.¹⁸ Nevertheless, the story has several important lessons. Firstly, it is vital that all trials be published, and that individual patient data be made available for independent reanalysis. Efforts are under way (<http://www.alltrials.net/>) and deserve our support. Secondly, money spent stockpiling drugs that are minimally effective is money not spent on other public health priorities. Because diverting these funds causes direct harm to the public, we must demand better evidence to inform these decisions. Thirdly, belief in the efficacy of oseltamivir may have led to less research to find truly effective drugs for influenza.

It is appropriate that WHO downgraded the status of this drug based on the concerted efforts of *The BMJ*, Jefferson and his team, and many others. A House of Commons report provides an excellent summary: "This longstanding regulatory and cultural failure impacts on all of medicine, and undermines the ability of clinicians, researchers, and patients to make informed decisions about which treatment is best." Downgrading oseltamivir in the essential medicines list is better late than never, but still comes far too late.

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