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thebmj.com

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English acute care trusts earned nearly £0.5bn from private patients in 2014-15

Gareth Iacobucci *THE BMJ*
NHS hospital trusts in England earned almost £0.5bn from treating private patients last year, a new analysis by *The BMJ* has found. But although the analysis found that the total amount of private income earned by hospital trusts in England has risen by around £50m in the past two years, it shows that this has remained broadly static as a proportion of trusts' income from treating patients, at around 1.2%.

For the analysis *The BMJ* examined the annual accounts for 2014-15 of 129 foundation and non-foundation trusts. In total, these 129 trusts earned £498.9m from private patients in 2014-15, representing around 1.2% of their overall income from treating patients of £42.8bn.

This compared with a total of £474.1m from private patients in 2013-14 (also 1.2% of the total of £40.4bn) and £451.9m from private patients in 2012-13 (again 1.2% of the total of £38.5bn).

The static proportion of overall NHS income derived from private patients comes despite the Health and Social Care Act 2012 removing the previous cap that restricted most NHS foundation trusts from deriving

more than 2% of their income from private patients.

But there was much variation among trusts. In 2014-15, as in previous years, the highest earners from treating private patients were largely London acute care trusts. The biggest was the Royal Marsden NHS Foundation Trust (which earned £76.9m from private patients), followed by Imperial College Healthcare NHS Trust (£43.1m), Great Ormond Street Hospital for Children NHS Foundation Trust (£40.9m), and the Royal Brompton and Harefield NHS Foundation Trust (£37.5m).

The Royal Marsden also earned the largest proportion of its overall patient income from private patients in 2014-15 (26.1%), followed by Moorfields Eye Hospital (12.7%), Great Ormond Street (11.9%), and Royal Brompton and Harefield (11.1%).

Outside London, Frimley Park Hospital NHS Foundation Trust in Surrey earned the most income from private patients, making £8.3m in 2014-15, 2% of its total patient income.

Imperial College Healthcare NHS Trust saw the biggest increase in the proportion of

income derived from private patients, from 4.4% in 2013-14 to 5.4% in 2014-15.

Some trusts have added new treatments to their lists of services that patients can pay for privately, details of which they disclosed to *The BMJ* under the Freedom of Information Act.

Barts Health NHS Trust in London has added a range of private cardiac treatments, including implantation of pacemakers and implantable cardioverter defibrillators. Colchester Hospital University NHS Foundation Trust in Essex now offers pacemaker implants, coronary angiography, implantable loop recorders, and cardiopulmonary exercise testing privately.

Jacky Davis, a consultant radiologist in north London and a member of the BMA's council, said that the general trend of NHS trusts earning private income was eroding "one of the founding principles of the NHS," regardless of the sums involved. She added, "I think the important thing is not so much the actual sums but the fact that trusts now have a number of ways of offering tiered treatment to patients."

Cite this as: *BMJ* 2015;351:h5068

IN BRIEF

Company raises price of drug 5000%: The Infectious Diseases Society of America and the HIV Medicine Association have written to Turing Pharmaceuticals urging the company to revise its increase of the price of pyrimethamine (which it markets as Daraprim) by 5000% from \$13.50 (\$21) to \$750 a pill. The drug, which was approved in the United States in 1953, is used to treat toxoplasmosis. This cost is unjustifiable and unsustainable, the organisations said.

Benefits change led to suicide:

The trigger for the 2013 suicide of Michael O'Sullivan, a 60 year old man from north London, was the assessment of his fitness to work, a coroner has told the Department for Work and Pensions. O'Sullivan was moved from employment support to jobseeker's allowance, despite reports from three doctors that he had long term depression and agoraphobia.



Nearly half of complaints about hospitals upheld last year:

In 2014-15 the parliamentary and health service ombudsmen completed 1652 investigations into NHS acute care trusts in England, up from 852 in 2013-14, largely because of a drive to deal with more complaints, and upheld 44%. Poor clinical care and treatment, poor communication, and errors in diagnosis were the main complaints.

Cholera outbreak in Iraq:

Iraq's Ministry of Health has declared a cholera outbreak in parts of west Baghdad and in Najaf and Diwaniya, both about 160 km south of the capital.

Cite this as: *BMJ* 2015;351:h5040



The Royal Marsden Hospital and Moorfields Eye Hospital (centre) earned the largest proportion of income from private patients, while Frimley Park (left) earned the most income from private patients outside London

IN BRIEF

“Super-gonorrhoea” outbreak in north of England sparks alert:

Public Health England has asked doctors and other healthcare professionals to be vigilant for cases of gonorrhoea that are highly resistant to azithromycin after 12 cases were confirmed in Leeds and four in Macclesfield, Oldham, and Scunthorpe between March and August this year. The patients have been treated with an alternative antibiotic that has been found to be effective, but resistance to the first line treatment “remains a concern,” said the agency.

Charity calls for action on dementia: New research commissioned by Alzheimer’s Research UK claims that 32% of UK people born in 2015 will develop dementia during their lifetime, 27% of men and 37% of women. This year 225 000 people will develop dementia, and the figure will rise to two million people by 2051, said the charity, which hopes that the new research will spur the government to fund more research.

UK scientists seek licence to genetically modify human embryos: The UK fertility watchdog the Human Fertilisation and Embryology Authority is to consider an application from the Francis Crick Institute in London to use a new genetic technique to carry out research into infertility. The research aims to understand the genes needed for human embryos to develop successfully. Genome editing of embryos that are surplus to in vitro fertilisation has been permitted in research in the UK since 2009, provided that the research meets the criteria in the legislation and that it is done under a licence from the authority. The embryos cannot be studied beyond 14 days.

Single training session for breathlessness works as well as three: One breathing training session is as effective as three for treating breathlessness in patients with lung cancer, a study in *BMC Medicine* has found.¹ In a trial conducted by researchers from the universities of York, Hull, and Cambridge and from the NHS, 156 patients underwent either one or three sessions of breathing training. The trial found clinically significant improvement in breathlessness intensity and other breathlessness measures from breathing training but found no evidence that three sessions conferred greater benefit than a single session for any of the outcomes.

Parents support food standards in all schools:

An online survey by the BMA showed that more than three quarters of parents (77%) back calls to ensure that food served at academies and free schools meets the same healthy standards as other state schools. Despite strict food regulations for local authority schools in England, more than 3500 academies and 200 free schools do not have to meet the same standards. The survey of 2000 parents also found that 79% supported calls for a free piece of fruit or vegetable to be provided to UK schoolchildren each day up to the age of 11.

Salmonella outbreak results in 91 hospitalisations in US:

An outbreak of salmonella that has been linked to contaminated cucumbers imported from Mexico has now caused 418 cases of illness in 31 states, US health officials have said. The Centers for Disease Control and Prevention said that the cucumbers were distributed in 24 states but had been sent on to more. Two deaths have also been reported in the outbreak, one in California and one in Texas. So far 91 people have been admitted to hospital, the officials said.

Cite this as: *BMJ* 2015;351:h5040

Home care visits should be at least 30 minutes

Ingrid Torjesen LONDON

Most home care visits should be at least half an hour long to enable carers to provide the personalised and dignified care that elderly patients need when being supported to stay in their own home, says a guideline on social care services from the National Institute for Health and Care Excellence (NICE).¹

Shorter visits would be appropriate only rarely, said the finalised guideline on home care, published on 23 September. This might be when the visit is part of a wider package of support, made by a carer who is known to the patient, or made to complete a specific time limited task, such as checking that a medicine has been taken or that a person is safe and well.

The NICE guideline said that a “one size fits all” service was not the best way to provide home care and urged a person centred approach where the needs and wishes of the individual are heard and respected. Support should focus on what people can do and not just what they can’t do, it said, and it should be provided by trained and competent staff with whom the patient can become familiar.

Bridget Warr, chief executive of the United Kingdom Homecare Association, chaired NICE’s guideline development group. She emphasised that, for general visits such as for personal care, 30 minutes was needed to provide the appropriate quality of care.

Cite this as: *BMJ* 2015;351:h5057



Fifteen minute visits are only suitable to complete a specific time limited task

NHS health checks waste £450m a year

Jacqui Wise LONDON

The NHS Health Check programme is ineffective and wastes £450m a year, a highly critical report has said.

The programme is advertised as a free “midlife MOT” for everyone in England aged 40-74 without a pre-existing condition. The check, offered every five years, assesses a patient’s risk of heart disease, diabetes, kidney disease, stroke, and dementia and provides support and advice to help them manage and reduce their risk of future disease.

But the report, published in the *Journal of Public Health*, said that the programme “relies on weak concepts, denies strong

scientific counter evidence, and ignores persistent implementation issues.”¹

The authors, from the London School of Economics and the University of Liverpool, said that the programme failed against many of the World Health Organization’s 10 criteria for screening for disease. For example, a patient’s likelihood of future cardiovascular disease is usually assessed using a global risk score, which has low sensitivity and specificity. Thus, it failed the “test suitability” criteria. With regard to “test acceptability,” uptake of the health checks averages just 50%.

Cite this as: *BMJ* 2015;351:h5039





Inspectors praised the “outstanding” quality of staff care

Addenbrooke's told to improve after “inadequate” rating

Matthew Limb LONDON

One of the NHS's best known hospital trusts has been placed in special measures after being judged “inadequate” by the Care Quality Commission (CQC).

Cambridge University Hospitals NHS Foundation Trust, which runs Addenbrooke's Hospital and the Rosie maternity hospital, has been ordered to make improvements to ensure that care is safe. Inspectors found serious staff shortages, frequently cancelled operations, and long waits for surgery and outpatient appointments.

The regulator also criticised the trust's board over governance and failure to tackle longstanding problems while praising the “outstanding” quality of the staff's care. The regulator Monitor, which will oversee a recovery plan, said that the trust was predicting a £64m deficit this year, overspending by £1.2m a week, and lacked adequate financial control.

The trust's chief executive, Keith McNeil, and chief finance officer, Paul James, stepped down last week.

The trust, which has 1100 beds, is a leading centre for transplantations, major trauma, treatment of rare cancers, and neurological intensive care.

It was inspected by the CQC in April and May this year. Inspectors found a “significant shortage” of staff in important areas, including critical care services.¹ This often meant staff being moved across different services, with gaps backfilled by bank or agency staff.

Cite this as: *BMJ* 2015;351:h5066

Over half of eligible people don't go for bowel cancer test in pilot areas

Jacqui Wise LONDON

Overall uptake for a pilot bowel cancer screening programme in England using flexible sigmoidoscopy was 43%, dropping to 33% in the most deprived areas, an analysis has shown.

The report, published in the *Journal of Medical Screening*, covered 21 187 invitations sent to eligible people in six pilot areas during the first 14 months of the programme—March 2013 to May 2014.¹ The six screening centre areas were in London, Norwich, Surrey, Tyneside, west Kent, and Wolverhampton. An explanatory letter was sent to all men and women who had their 55th birthday during this time, followed by a letter offering a specific screening appointment. Those who did not confirm they would attend were sent a reminder letter.

The NHS bowel scope screening

programme is being phased in across England and is due to be fully rolled out by 2018. It involves flexible sigmoidoscopy of the lower bowel to look for any polyps which may develop into bowel cancer if left untreated. The test will run alongside the current bowel cancer screening programme, which sends a faecal occult blood testing kit for use at home every two years to people aged 60-74 in England. The Independent Cancer Taskforce has called for the bowel scope screening test to reach 75% uptake in all areas of the country by 2020.

The study found that 39% of eligible people in the most ethnically diverse area decided to have the test, compared with 45% in the least ethnically diverse area. In total, 44.6% of all invited men were screened, compared with 41.5% of all invited women. Uptake in the most deprived

location was 32.7%, compared with 53.2% in the least deprived area. Individuals offered a routine appointment were less likely to attend than those offered an out of hours appointment.

Christian von Wagner, senior lecturer at the Health Behaviour Research Centre at University College London and leader of the study, said in a statement that he was encouraged by the level of uptake in the pilot areas for a fairly new and invasive test. “We were surprised that more men were willing to have the test than women. What we found worrying was that people living in poorer areas seem less likely to take advantage of this screening.”

He said that they were now doing more research to find out the reasons why people might not have the test.

Cite this as: *BMJ* 2015;351:h5032

No evidence that £1bn Cancer Drugs Fund helped patients

Zosia Kmietowicz THE BMJ

There is no way of knowing whether the Cancer Drugs Fund, which has cost the NHS £1bn over five years, has improved the survival or quality of life of patients who accessed new treatments, a National Audit Office report has said.¹

The fund, which has provided cancer patients with drugs that are not approved by the National Institute for Health and Care Excellence (NICE), is likely to cease to exist from next April, said the report from the government spending watchdog. Decisions about which cancer drugs are available on the NHS would revert to NICE, the organisation set up in 1999 to determine the affordability of new drugs.

Meg Hillier, MP and chair of the Public Accounts Committee, said, “If patients are going to get access to the drugs they need, there needs to be much better control of costs and proper assessment of whether these drugs are making a difference to the health of patients.”

Cite this as: *BMJ* 2015;351:h4988

World Rugby must review rules on tackling

Zosia Kmietowicz THE BMJ

A campaigner for the game of rugby to be made safer has said that it is vital for the sport's governing body to review rules on the tackle to reduce the risk of injury.

Allison Pollock, professor of public health research and policy at Queen Mary University of London, said that the government should act to make rugby in schools a non-contact sport.

She was responding to reports ahead of a BBC *Panorama* programme, aired on 21 September, in which Martin Raftery, World Rugby's chief medical officer, said that the tackle would be a focus of discussions about how to make the game safer for athletes.

Data published in February showed 86 reported concussions from matches during the 2013-14 season, up from 54 in 2012-13.¹ The incidence of reported concussions was 10.5 in every 1000 hours of play in 2013-14, up from three concussions per 1000 hours in 2005-06.

Raftery told the BBC, “There's no doubt that the biggest area that we know where concussion is going to occur is in the tackle, so that will help us to look at the tackle and see what we can do to make it safer.”

Pollock told *The BMJ*, “Rugby officials absolutely need to change the rules: there are tens of thousands of injuries from rugby each year in the UK, and many of those injured end up in the emergency department.”

Cite this as: *BMJ* 2015;351:h5049



Republican candidates cast doubt on vaccines in televised US presidential debate

Owen Dyer MONTREAL

A Donald Trump administration would change vaccination schedules to stop an “epidemic” of autism, the candidate said at the Republican Party’s presidential debate on 16 September.

Two other Republican candidates who are doctors also drew criticism from the watching physicians for their equivocal defence of vaccination. Ben Carson, a neurosurgeon, and Rand Paul, an ophthalmologist, both said that parents were justified in rejecting recommended vaccination schedules and instead demanding single shots spread out over a longer period.¹

Carson, who retired in 2013 from a

career as a professor of neurosurgery at Johns Hopkins Hospital in Baltimore, Maryland, has surged in recent polls to command support from 20% of Republican voters, second only to Trump’s 32%.

Referring to a recent measles outbreak in California, the debate’s moderator, Jake Tapper, asked, “Dr Carson, Donald Trump has publicly and repeatedly linked vaccines, childhood vaccines, to autism, which, as you know, the medical community adamantly disputes. You’re a pediatric neurosurgeon. Should Mr Trump stop saying this?”

Carson responded that no evidence existed of a correlation

between vaccination and autism. But he continued, “Vaccines are very important. Certain ones. The ones that would prevent death or crippling. There are others, there are a multitude of vaccines which probably don’t fit in that category, and there should be some discretion in those cases.”



Presidential hopeful Donald Trump: “Autism has become an epidemic”

Tapper then asked Trump, “How would you handle this as president?”

Trump responded, “Autism has become an epidemic. Twenty five years ago, 35 years ago, you look at the statistics, not even close. It has gotten totally out of control. I am totally in favour of vaccines. But I want smaller doses over a longer period of time.”

Trump then related an anecdote about an employee’s child who “just the other day . . . went to have the vaccine, and came back, and a week later got a tremendous fever, got very, very sick, now is autistic.” He has related the same anecdote on several occasions over the years.

Cite this as: *BMJ* 2015;351:h5006

The BMJ wins Ig Nobel prize for speed bump diagnosis of appendicitis

Janice Hopkins Tanne NEW YORK

The 2015 Ig Nobel award for Diagnostic Medicine, for a study showing that pain while travelling over speed bumps is a sign of acute appendicitis, was presented to Helen Ashdown and her UK team on 17 September at the awards’ 25th annual ceremony, held at Harvard University in Cambridge, Massachusetts, USA.

The paper, by Ashdown and a team from the University of Oxford and Stoke Mandeville Hospital, was published in *The BMJ* in 2012.¹ It is the fourth *BMJ* paper to win an Ig Nobel award in recent years.²⁻⁴ The Ig Nobel awards honour achievements that first make people laugh and then make them think.

Ashdown, dressed as a speed

bump and wearing a traffic cone for a hat, lay down on the Harvard stage while colleagues stepped over her and mimicked the effect on a person with appendicitis of passing over a speed bump. She told *The BMJ* that doctors had commented that patients with possible appendicitis often said that the pain was worse when their transport passed over speed bumps.

“I’m interested in evidence based medicine,” said Ashdown, adding that, among patients with suspected appendicitis, 97% of those who later had it confirmed had reported worse pain when passing over speed bumps. While the test was not very specific, she said that it was better at ruling out appendicitis than several

commonly used clinical features.

Ashdown and her colleagues were among the 10 winners of Ig Nobel awards, handed out by six genuine Nobel laureates. Winners travelled to Harvard at their own expense to collect the prizes: a certificate signed by a Nobel laureate and a 10 trillion dollar Zimbabwean note (£0).

The event was produced by the science humour journal *Annals of Improbable Research* and its editor, Marc Abrahams, and was co-sponsored by the Harvard-Radcliffe Science Fiction Association and the Harvard-Radcliffe Society of Physics Students.

The discovery that all mammals over 3.3 kg take about 21 seconds to urinate won the Physics prize for David L Hu of Georgia Tech in Atlanta, Georgia, USA, who wore a toilet seat around his neck for the occasion. He told *The BMJ* that he was inspired to do the study while changing the nappies on his two young children. Research at the Atlanta Zoo and online then confirmed that large and small animals take about 21 seconds to pee. The reason is that the urinary system has constant proportions across animal size and makes a haemodynamic contribution, he said.

Cite this as: *BMJ* 2015;351:h5007

Ramipril research papers are retracted over faked data

Michael McCarthy SEATTLE

Two papers that reported that the blood pressure drug ramipril was beneficial in patients with intermittent claudication due to peripheral artery disease have been retracted after an investigation found that data were fabricated by the studies’ lead author, Anna A Ahimastos, a researcher at the prestigious Baker IDI Heart and Diabetes Institute in Melbourne, Australia.

The first paper¹ was published in *JAMA* in 2013, and the second paper² appeared in *Circulation Research* in 2014. Both papers reported that patients showed a marked improvement on ramipril.

However, in a letter published online on 14 September,³ authors of the original *JAMA* article retracted the study, saying, “A recent internal subanalysis . . . triggered an investigation and an admission of fabricated results by Anna A Ahimastos, PhD, who is both the first and corresponding author and was responsible for data collection and integrity for the article.”

No other authors were involved in the fabrication.

Cite this as: *BMJ* 2015;351:h5035



The winning team from Stoke Mandeville Hospital and Oxford University demonstrate their findings

John Ioannidis

Uncompromising gentle maniac



JOHN IOANNIDIS, 50, is the scourge of sloppy science, whose 2005 paper *Why Most Published Research Findings are False* has achieved near legendary status. He recalls his rising excitement as he wrote the paper while on Sikinos, an island in the Cyclades, and the feeling that things were falling into place. He was born in New York, grew up in Greece, and now holds the chair in disease prevention at Stanford University, California. His dim view of medical science, radical in 2005, has since been supported by many empirical studies, the latest showing that 97% of head to head industry sponsored non-inferiority trials back the sponsor's drug—a result he describes as “very curious.”

What is your pet hate?

“Petty politicians and people who seek power in general. Yet, I thank them for demonstrating their incompetence so often and so vividly: it makes me laugh”

What was your earliest ambition?

To become an astronaut, Zorro, or a scientist.

Who has been your biggest inspiration?

The late Tom Chalmers, the great champion of randomised trials and meta-analyses with whom I had the pleasure to work in his last years in Boston. I remember him pacing up and down the room in our brainstorming meetings, fresh with new ideas, even though he had terminal cancer.

What was the worst mistake in your career?

Hard to pick: my career has almost entirely comprised errors and mistakes.

What was your best career move?

Switching from bench research (which is often called “basic science” and which I still fully respect despite its stunning irreproducibility) to evidence based medicine and research methods (the genuine basic science).

Who is the person you would most like to thank and why?

My students, for revealing continuously with their comments how little I know.

To whom would you most like to apologise?

To my co-investigators and coauthors who have long tolerated me, as I'm sure that I drive them crazy with my ideas and suggestions. (“Why don't we analyse the data from another three million papers?”)

What single unheralded change has made the most difference in your field in your lifetime?

I'm still having difficulties defining my exact scientific field, as it changes daily. Once we fix this, perhaps I can answer this question, but sadly by then the field will no longer be interesting.

Where are or were you happiest?

In a tiny cottage on a tiny Ionian island called Antipaxi. Along with my wife and my daughter I've been going there every summer for the past 16 years.

If you were given £1m what would you spend it on?

Only £1m? I'd need at least £3m to buy a modest two bedroom house in Palo Alto and stop renting.

Do you support doctor assisted suicide?

No, but I don't blame those who adopt it.

What book should every doctor read?

I can't single out one book in particular as being “the doctor's Bible” or “the doctor's Quran,” but books are my best companion and a great refuge. I typically read a couple of dozen books in parallel, and I love being surrounded by hundreds and thousands of books.

What is your guiltiest pleasure?

There is no guilt in pleasure.

If you could be invisible for a day what would you do?

Business as usual: I'm already totally uninhibited in what I do.

What television programmes do you like?

We don't have a television at home, but I occasionally watch some satirical political Greek TV shows online. I enjoy cynical self deprecation and uncensored criticism.

What is your most treasured possession?

A Renaissance edition of Pindar [ancient Greek lyric poet].

What, if anything, are you doing to reduce your carbon footprint?

I don't drive a car, so I walk almost everywhere I go (well, my wife occasionally gives me a ride when I'm late).

What personal ambition do you still have?

To become myself.

Summarise your personality in three words

Uncompromising gentle maniac.

Where does alcohol fit into your life?

It doesn't really fit—with few exceptions.

What is your pet hate?

Petty politicians and people who seek power in general. Yet, I thank them for demonstrating their incompetence so often and so vividly: it makes me laugh.

What would be on the menu for your last supper?

Fresh figs, picked by hand from a fig tree, which means that I must die in high summer in Greece. Mephistopheles, do we have a deal?

Do you have any regrets about becoming a scientist and academic?

I'm not sure about what I have become or what I will become. I'm still working on it.

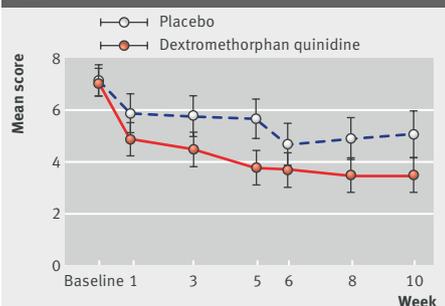
If you weren't in your present position what would you be doing instead?

I'd still be trying to be an astronaut, Zorro, or a scientist. Chances are practically zero for the astronaut (space travel is too expensive) and for Zorro (I love épée fencing, but I lose most bouts). I still haven't given up on the scientist, but, if it means being knowledgeable, the chances are slim, and I will likely remain a poor, questioning researcher.

Cite this as: *BMJ* 2015;351:h4992

RESEARCH NEWS

Mean neuropsychiatric inventory agitation/aggression domain scores



ALZHEIMER'S DISEASE

Combination drug shows promise for treating agitation

A combination of dextromethorphan hydrobromide and quinidine sulphate can reduce agitation in patients with probable Alzheimer's disease, research published in *JAMA* has shown.¹

The study, funded by Avanir Pharmaceuticals, included 220 patients with probable Alzheimer's disease and clinically significant agitation at 42 US sites. The patients were randomised to receive dextromethorphan quinidine (n=93) or placebo (n=127). After five weeks those receiving dextromethorphan quinidine continued for another five weeks, while those receiving placebo were stratified by response and were re-randomised to the active treatment or placebo. Dextromethorphan quinidine is approved for treating pseudobulbar affect, a neurological disorder characterised by uncontrollable crying.

Some 194 patients (82.2%) completed the study. Patients treated with dextromethorphan quinidine showed an average 51% reduction in the measure of agitation on the neuropsychiatric inventory from baseline to week 10, compared with 26% of those treated with placebo. After the first randomisation the mean agitation/aggression scores decreased from 7.1 to 3.8 with dextromethorphan quinidine and from 7.0 to 5.3 with placebo (95% confidence interval -2.3 to -0.7; $P<0.001$). In the second stage, agitation and aggression decreased from 5.8 to 3.8 with dextromethorphan quinidine and from 6.7 to 5.8 with placebo (-2.9 to -0.3; $P=0.02$).

The combination was generally well tolerated and was not associated with cognitive impairment or sedation.

In an editorial Anne Corbett and colleagues, of King's College, London, wrote that dextromethorphan quinidine could be a safer alternative for agitation than antipsychotics.

Cite this as: *BMJ* 2015;351:h5015

BETA BLOCKERS

Low dose beta blockers as good as higher doses after MI

Patients who have had an acute myocardial infarction and are treated with a lower dose of beta blockers than used in clinical trials show similar or better survival than those given higher doses, a study has found.

The multicentre study, published in the *Journal of the American College of Cardiology*, enrolled 7057 consecutive patients with acute myocardial infarction at 26 centres in the United States and Canada.¹

Most (91.5%) of the 6682 patients with complete follow-up data were discharged from hospital on a beta blocker. But the mean dose was 38.1% lower than that used in trials.

Patients discharged on a beta blocker at any dose had a significantly lower mortality rate at two years than those not given this type of drug ($P<0.0002$). But the risk of death decreased with lower doses of beta blockers.

Patients given >25% to 50% of the beta blocker dose used in clinical trials had 4% lower mortality at two years than those given a higher dose (>50%), after adjustment for potentially confounding variables (hazard ratio 0.963 (95% confidence interval 0.765 to 1.213)). The reduction in risk of death was even greater, at around 20%, in patients discharged from hospital on >12.5% to 25% of the trial dose of beta blocker (0.799 (0.635 to 1.005)) and in those given >0% to 12.5% of the dose (0.862 (0.677 to 1.098)).

Cite this as: *BMJ* 2015;351:h5038

PNEUMONIA

Borderline patients may benefit from intensive care

Admission of older, low risk pneumonia patients to intensive care is associated with reduced mortality without a considerable increase in costs, research published in *JAMA* has shown.¹ The researchers said that the findings contradicted moves to reduce intensive care unit (ICU) admissions to contain healthcare costs.

Observational studies have previously shown that greater ICU use does not achieve better outcomes, but those results may have been influenced by sicker patients being more likely to be admitted to an ICU.

The retrospective cohort study included more than a million US Medicare beneficiaries over 64 who were admitted with pneumonia to almost 3000 acute care hospitals. Of these patients,

30% (328 404) were admitted to the ICU.

In 13% of patients the decision to admit to an ICU seemed discretionary, depending only on how close they lived to a hospital with a high admission rate. Admission to an ICU among patients in this group was associated with a 5.7% absolute survival advantage at 30 days (a 14.8% mortality rate among patients admitted to an ICU, compared with a 20.5% mortality rate among general ward admissions). Additionally, no statistically significant differences were seen between the two groups in total costs or total Medicare payments.

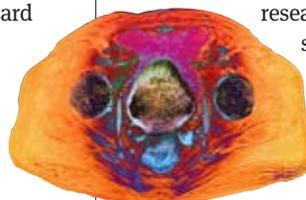
An editorial said that the findings "argue against active efforts to reduce ICU admissions through triage guidelines or bed supply reductions, at least for older patients with pneumonia."²

Cite this as: *BMJ* 2015;351:h5017

PROSTATE CANCER

Androgen deprivation therapy requires caution

Combining androgen deprivation therapy (ADT) and radiotherapy is known to improve outcomes in aggressive prostate cancer, but research published in *JAMA* shows that it should be used with caution in men with coexisting illness.¹ Six months of ADT and radiation therapy is the standard treatment



for unfavourable risk prostate cancer. But a post-randomisation analysis found that men with moderate or severe comorbidity showed no survival benefit from combined therapy.

Altogether, 206 men with unfavourable risk prostate cancer were randomised to receive radiation therapy alone or a combination of radiation therapy and ADT. After a median follow-up of 16.62 years 156 men died: 29 from prostate cancer (19%), 39 from cardiac causes (25%), and 99 from other causes (56%). Among men with moderate or severe comorbidity 46 of 49 died, compared with 110 of 157 with no or minimal comorbidity.

Survival did not differ between the patients who had radiotherapy alone and those who had radiotherapy and ADT.

However, in men with moderate or severe comorbidity, radiation therapy alone versus combined therapy was associated with significantly decreased overall mortality (hazard ratio 0.36 (95% confidence interval 0.19 to 0.67); $P=0.001$) and cardiac mortality (0.17 (0.06 to 0.46); $P<0.001$).

Cite this as: *BMJ* 2015;351:h5043