

News in Brief

“This has the potential for doing to the US healthcare system what the Japanese auto industry did to American carmakers.”

- Princeton healthcare economist Uwe Reinhardt, on the impact of medical outsourcing.

OUTSOURCING YOUR HEART

Bumrungrad Hospital in Bangkok, with its marble floors, liveried bellhops, fountains and restaurants, resembles a grand hotel more than a clinic. Described as a mecca of medical trade, it is attracting hordes of medical tourists, a large percentage of which now hails from the United States (US).

US hospitals could certainly do with a little global competition. For years, their share of the national healthcare bill has grown at a rate far faster than inflation, and today they gobble up a third of all medical expenditures. At current rates, the US will be spending \$1 of every \$5 of its GDP on healthcare by 2015, yet more than one in four workers will be uninsured.

With more American insurance companies and self-insured major corporations taking a serious look at medical outsourcing, Asian countries which offer high-quality care at cut-rate prices – for example, Thailand, India, Malaysia and Singapore – are being offered to clients and employees, sometimes with the added incentive of sharing in savings garnered from the outsourcing.

Excerpts from a cost comparison table:

Procedure	US insurer's cost	US retail cost	India	Thailand	Singapore
Angioplasty	\$25,704- \$37,128	\$57,262- \$82,711	\$11,000	\$13,000	\$13,000
CABG	\$54,741- \$79,071	\$122,424- \$176,835	\$10,000	\$12,000	\$20,000
TKR	\$17,627- \$25,462	\$40,640- \$58,702	\$8,500	\$10,000	\$13,000
Mastectomy	\$9,774- \$14,118	\$23,709- \$34,246	\$7,500	\$9,000	\$12,400

Quality of care is ensured through accreditation from the Joint Commission International (JCI), the global arm of the institution that accredits most US hospitals. In addition, many of the tourist hospitals team with surgeons who have trained in America or Britain. For instance, Escorts Heart Institute and Research Centre in New Delhi was founded by an authority on robotic cardiac surgery, Dr Naresh Trehan, formerly of New York University.



Incidentally, Trehan plans to launch his vision of the “Mayo Clinic of the East” next year, in the form of a \$250 million specialty Escorts hospital complex near Delhi featuring luxury suites, a hotel and swank restaurants.

However, there are those who may balk at travelling across the world for a procedure, especially to developing nations like India, where children pick through garbage just outside the hospital doors. And good luck to the litigious-minded – India’s malpractice laws limit damage rewards, one of many reasons healthcare is significantly cheaper.

(Source: Time Magazine)

VACCINE AGAINST WEIGHT GAIN?

A group led by Kim Janda at the Scripps Research Institute reports that a vaccination approach may be used to treat obesity.

Janda’s group studies ghrelin, a naturally occurring endogenous agonist of the growth hormone secretagogue receptor (GHSR). The GHSR was originally identified in 1988 as an “orphan receptor” for which only synthetic agonists were available.

Ghrelin and adenosine were subsequently identified as GHSR agonists. Both agonists stimulate feeding in rats but only ghrelin stimulates growth hormone release. Knockout mice deficient in the ghrelin receptor GHSR appear to have normal appetite and body habitus. Chemical depletion of circulating ghrelin in the blood is sufficient to abrogate its CNS effects.

Janda et al vaccinated adult rats against ghrelin. Rats with an immune response against the active form of ghrelin demonstrated preferential reduction of body fat with sparing of lean mass. Food intake was unchanged in all testing groups.

While this finding opens new possibilities for obesity treatment, the vaccine has not yet been tested in humans. It remains to be seen whether there are long-term health consequences to inducing what is essentially an autoimmune condition.

(Source: PNAS (2006) early online print 10.1073/pnas.0605376103; PNAS (2004) 101:4679-4684; PNAS (2004) 101: 13174-13179)

A SHOCKING TRUTH REVEALED

A report from the Institute of Medicine states that medication errors injure more than 1.5 million Americans every year, with hospitalised patients suffering, on average, at least one such error per day.

The probe did not say how many of the injuries are serious or how many victims died, but a 1999 estimate puts deaths, conservatively, at 7,000 a year. Even the total injury estimate is conservative, as it only includes drug errors in hospitals, nursing homes and among Medicare outpatients, with no mention of mix-ups in most doctors' offices or by patients themselves.

Causes cited range from bad handwriting and confusion caused by similar-sounding medications to poor patient education and lack of an adequate medical database.

One study found parents gave their children the wrong dose of over-the-counter fever medicines 47% of the time, while one story describes how an asthmatic "used" his inhaler by squirting two puffs into the air then trying to breathe the mist.

But if all else fails, economic drawbacks should trigger some action. The report estimates that a serious drug error can add more than \$5,800 to a patient's hospital bill. That adds up to \$3.5 billion a year assuming that hospitals commit just 400,000 preventable drug errors.

(Source: CNN Health)

NEW ALZHEIMER'S DISEASE TREATMENTS

Novartis Pharmaceuticals Corp unveiled its Exelon skin patch at a recent Alzheimer's meeting in Spain, and is poised to seek US sales approval by year's end. Applied once a day, it delivers the drug – which inhibits the breakdown of acetylcholine – directly into the bloodstream, bypassing the gastrointestinal tract and reducing side effects while maintaining a constant day-long dose.

About 4.5 million Americans have Alzheimer's, a toll expected to reach a staggering 14 million by 2050 with the graying of the population.

Two other experimental treatments aim to fight the buildup of beta-amyloid, a sticky protein which forms clumps in brain tissue, impairing cell function. One is leuprolide, an anti-hormone drug currently used to treat prostate cancer and uterine disorders, from Voyager Pharmaceutical Corp. The other is an immunological combination of antibodies and a vaccine alternative which hope to induce amyloid clearance, from Eli Lilly & Co and Elan Corp respectively.

(Source: CNN Health)

\$1.5 BILLION PACKAGE FOR CLINICAL AND TRANSLATIONAL RESEARCH

National Research Foundation chairman Dr Tony Tan has announced a \$1.5 billion package for

Singapore's biomedical sciences sector over the next five years, to boost healthcare standards and clinical research capabilities.

Speaking at the KK Women's and Children's Hospital annual lecture and dinner, Dr Tan noted that one key objective (among others) is to translate Singapore's basic biomedical science discoveries into drugs, methods and therapies. This would be one way of keeping Singapore's competitive edge, given that many nations such as Thailand, India and China can increasingly offer "First World medical capabilities at Third World prices".

(Source: The Straits Times 30 July 2006)

MORE TOP FOREIGN MEDICAL SCHOOLS TO BE RECOGNISED

With effect from 1 August 2006, the Ministry of Health and the Singapore Medical Council will include an additional 20 foreign medical schools to the Medical Registration Act's Schedule of recognised institutions. These include medical schools from Canada, India, Israel, Japan, South Korea, Spain and the US. This follows a previous decision in early 2006 to increase the number of recognised foreign medical schools from 71 to 100.

(Source: MOH website press release 27 July 2006)

THE BIRD FLU CODE

Indonesia announced that its H5N1 bird flu death toll had hit 42 as of Monday 17 July 2006, following confirmation by a World Health Organisation (WHO) laboratory. The victim was a 3-year-old girl.

This follows on a call by scientists for greater transparency by international and domestic health authorities in declaring the genetic sequencing results of H5N1 samples from patients. A cluster of H5N1 cases earlier this year in Kubu Sembelang, in northern Sumatra, was notable for the possibility of human-to-human transmission.

As of early July 2006, virus isolates from six of the eight victims had been sequenced, but the WHO had not released the data, saying that they belonged to local authorities. The WHO released a statement on 23 May 2006 stating "no evidence of genetic reassortment with human or big influenza viruses and no evidence of significant mutations".

The international scientific journal *Nature* has since obtained information showing that mutations accumulated with successive spread within the cluster. According to *Nature*, one mutation also conferred resistance to the antiviral drug amantadine, a fact not mentioned in the WHO statement. *Nature* reports that the data were presented by Malik Pereis, a University of Hong Kong virologist, at a meeting of international experts in late June. *Nature* concluded that while the WHO statement was not incorrect, more information could have been disclosed.

(Sources: Straits Times Online; Nature (2006) 442:114-115, published online 12 July 2006)

◀ Page 35 – News in Brief

SHARING THE BIRD FLU CODE

Scientists at the United States Centers for Disease Control (CDC) have placed the genetic sequence data of about 40 Indonesian H5N1 bird flu virus cases into a public access database.

This move came after the Indonesian government told the World Health Organisation that it was willing to share the genetic sequences of all H5N1 viruses isolated from humans there.

Dr Nancy Cox, director of the CDC's influenza division, was quoted as saying she hoped that the Indonesian decision would spur other countries to share the genetic sequences of H5N1 viruses they have collected.

(Source: Canadian Press News Service (CP), 7 August 2006)

WHAT'S IN A NAME? NOMINATIVE ATTRACTIVENESS AS MARKER OF EFFICACY?

In a letter to the *New England Journal of Medicine*, Stanbrook and colleagues systematically reviewed a group of randomised trials. Of the 173 studies, 34% were named with an acronym. Compared to studies without acronym names, those with acronyms had higher methodological quality scores and enrolled five times as many patients. They were four times as likely to be funded by the pharmaceutical industry.

Acronym-named randomised trials were cited two times as often compared to non-acronym trials.

(Source: NEJM (2006) 355:101-102)

ASIAN SARS RESEARCHER HONOURED WITH FELLOWSHIP OF ROYAL SOCIETY

Professor Malik Peiris, Chair in the Department of Microbiology at the University of Hong Kong, has been elected a Fellow of the Royal Society, in recognition of his research in human viral infections that cause respiratory disease. His team was one of three that discovered the SARS coronavirus and ascertained the clinical progression and recovery from disease, in respect to pathology and viral load. A Sri Lankan by origin, Professor Peiris has also made significant contributions to the study of H5N1 avian influenza and the role of antibody enhancement in Dengue and West Nile virus infection.

The Royal Society, founded in London, is one of the world's most prestigious scientific societies. Fellows are elected on the basis of scientific excellence. Granted the designation "FRS" after their names, the current living Fellows include 20 Nobel laureates. Current fellows include Stephen Hawking (cosmology), Paul Nurse (Nobel for work on cell cycle), John Sulston (Nobel laureate who also worked on the human genome project) and Kenneth Arrow (Nobel laureate economist). ■

(Sources: BBC News Online; Royal Society website – www.royalsoc.ac.uk)