NEWS

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WHO says people with dementia will number 65.7m by 2030

US specialties list five tests and treatments that doctors and patients can safely avoid

Bob Roehr WASHINGTON, DC

Nine US medical specialties have released lists of five tests or procedures that are commonly used but are often unnecessary, which they hope will improve healthcare safety and quality while reducing costs.

The *Choosing Wisely* campaign "is about physicians and patients having conversations, informed conversations, about making wise choices, about their care, and avoiding unnecessary tests and procedures that are not supported by evidence," said Christine Cassel at a press briefing in Washington, DC on 4 April. It will be supported by ongoing educational activities.

"Research shows that many doctors feel compelled to accommodate a patient's request for a certain type of intervention, even when they don't think that it is beneficial," she said. "More care is not always better care. As physicians, we need to recognise the importance of these conversations and make sure that the right patient gets the right care at the right time."

Cassel is president of the American Board of Internal Medicine Foundation, the charity arm of the independent non-profit organisation that evaluates and certifies doctors in internal medicine subspecialties. The board represents 374 000 doctors practising in allergy, asthma and immunology, family medicine, cardiology, internal medicine, radiology, gastroenterology, oncology, nephrology, and nuclear cardiology. An additional eight groups have begun the process and will release their lists in the autumn.

The campaign from family doctors is urging doctors and patients not to seek or perform imaging tests for low back pain of less than six weeks unless red flags are present and to avoid antibiotics for acute mild to moderate sinusitis that has been present for less than seven days and DEXA scans for osteoporosis in women under 65 and men under 70 with no risk factors.

Cardiologists are advising the avoidance of stress cardiac imaging or advanced non-invasive imaging in the initial evaluation of patients without cardiac symptoms unless high risk markers are present.

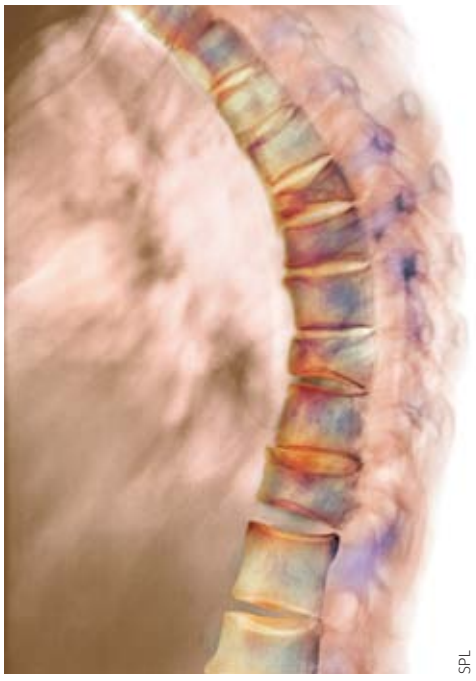
And an example from gastroenterologists is for doctors not to repeat colorectal cancer screening (by any method) for 10 years after a negative colonoscopy in patients with average risk.

James Fasules, from the American College of Cardiology, said, "Patients have the idea that more is better. That isn't always the case; more can lead to further unnecessary studies and going down the wrong pathway."

Amy Williams, a nephrologist at the Mayo Clinic in Rochester, Minnesota, said it was important that patients heard a consistent message on appropriate care throughout the trajectory of their treatment. That was best accomplished by relying upon evidence based guidelines and educating doctors.

Much of it came down to a relationship of trust between the doctor and patient, Williams told the *BMJ*. "You have to be incredibly honest with your patients, have the data that you need, and tailor therapy to the . . . individual patient."

Five things physicians and patients should question is at www.choosingwisely.org.



SPL

Detecting osteoporosis (shown as x ray): doctors are advised not to carry out DEXA scans in women under 65 and men under 70 without risk factors

Cite this as: *BMJ* 2012;344:e2601

Most laboratory cancer studies cannot be replicated, study shows

Nigel Hawkes LONDON

Most laboratory studies of cancer are wrong, says a former head of global cancer research at the biotechnology company Amgen. Of 53 "landmark" publications in the literature that Glenn Begley and colleagues attempted to double check, only six could be successfully replicated.

"It was shocking," he told Reuters. "These are the studies that the pharmaceutical industry relies on to identify new targets for drug development. But if you're going to place a $1m or $2m or $5m bet on an observation, you need to be sure it's true."

Begley, now senior vice president of the biotechnology company TetraLogic, wrote a comment in *Nature* (2012;483:531-3, doi:10.1038/483531a) with Lee Ellis of the M D Anderson Cancer Centre in Houston, Texas, calling for a series of reforms.

Amgen's experience, the two wrote, is not unique. Bayer Health Care in Germany last year reported that only a quarter of published preclinical studies they checked could be validated. Cancer research made up 70% of these studies. The importance placed on publication in a high impact, peer reviewed journal means that researchers cherry pick their experiments to find "the perfect story," they say.

Begley calls for an obligation to publish all datasets, and the "blinding" of those who analyse results to the experimental and control groups so that they are not unconsciously biased. There should also be more chances to publish negative data; and preclinical researchers should have to report all findings, regardless of outcome, he says.

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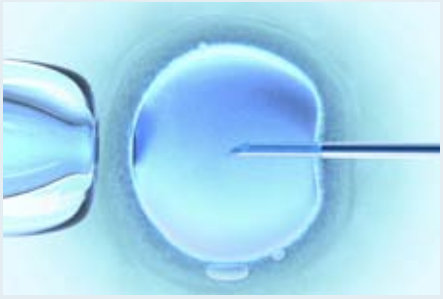
Regulator tells clinics to treat egg and sperm donors better to boost numbers



Egg and sperm donors do not feel welcomed or supported by some clinics

Ingrid Torjesen LONDON

The Human Fertilisation and Embryology Authority (HFEA) has launched a national strategy to boost the number of egg and sperm donors by raising awareness about donating and improving the way that donors are treated by clinics.

The authority is establishing an expert group to look at ways of raising awareness of donation, to debate contentious issues and to ameliorate areas of concern, and to promote good practice among clinics to ensure that potential donors feel supported and not discouraged.

The strategy was announced as new rules governing how much egg donors can be paid came into force. From 1 April, the amount of money women who donate eggs for infertility treatment in the United Kingdom can be paid per cycle, to compensate for loss of earnings, expenses, and the procedures they undergo, trebled to £750 (*BMJ* 2011;343:d6865). The extra money is also an attempt to remedy a shortage of egg donors by ensuring that donors are not financially disadvantaged by donating.

Although the numbers of egg and sperm donors have recovered from a dip in 2005, when the law was changed to remove donor anonymity and give children conceived the right to find out the donor's identity when they reach 18, Lisa Jardine, chair

Herbal medicine might be responsible for high incidence of urinary tract cancer in Taiwan

Nigel Hawkes LONDON

Chinese herbal medicines containing extracts from *Aristolochia* plants might be responsible for the high incidence of urinary tract cancer in Taiwan, a study has suggested.

It adds to growing evidence that herbal preparations using *Aristolochia* (now banned in Europe) are extremely dangerous and, given the lifelong persistence of the DNA damage they cause, have created "an international public health problem of considerable magnitude," say the authors of the study published in *Proceedings of the National Academy of Sciences* (doi/10.1073/pnas.1119920109).

In Taiwan there is a remarkably high incidence of upper urinary tract urothelial carcinoma (UUC), a condition diagnosed four times more often than it was in the early 1980s. Incidence, at nearly four cases per 10 000 people by 2007, is four times higher than in the US, where UUC diagnoses have fallen slightly over the same period.

The authors, led by Chung-Hsin Chen, a urologist from National Taiwan University Hospital in Taipei and including scientists from the US, attribute this change to the progressive replacement of traditional Mutong and Fangchi herbs with those from *Aristolochia manchuriensis* and *Aristolochia fangchi*. This process began in mainland China in the 1930s and was universal by the 1950s. It continued there until these substitutions were banned by the Chinese government in 2003.

The substitute herbs contain aristolochic acid, a potent human carcinogen. The presence of this acid in herbs exported to Taiwan, as well as to other Asian countries and to the UK and the Netherlands, has been shown by chemical analysis. Consistent with a latency period of 20-40 years, the authors say, any damaging effects should be detectable from about 1985 onwards.

Aristolochic acid has a consistent pattern of DNA damage, forming what are called aristolactam adducts which are concentrated in the kidneys, and causing two characteristic mutations in a gene, *TP53*, that is linked to cancer.

Cite this as: *BMJ* 2012;344:e2644

NHS looks set to save £20m as antipsychotic drug comes off patent

Nigel Hawkes LONDON

The launch of generic versions of an antipsychotic drug at the end of last month is likely to save the NHS as much as £20m (€24m; $32m).

The generics manufacturer Teva launched versions of quetiapine (marketed by AstraZeneca as Seroquel) and the prolonged release version of the drug (Seroquel XR) in the United Kingdom on 30 March. Its version of quetiapine will cost £6.08 for a pack of 60 pills of the 25 mg dose, whereas the branded product cost £30.50 a pack. The NHS in England spends about £90m a year on the drug so is likely to save many millions as a result of the patent expiry.

AstraZeneca strongly resisted the lifting of the patent on Seroquel XR, arguing in the British courts that the technology used to prolong release of the drug effectively meant that it justified a separate patent from the original version. But the High Court ruled on 22 March that a separate patent was not justified and that the existing patent had expired.

In the United States, by contrast, the district judge Joel Pisano ruled on 30 March that the company's patent on the prolonged release version was valid. That means this version of the drug will remain patented until 2017 in the US. A Dutch court made the same decision on 7 March, and a decision is awaited in Spain. So far only the UK has lifted the patent.

Generic quetiapine will cost £6.08 a pack compared to £30.50 for a pack of Seroquel

JB RED/BLOOMBERG/GETTY IMAGES

But AstraZeneca was not so lucky in another of its actions in the US: an attempt to prevent the patent being lifted on the original drug. The company had sought an injunction against the US Food and Drug Administration in the federal court, seeking to delay the FDA's approval of generic versions of quetiapine (*BMJ* 2012;344:e2099, 15 Mar).

AstraZeneca's case rested on a labelling issue. It argued that the generic versions would have to carry the same warnings about the risk of high blood sugar and suicidal thoughts as the branded drug, and because these warnings were the result of the company's own research it was entitled to exclusivity over the information until December this year.

The FDA rejected the company's argument.

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of the authority, said that there still were not enough donations to meet UK demand. As a result there were long waiting lists, forcing many women to seek treatment abroad.

The expert group will attempt to find ways of encouraging more altruistic egg donors to come forward and persuading more women undergoing fertility treatment to make any eggs that they do not need themselves available for donation.

Even if the donating woman does not go on to have a viable pregnancy herself, Jardine said: "The anecodotal evidence we have is that it is comforting for the woman who is unsuccessful, the woman who hasn't managed to have a child but finds that her eggs have been donated to someone who has."

The group will also encourage the spread of best practice between clinics to ensure that donors feel valued and engaged, and have access to information and support.

Jardine said there was evidence that donors did not feel particularly welcomed at some clinics. "Donors are a sort of side issue in the clinic but they have to be dealt with through the clinic," she said. "We have heard that their phone calls aren't returned or they don't even get a cup of tea, or a gay donor was given girlie magazines in the donation room."

The authority is seeking to recruit 12 to14 people to the expert group, with expertise in areas of donor recruitment, public relations, awareness raising, donor customer care, patient interests, or the wellbeing of future donor conceived people. The deadline for applications is 1 May. **For more information about joining the HFEA expert group go to www.hfea.gov.uk/7138.html.**

Cite this as: *BMJ* 2012;344:e2594

Virgin Care is set to take over two NHS community health services in Surrey

Adrian O'Dowd LONDON

Private firm Virgin Care is to take over running NHS community health services in two parts of Surrey in a £500m (€605m; $791m) deal agreed with the local primary care trust.

Unions and campaigning groups have reacted angrily to the development which they see as proof of the government's intention to allow private companies a much greater role in the NHS so soon after the controversial NHS changes became law in the Health and Social Care Act (*BMJ* 2012;344,:e2243).

NHS Surrey has announced it has signed a contract with Virgin Care (formerly Assura Medical) to deliver community services across much of the county from 2012 to 2017 including community nursing, health visiting, physiotherapy, diabetes treatment, and renal care.

Other potential bidders for the contract who lost out were Central Surrey Health, despite its reputation as the government's flagship social enterprise mutual, and Surrey and Borders Partnership NHS Foundation Trust.

The £500m contract covers community health services in southwest and northwest Surrey as well as some services provided county-wide, such as prison healthcare and sexual health services.

These services will continue to be known as Surrey Community Health—the provider arm of the NHS Surrey—providing NHS healthcare for Surrey patients. Surrey Community Health is one of the largest community service providers in England.

The trust described the change as a "transfer of management" and said it was in line with national guidance that allowed the trust to focus on developing, buying, and managing the performance of services, thus leaving the provider to concentrate on delivering services.

It stressed that patients would continue to be cared for by existing staff, whose terms and conditions would be protected and maintained, including their NHS pension scheme.

A procurement process began in January last year and the trust said that Surrey Community Health staff had been fully involved throughout the process as had the Surrey Local Involvement Network (LINk), which represents local public, patients, and carers.

Under the deal, Virgin Care will run and manage the services, leasing property, as the ownership of local estates remains with the NHS.

Virgin Care already operates more than 80 services including community based intermediate NHS services, GP led walk in and healthcare centres, urgent care centres, out of hours, community diagnostics and GP practices.

Anne Walker, chief executive of NHS Surrey, said: "The successful conclusion of a long involved procurement process resulting in this contract signed with Virgin Care will bring best quality, safety and value for Surrey's NHS patients, carers and taxpayers."

Unison said that despite the government's promises that it would not privatise the NHS, the agreement in Surrey undermined that claim and raised concerns about profit becoming more important than care.

Sarah Hayes, Unison regional organiser, said: "Both staff and the public do have fears over what this means for the future of the NHS."

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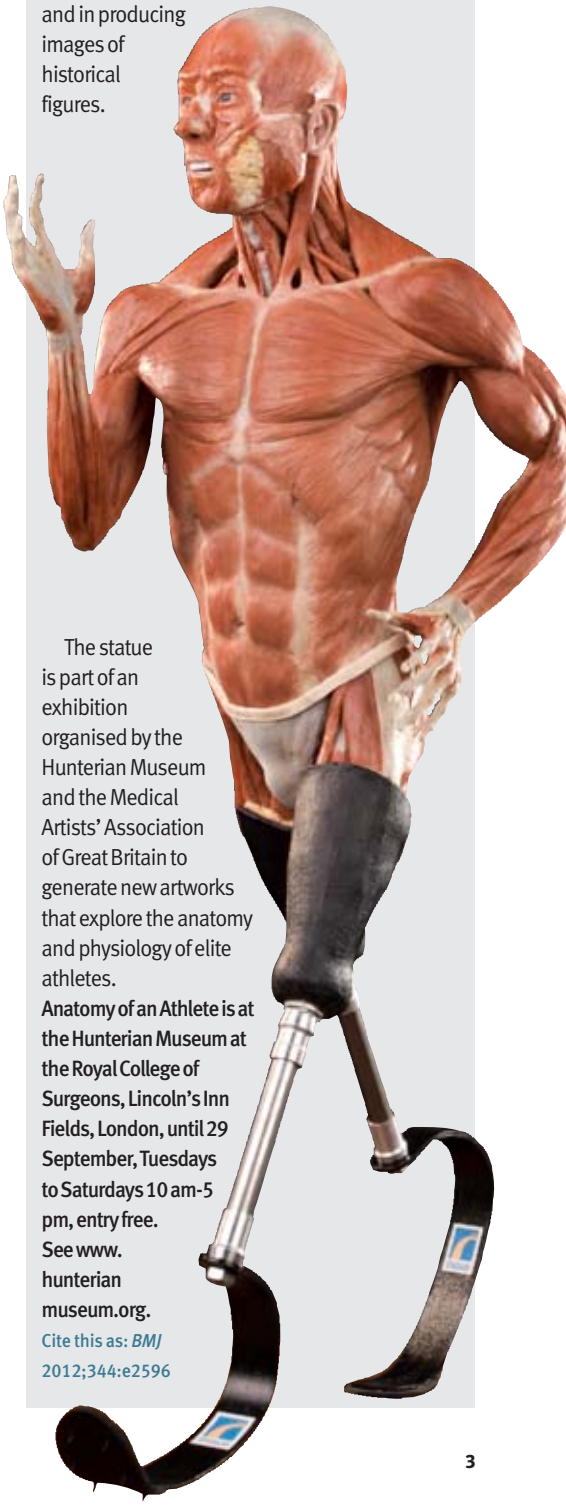
Using art to explore the physiology of elite athletes

Annabel Ferriman BMJ

This wax écorché statue of double amputee marathon runner Richard Whitehead was made by forensic artists Richard Neave and Denise Smith. Neave, from the Art in Medicine unit at the University of Manchester, has used his skill in recreating faces from skulls in police forensic work and in producing images of historical figures.



The statue is part of an exhibition organised by the Hunterian Museum and the Medical Artists' Association of Great Britain to generate new artworks that explore the anatomy and physiology of elite athletes. **Anatomy of an Athlete is at the Hunterian Museum at the Royal College of Surgeons, Lincoln's Inn Fields, London, until 29 September, Tuesdays to Saturdays 10 am-5 pm, entry free. See www.hunterianmuseum.org.**

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IN BRIEF

More UK women are getting uterine cancer: The mortality rate from uterine cancer in the UK has risen from 3.1 per 100 000 in the late 1990s to 3.7 per 100 000, show figures from Cancer Research UK. The incidence of uterine cancer rose by 43% over the same period from 13.7 per 100 000 in the later 1990s to 19.6. Although 1900 women now die from the disease each year, compared with fewer than 1500 at the turn of the millennium, 77% of women now survive for five years or more.

Fewer GPs believe NHS changes will improve patient care: Just 12% of GPs out of 814 questioned in a BBC poll agreed that putting GP led groups in charge of most of the NHS budget would lead to "noticeable" improvements in patient care. In September 2010 a similar poll found 23% of GPs believed the changes would bring patient benefits. In addition, 83% of GPs believe there will be more rationing of care in their area.

Drug use increases in older people in England: Figures from surveys show a 10-fold increase in lifetime illicit drug use in people aged 50-64 in England since 1993. Cannabis is the most commonly used (1.8% of people had used it in the previous 12 months), although use of amphetamines, cocaine, and LSD had also increased. In contrast, use of tranquillisers was relatively stable (*Age and Ageing 2012* doi:10.1093/ageing/afs020).

More than 400 000 babies will be tested for rare diseases: Five more diseases are going to be added to the five illnesses already tested for in newborn babies through the heel prick test, in pilot schemes in Sheffield, Leeds, Manchester, Birmingham, and parts of London. The five additional diseases are maple syrup urine disease, which affects one in 120 000 births, homocystinuria, glutaric acidaemia type 1, isovaleric acidaemia, and long chain fatty acidaemia, all of which affect one in 100 000 live births.

Cheaper rotavirus vaccine for developing countries: Vaccine charity the GAVI Alliance has secured new prices with manufacturers for vaccines against rotavirus that are 67% lower than before, saving $650 (£410). The bulk (95%) of the vaccines contracted—132 million doses—will be procured at a cost of $5 per (two dose) course instead of $15. The same course costs $177 in the US. The deal will enable the Alliance to provide the vaccines to eight developing countries this year for some three million children.

Cite this as: *BMJ* 2012;344:e2618

Whole genome sequencing fails to predict risk of common diseases

Companies such as 23andMe and deCODEme offer genetic analysis as an aid to health

Susan Mayor LONDON

Whole genome sequencing fails to provide useful guidance on the risk of the most common diseases, according to results published this week of a study comparing risk in thousands of pairs of identical twins.

Whole genome sequencing analyses all the genes coded for by a person's entire DNA. The cost of the procedure has fallen dramatically over the past few years, so there has been growing interest in its potential for predicting risk of disease.

The contribution of nearly all genetic variants to any disease is unknown, making it very difficult to assess the benefit of whole genome sequencing in determining the risk of a particular disease.

But this question can be answered by looking at identical twins. "Identical twins share the same genome, and if the genome were the determining factor for common diseases, then the prevalence of a specific disease in an individual whose twin has that disease can be used to determine how well whole genome sequencing could predict an individual's disease risk," said Bert Vogelstein, professor of oncology at the Johns Hopkins Kimmel Cancer Center, Baltimore, and the study's lead author. "We used twins as a natural experiment to estimate the capacity of genome sequencing to determine disease risk, even though we didn't know their genome sequence."

The group analysed data on disease incidence from more than 53 000 pairs of monozygotic twins on registries in Denmark, Finland, Norway, Sweden, and the US National Academy of Science's national research second world war veterans twins registry (*Science Translational Medicine* doi:10.1126/scitranslmed.3003380).

They looked at the incidence of 24 diseases, including autoimmune, cardiovascular, genitourinary, neurological, and obesity associated diseases and cancer. The group then used mathematical models to estimate the capacity of whole genome sequencing to predict the risk of each disease, on the basis of typical thresholds used to initiate preventive or therapeutic measures.

Their results showed that most people would get negative results from whole genome sequencing for 23 of the 24 diseases. But these negative results would generally not be very informative, because the risk of developing 19 of the 24 diseases in people testing negative would still be, at a minimum, 50-80% of that in the general population.

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Wellcome Trust insists on open access to its research

Nigel Hawkes LONDON

The Wellcome Trust, one of the world's biggest funders of biomedical research, is to throw its weight behind the campaign to open up access to scientific papers.

Mark Wallport, director of the trust, told the *Guardian* (10 April, p 1) that in future it would insist on the scientists it funds publishing their results in such a way that the public could have free access to them within six months of publication. Those who disregard the policy could find it impossible to obtain future grants.

The trust is about to launch its own journal, *eLife*, in cooperation with the Howard Hughes Medical Institute and the Max Planck Society. It will be open access, cover the whole range of biomedical sciences, and aim to challenge market leaders such as *Nature* and *Science*.

UK universities spend about £200m (€242m; $317m) a year gaining access to journals to read research that has in most cases been funded by public bodies. The quality of that research is maintained by peer review, provided free by the academic community.

Online journals finance their operations by charging those who submit manuscripts, not, as in the traditional model, by charging those who read them. The Wellcome Trust provides funds for its grant holders to pay these charges, but only 55% take advantage. Others prefer to publish in high impact journals, which count for more in career terms, but are not open access.

Wallport said the six month delay on open access imposed by many journals was too long. ***BMJ* provides free access to all its research articles.**

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