VIEWS & REVIEWS



Fascination with surgical instruments, p 836

GPs should have to take financial responsibility

PERSONAL VIEW Danny Ruta

hat is the real aim of this white paper, Equity and Excellence: Liberating the NHS, this mother of all policy interventions? For me its ultimate purpose is almost surreptitiously inserted in just one terse bullet point on page 45, perhaps in the hope that it will pass unnoticed all the way to the statute books. It states, "GP consortia will align clinical decisions in general practice with the financial consequences of those decisions." These reforms will fail unless GPs are legally obliged to take financial responsibility for practice budgets.

There it is: to force doctors, once and for all, to consider the opportunity costs of their day to day clinical decisions. I believe that this has been the unstated aim of every major health policy initiative since the mid-1970s. Why? Because only by getting doctors to acknowledge that NHS resources are scarce, that every clinical decision has an opportunity cost, and that they should take financial responsibility for a finite envelope of resources can we shape a state funded healthcare system that reflects the health needs of the population rather than the interests of doctors, primarily hospital doctors, who have always wielded most of the power in the NHS.

GPs who repeatedly fail to live within their means and fail to control their commissioning budget ... must lose the right to continue to work for the NHS

The challenge is essentially to prevent demand induced by suppliers of acute care. All attempts over the past 30 years have so far been unsuccessful. There was policy guidance in the 1970s on the need to reallocate resources to the "Cinderella services," which was no more

than guidance and therefore ignored. This was followed by more robust attempts by the government to challenge the power of acute hospital medicine, with general management in the 1980s, the internal market and general practitioner fund holding in the 1990s, then with clinical guidelines, performance



management, payment by results, and practice based commissioning in the first decade of this century. All attempts failed. Like a singularity in space time, a huge black hole, the gravitational force of demand induced by suppliers continues to draw everything to acute hospitals: patients, staff, buildings, equipment, and more patients.

And so this white paper is trying, finally, to solve the problem at the heart of the NHS by shifting the power from one group of doctors, hospital consultants, to another group, GPs. For reasons that can be traced back to their origins as apothecaries and to the evolution of teaching hospitals in the 18th century that barred them from employment and denied them admitting rights, GPs have always been disempowered in Britain. This transfer of power will be achieved by aligning their clinical decisions to budgetary responsibility for a finite resource envelope, allocated to a population, and risk adjusted for clinical need. In effect the white paper's proposals force the group of doctors whose interests are arguably most closely aligned with the needs of the population to consider the opportunity cost of their clinical decisions so that they can maximise health gain for that population and

reduce health inequalities with the resources available to them.

Will this most radical (some would say revolutionary) policy intervention succeed where all others have failed? Just possibly: but the entire legislative house of cards about to be constructed will come crashing down in an almighty financial heap if one key piece of legislation isn't passed. The government must negotiate with the BMA to impose the ultimate sanction on GPs who repeatedly fail to live within their means and fail to control their commissioning budget: they must lose the right to continue to work for the NHS. If the ultimate financial responsibility is delegated to an "accountable officer" in a general practice consortium, who will be summarily dismissed if the consortium fails, then there is no real incentive for GPs to consider opportunity cost. If the GPs in a consortium fail to manage their practice budget and fail to implement successful remedial measures over a predetermined period of time, they must lose their contract with the NHS.

Competition may provide some added incentives to managing scarcity, but at the level of competition for patients between consortiums, not competition between providers of acute care. Competition between what will start to look like integrated managed care organisations, with patients required to renew their registration with a consortium every two to three years, and with a choice of at least two or three consortiums within a local authority area, could promote efficiency and deliver better clinical outcomes, but only if GPs take financial responsibility for the budget.

If this little detail hidden away on page 45 of the white paper is enforced through revised contracts, the NHS could quickly start to deliver maximum health gain for the resources available and may even do it equitably.

Competing interests: None declared.

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An open letter to the health secretary: how to really save money on the NHS

PERSONAL VIEW Peter Lachmann

Dear Mr Lansley

Your proposals to transfer the role of purchasing NHS services for patients from primary care trusts to general practitioners is appealing in as much as it promises reduction in the excessive bureaucracy arising from the "low trust" culture introduced by the Thatcher reorganisation of the NHS in the 1980s and never reversed. However, as eloquently pointed out by the late Douglas Black-an eminent physician with much experience in government—none of the reorganisations since (and including) those of 1973 have succeeded in improving function by tampering with structure. Indeed they have all done the reverse, because they fail to appreciate that health care should be treated as a service rather than as a business.

However, I imagine that the main aim underlying your proposals is to save money and to provide better healthcare delivery at lower cost; there are, indeed, at least three ways in which this could be done.

Reducing the cost of drugs

The population now believes that drugs have to be absolutely safe and that if anybody comes to harm from them they should seek compensation through the courts. This has led to drugs becoming hugely expensive and very slow to bring into use. It is now estimated that to develop a novel drug costs several hundred millions of dollars and takes 10 years.

About 60% of drug development is taken up by late stage, phase III, trials. Phase I trials to ensure safety and phase II trials to demonstrate efficacy require small numbers. Phase III trials involve large numbers but still cannot detect side effects occurring in less than one in 1000 people. There is a strong case for making drugs available after phase II trials and to rely on post-marketing surveillance for detecting uncommon side effects. This would make drugs much cheaper and available much earlier. It seems likely that phase III trials save fewer lives from avoided side effects than they cause deaths from patients having been denied a valuable drug. Initially this change should be done on a voluntary basis for those patients who sign an appropriate indemnity.

The practice of suing drug companies for adverse effects is generally to be deplored. It does them no financial harm, the expense being

passed on to the consumer. Only lawyers really benefit. Legal redress should be reserved for cases of negligence or other malfeasance.

Furthermore, many drugs are probably never developed because the potential market is too small for all the risks involved.

Reforms in this area could save enormous amounts of money. They are rarely even discussed, and the part of the Cooksey report dealing with this problem was simply ignored by the last government.

Making better use of medical facilities

The maintenance of hospitals and their facilities-including operating theatres, radiology departments with expensive imaging equipment, and pathology laboratories with expensive machines-is all very consuming of capital. It would make much better economic sense to use these facilities seven days a week. 24 hours a day. This would reduce capital expenditure and, in the longer term, the number of hospitals that need to be built. There are, moreover, other advantages. Being taken acutely ill on a Friday night carries a worse prognosis than being taken ill on a Monday night, and a new report shows that babies born "out of hours" face higher risks. The quality of clinical service will therefore benefit as well as its economics. These changes would involve employing more staff per hospital and getting agreement to rather more unsocial hours of work. It would certainly be of great benefit to the NHS.

End of life care

A forbidding statistic produced by the RAND Corporation is that on average between one third and one half of a person's lifetime healthcare expenditure is spent in the last six months of their life, independent of when this occurs. This leads to the inevitable conclusion that no advance in medicine can make health care cheaper; it just postpones the expenditure. The only answer to this is to reduce expensive, interventionist methods that are often undignified and painful when there is no prospect of appreciable gain in quality adjusted life years (QALYs). Medicine needs to adjust to the paradigm that active intervention should be undertaken only in anticipation of improving, or at least maintaining, quality of life

There is a strong case for making drugs available after phase II trials...
This would make drugs much cheaper and available much earlier

and not for prolonging life at all costs. In end of life care the cost per QALY can also not be totally ignored, although the criticism that the National Institute for Health and Clinical Excellence consistently attracts when it makes decisions on this basis shows what a sensitive area this is.

Related to this is the right of patients to have their lives terminated if they so wish. In the UK at present this is legal only if done by withholding treatment or nutrition but is a criminal offence if any active assistance is given. There is a strong argument that, subject to necessary safeguards, people have not only a right to life but also a right to death and that it infringes their human rights to deny them access to ending life painlessly and with dignity if they are minded so to do.

Implementing changes in these three areas would allow health expenditure to be substantially contained, unlike tinkering with management structures, which is more like rearranging the deckchairs on the *Titanic*. Alonger version, including references, is on bmicom.

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REVIEW OF THE WEEK

Objects of beauty and dread

This photoexhibition depicting surgeons and their tools fascinates **Ara Darzi** and **Hutan Ashrafian**

The Dreadful and the Divine

An exhibition by Elaine Duigenan Hunterian Museum, Royal College of Surgeons of England, 35-43 Lincoln's Inn Fields,

London WC2A 3PE Tuesday to Saturday, 10 am to 5 pm, until 23 December

www.rcseng.ac.uk/museums/exhibitions

Rating: ★★★☆

The relationship between doctors and their instruments reflects an intimate bond, forged over millenniums, that is most obvious in the surgical specialties. The ancient obsidian scalpels of the late bronze age in the ancient Near East (4000 years ago), ancient Egypt, and Mesoamerica are associated with functional facets of patient care in addition to a ritual element of divine art. The latest surgical robots (such as Intuitive Surgical's da Vinci System), may seem superficially different but take similar inspiration from artistic design to portray exactitude, precision, and safety. And the next generation of surgical robots are derived from the art of nature, for example, flexible access, bioinspired platforms derive from the shape of

The current exhibition at the Royal College of Surgeons of England explores this interaction between surgeons and their tools. The college's artist in residence, Elaine Duigenan, has drawn from the Hunterian Museum's rich collection of surgical instruments and combined these

with pictures taken at dissections of cadavers. The divine aspect of her work is accentuated by the route to the gallery, which requires viewers to go on an elating journey through the varied passages of the museum's collection of preserved natural specimens.

The entrance to the crypt-like exhibition sets a mood with its bright lights and silhouettes of surgical tools. Among the first of her pieces, Duigenan presents a photograph of the exploration of a cadaveric wrist, where the flexor tendons of the forearm are clearly shown. The picture is a composite of two mirror images, conveying a heightened sense of symmetry—sometimes a concern in patient care but also a source of surgical satisfaction.

The picture of a surgeon teaching other surgeons working on a cadaver is reassuring and alludes to the broader theme of equipping the next generation of doctors with the knowledge to cure. This is explored further in the piece *Heal Thyself*, where instruments hang in a sword of Damocles style configuration, which epitomises our ever present responsibility as surgeons. In the bottom corner is a lone tendon hook, an instrument that is still in use today but that comes to us from at least a heritage of two millenniums. Sushruta, the Indian father of plastic surgery, demonstrated this instrument in 600 BC.

Further pictures show historical surgeons' carry cases, whose instruments have left a lasting impression on their velvet interiors. Today's



A cut in the palm of the glove reminds us that we ourselves may require healing and highlights a readily forgotten point: the glove itself is one of our most important tools

Western surgeons rarely carry their instruments with them. That's because staff, anaesthesia, electricity, and audiovisual integration are all fundamental to even basic operations such as laparoscopic appendicectomy and cholecyctectomy. This situation might, however, be reversed, as many future technologies (such as miniature robots) could allow easy transportation in addition to scarless techniques and only minimal tissue trauma.

Several mirror print photographs are visually stunning but also provocative in their portrayal of hands and instruments used in obstetrics and gynaecology. In *Protection* Duigenan's gloved hands are clasped and surrounded by some early obstetric forceps from the college's collection. The hands might represent the tactility and dexterity of our profession, and the metallic, engineered forceps express the design and engineering that is integral to our specialty. This piece reminds us that the manufacture of surgical tools is in no way less sacred than, for example, the ancient process of forging samurai swords.

The exhibition ends with a gloved hand taking the shape of ulnar nerve palsy, resembling the shape of a priest's hand conferring a blessing. This alludes to divine healing and faith. The palsied image is also a metaphor for our own mortality and illness. A cut in the palm of the glove reminds us that we ourselves may require healing and highlights a readily forgotten point: the glove itself is one of our most important tools. It exists in all our operations and allows us the highest levels of perception, versatility, and haptic feedback. And it offers patients and surgeons safety despite the proximity of their tissues.

Duigenan's work provokes refreshing messages about surgery and its instruments. This exhibition will inspire all those interested in innovation or those who want to appreciate the purity of working within a craft discipline. Hutan Ashrafian clinical lecturer in surgery, Imperial College London h.ashrafian@imperial.ac.uk

Ara Darzi professor of surgery, Imperial College London Cite this as: *BMJ* 2010;341:c5620

Hypochondria as control

Illness, or at least what sociologists used to call "illness behaviour," is one way people have of controlling one another. For example, I once knew a woman who claimed to be allergic to practically everything. The only water that she could allow to touch her skin was from a certain spa in Germany, and so her husband had to buy huge quantities of it for her to bathe in. As they were living in a remote part of the African bush at the time, this kept him so busy-importation was far from easy-that he had

little time or energy left over for the activities to which he was reputed to be inclined.

There is a very similar description of the use of symptoms to control someone in the first short story, "Chawdron," in Aldous Huxley's 1930 collection, *Brief Candles*. Chawdron is an oil magnate of doubtful honesty who has made an immense fortune (about £100m in today's money) from the New Guinea Oil Company. Chawdron has just died of heart failure; and his amanuensis, an unsuccessful writer called Tilney who has ghosted his autobiography, relates his relationship with a woman whom Chawdron called Fairy but whose real name was Maggie Spindell.

Miss Spindell wrote to Chawdron, claiming some kind of affinity with him; he met her and one thing led to another. As is so often the case in such instances, the balance of power changed rather quickly. Miss Spindell, alias Fairy, soon discovered headaches as sovereign means by which to attract and keep Chawdron's attention. "She had headaches for the same reason as a baby howls. If you give in to the baby and do what it wants, it'll howl again, it'll make a habit of howling."

The narrator of the story, Tilney's interlocutor, asks whether the headaches were purely imaginary. The answer is such as

BETWEEN THE LINES

Theodore Dalrymple



"It was infinity in a grain of sand and eternity in an intestinal stasis. Regularly every Tuesday and Friday she died—died with a beautiful Christian resignation, a martyr's fortitude"

uncorrected myopia. Her body made her a present, so to speak, of the pain."

a doctor might give,

though with more up

to date physiology:

"Yes and no. There

was certainly a physi-

ological basis. The

woman did have pains

in her head from time

to time. It was only to

be expected; she

was run down,

through not eat-

ing enough; she

didn't take sufficient

exercise, so she had

chronic constipation;

chronic constipation

probably set up a slight

chronic inflammation

of the ovaries; and she

certainly suffered from

eye-strain-you could

tell that from the beau-

tifully vague, spiritual

look in her eyes, the

look that comes from

But this was only the beginning. "Her mind then proceeded to work up this raw material. Into what remarkable forms! Touched by her imagination, the headaches became mystic, transcendental. It was infinity in a grain of sand and eternity in an intestinal stasis. Regularly every Tuesday and Friday she died—died with a beautiful Christian resignation, a martyr's fortitude. Chawdron used to come down from the sick-room with tears in his eyes. He's never seen such patience, such grit. There were few men she wouldn't put to shame."

There is one slight problem with this satirical portrait of the hypochondriac that I am not sure whether Huxley notices. Asked what became of Miss Spindell, Tilney says, "She retired to her mystic death-bed once too often... She really did die."

As she was a young woman, is it not likely that there was something wrong with her all along? This is a story to stir the fear of every doctor who has ever been irritated by a hypochondriac—that is to say, every doctor.

Theodore Dalrymple writer and retired doctor Cite this as: *BMJ* 2010;341:c5627

MEDICAL CLASSICS

Acland's Video Atlas of Human Anatomy by Robert D Acland

First released 1995

The decline in basic knowledge of anatomy is an area of widespread concern in the UK undergraduate and postgraduate medical curriculums. Robert Acland's video atlas series represents a powerful force against this perceived dumbing down and has set about reinvigorating the subject through its crystal clear presentation of human anatomy. Broken into six volumes, the atlas covers the body in its entirety, with sections on the upper limb, lower limb, abdomen, and spine and thorax, and two on the head and neck.

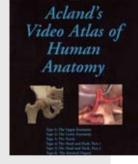
After title sequences set to classical music the viewer is guided by the softly spoken curator without the unnecessary flamboyant showmanship that people such as Gunther von Hagens have more recently injected into modern anatomical discourse. Instead this professor of plastic and reconstructive surgery displays a cool precision that reflects his job as a microsurgeon at the University of Louisville School of Medicine, Kentucky.

The specimens are instead the real stars, with first rate dissections exquisitely presented to the audience. Bringing the dissection room into your living room was not a simple task for the production team, and the voiceover is perfectly synchronised with the images shown. Each minute of footage took a staggering 12 hours to produce, and overall its understated elegance deserves to be celebrated.

The intuitive choreography allows you to grasp concepts

and visualise anatomical relations otherwise impossible outside the dissecting room. The simple premise of rotating the specimen allows you to memorise features in spatial or three dimensional form, as you would in conventional cadaveric dissection.

Although only ever intended as an adjunct to formal teaching, it's difficult to find fault with this video series. It was initially recommended to me for preparation for the examination for membership of the Royal College of Surgeons. The simplicity of expression and deft camera work allow an



efficiency that is welcome before examinations. Additionally Professor Acland places great emphasis on recapping anatomy that may serve as a spot test after a chapter to test your learning if you turn the sound down.

The atlas was initially released in VHS format in 1995. Now the DVD version offers an excellent revision medium for surgical trainees, medical students, or anyone with an interest in human anatomy. The focus of the series is not just on obtaining raw knowledge, because learning lists from a book would surely be a better alternative. Rather the atlas promotes a deeper and more clinically useful understanding of the human body. This groundbreaking video series signified the beginning of a new era in presenting and teaching human anatomy.

See http://louisville.edu/medschool/atlasofanatomy/sample-clips for sample clips.

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Bad medicine: polycystic ovary syndrome

FROM THE FRONTLINE **Des Spence**



About a third of the female population is estimated to have polycystic ovary syndrome, a condition often still called polycystic ovary disease or its scary Teutonic ancestor, Stein-Leventhal syndrome (BMJ 2009;338:a2968). It is linked to infertility, is considered a metabolic prediabetic syndrome, and is linked with oestrogenic tumours of the breast and endometrium. The syndrome is widely treated, and drugs such as metformin, rosiglitazone (now recognised to have adverse effects), and simvastatin have been used. It has filled many a column inch and sold millions of magazines by using the old stalwart, fear. The diagnosis, often made in young women presenting with oligomenorrhoea and on the basis of a solitary biochemistry profile, has made women anxious, paranoid, and unhappy and has undermined their sexuality. But is it a legitimate diagnosis or, with such a high reported prevalence, merely a variant of normality?

A consensus workshop in Rotterdam in 2003 tried to rationalise the diagnosis (*Human Reproduction* 2004;19:41-7). But this was the traditional conflicted approach: a small group of vested interest specialists, sponsored by a special interest endocrinology group and a company that manufactured drugs used in this condition. So the diagnostic definition is a combination of polycystic ovaries (although this is not necessary a feature), raised testosterone (although this is not necessary a feature, and there is no agreed normal

range in women), hirsutism (although this is not necessarily a feature), raised body mass index (although this is not necessary a feature), and oligomenorrhoea (a highly subjective symptom, especially in these days of the regularity tyranny of hormonal contraceptives). The diagnosis of polycystic ovary syndrome is a mess. And the evidence base on the complications is even worse.

No evidence exists that the syndrome increases the risk of cardiovascular disease, just the usual statistical abuse of soft surrogate end points (*Endocrine Reviews* 2003;24:302-12). The risk of ovarian and breast cancer is overstated, and there is no evidence that intervention alters this risk anyway (*Fertility and Sterility* 2010;94:1787-92). Even with infertility—the main anxiety of the young—there is no significant effect in comparison with controls, with a pregnancy rate of 87% in women in their 40s (*Human Reproduction* 2008;24:1176-83). And if we want to be honest about fertility we need to suggest that couples simply have children at a younger age.

We can help women with these symptoms and much else through modification of lifestyle. But to suggest that polycystic ovary syndrome is either an endocrine or metabolic disorder is simply wrong. Women have the right to be free of this diagnosis: it is bad science and bad medicine.

Des Spence is general practitioner, Glasgow **destwo@yahoo.co.uk** Cite this as: *BMJ* 2010;341:c5669

There in black and white

DRUG TALES AND OTHER STORIES **Ike Iheanacho**



Say you wanted to keep a casual eye on what the drug industry was up to: where could you look? For the enthusiast, there's a myriad trade publications, websites, news feeds, and blogs to cater to this need. These, though, may hold little appeal for healthcare professionals, who'd rather remain amateurs in this area.

They might try instead general medical journals. But coverage there tends to be tangential and, sometimes, distorting, through its selective focus on individual drugs or conditions. And where the industry, rather than its produce, is the subject, this is often to highlight alleged bad behaviour. Less emotive accounts of current activity can be much harder to find. Anyway, scouring journals for this stuff will strike many as way too much effort for maintaining an interest that's not essential for everyday practice.

There's another, easily overlooked source readily available to most people: the business pages of

newspapers, particularly broadsheets. These provide a wealth of information, analysis, and comment on the industry.

It's not just the share prices of companies. There are also the snippets on how drugs under development are faring in research. The "watch this space" alerts on products performing well are countered by funeral notices for those drugs that disappear in the wake of underwhelming data. Despatches on skirmishes between companies and drug regulators can also be illuminating, as can details on when companies are racing each other to the market or competing once they're there. And, conversely, it's fascinating to get some sense of the fluidity and flexibility of the industry from seeing reports of where companies work together formally, ranging from cooperation on particular treatments to full blown mergers and acquisitions.

This sort of information is crucial

in forming a balanced view of the industry and its operations. And there it is, in succinct, manageable format, often long before it becomes common knowledge among clinicians (if, indeed, this ever happens).

Of course, newspaper articles, especially at the more speculative, gossipy end, need to be considered as sceptically as other publications. And some readers may find that the coverage majors too heavily for their liking on the interests of one group, namely shareholders.

Other parts of a newspaper might well acknowledge and echo concerns of patients and healthcare professionals. But the business section sees the world through a very different prism—one that typically shows the drug industry as a business behaving like, of all things, a business.

Read all about it.

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