



REUTERS/Navesh Chitrakar (NEPAL)

Workers bury culled roosters infected by H5N1 bird flu virus at a poultry farm at Bode in Bhaktapur, Nepal, earlier this month. The District Administration Office declared an emergency in the area after the outbreak of bird flu was confirmed at this farm. The World Health Organization reports 19 human deaths from avian influenza A(H5N1) worldwide so far this year (http://www.who.int/influenza/human_animal_interface/en/).

From the Australian Commission on Safety and Quality in Health Care

Guides for safe e-health systems in hospitals

The Australian Commission on Safety and Quality in Health Care (ACSQHC) has published two sets of documents to guide safe implementation of electronic medication management (EMM) and electronic discharge summary (EDS) systems in hospitals. The guides were built “bottom up” from the literature and from experience in Australian hospitals.

The *Electronic discharge summary systems self-evaluation toolkit* takes hospitals through the process of implementing and evaluating a system to ensure safe handover for patients being discharged from hospital. Its development was informed by the literature and a series of on-site interviews, studies and workshops. It is available on the ACSQHC website (<http://www.safetyandquality.gov.au/our-work/clinical-communications/resources>) along with two reference documents — a literature scan, and an EDS system evaluation report describing the lessons learnt from implementation, the system’s benefits and potential safety and quality

issues. A newly revised and validated edition of the toolkit will be available on the website in December this year.

Electronic medication management systems: a guide to safe implementation provides guidance for hospitals introducing computerised prescribing, supply and administration of medicines. The ACSQHC produced the guide with the National E-Health Transition Authority and Australian hospitals already using EMM systems. It advises on how to select and implement an EMM system, and comes with an implementation planning template. A second edition was published in May 2012 (<http://www.safetyandquality.gov.au/our-work/medication-safety>) and a summary of the requirements of more specialised functions — renal dialysis, infusions and fluid balance, paediatrics and oncology — was published concurrently.

As shown by the reviewed literature and the experiences of hospital personnel implementing medication

AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

systems, careful preparation for the introduction of an EMM system is crucial to its success. Executive support, clinical leadership, and well developed communications and training planning are essential elements. Many hospitals will need to provide more computers for clinical staff to enable prescribing and medication administration. Some hospitals have invested in COWS — computers on wheels — for bedside prescribing on ward rounds and medication administration by nurses, while “tablets” clearly offer great potential to support highly mobile hospital clinicians. Secure wireless access to the clinical systems network will also enhance the integration of clinical practice and legible documentation with decision support, laboratory results and online order entry.

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Safety in e-health,
Australian Commission
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News

Cancer burden growing in developing nations

Radical improvement in cancer prevention and treatment is needed in developing countries, which are facing a growing cancer burden, according to research published in *The Lancet*. Using disability-adjusted life-years (DALYs), the researchers found that more than 169 million years of healthy life were lost to cancer worldwide in 2008. Developing nations had a consistently larger proportion of years of life lost to cancer than developed countries, indicating that inequalities in prognosis after diagnosis were related to a country's level of development. In an accompanying commentary, the authors wrote that the burden in developing countries was partly due to population ageing and growth, as well as the marketing-driven adoption of unhealthy lifestyles, such as tobacco use and consumption of high-calorie food. There had also been limited progress in the reduction of infection-related cancers, they wrote. The international study comes after the Australian Institute of Health and Welfare reported a marked increase in cancer survival in Australia. The five-year survival for all cancers combined increased from 47% in 1982–1987 to 66% in 2006–2010, according to the report. Prostate cancer, kidney cancer and non-Hodgkin lymphoma showed the largest gains in survival over this time, while cancers of the lip, larynx and brain, and chronic lymphocytic leukaemia did not show any significant changes in survival in the same period.

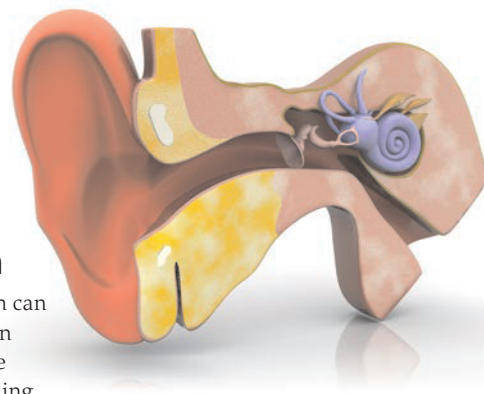
The Lancet 2012; 16 October (online)

Australian Institute of Health and Welfare 2012. *Cancer survival and prevalence in Australia: period estimates from 1982 to 2010*

Aid for detecting otitis media with effusion

A simple visual sign can help in the detection of paediatric middle ear effusion, according to research published in the *Archives of Otolaryngology*. In an observational study, 76 children who were about to undergo myringotomy were examined for the presence or absence of the "spoke sign" — a dull grey appearance of the tympanic membrane with engorged vasculature resembling the spokes of a bicycle wheel covering at least half the inferior membrane. The sign was present in all ears with middle ear effusion, and only five of 69 ears without effusion, making it a sensitive and specific marker for the condition. The spoke sign required only quick visual inspection and could augment otoscopy to improve diagnostic accuracy, the researchers wrote. However, they added that it was not intended to replace pneumatic otoscopy. Training in evaluating the tympanic membrane would be needed before the spoke sign could be incorporated into clinical practice as a diagnostic aid, they wrote.

Arch Otolaryngol Head Neck Surg 2012; 15 October (online)



From the MJA archives

MJA 1949; 17 September (edited extract)

The use of urethane in leukaemia

Urethane (ethyl carbamate $\text{NH}_2\text{COOC}_2\text{H}_5$) has been known for many years. It has been used in experimental physiology as a hypnotic for cats, and in surgery, together with quinine, as a sclerosing agent for varicose veins.

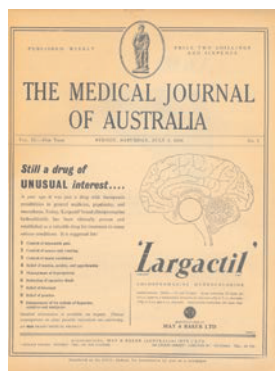
In 1946 Haddow and Sexton noticed a depression of the leukocyte count while experimenting with esters of carbamic acid in the treatment of tumours in animals. This suggested the trial of urethane in human patients with leukaemia. Paterson and colleagues reported the use of urethane in the treatment of 32 patients with leukaemia in the United Kingdom. Nineteen of their patients had myeloid leukaemia; of these, 10 were benefited.

Urethane became available in 1948 at the Royal Prince Alfred Hospital in Sydney, Australia, and was used to treat leukaemia. No favourable results occurred in any of our cases. In all three cases — two

of chronic myeloid leukaemia and one of chronic lymphatic leukaemia — toxic effects were marked.

In conclusion, we feel that urethane has little place, if any, in the treatment of terminal cases of leukaemia. Its nauseating action gravely interferes with the nutrition of the patient, who is usually poor in appetite and often emaciated. We feel that it would be far better in such cases to try, by giving blood transfusions frequently and by administering protein hydrosylates by mouth, to improve the patient's condition to allow a course of deep x-ray therapy.

Ian Collins



Postsurgical risks linked to muscle relaxant use

The use of intermediate acting neuromuscular blocking agents during anaesthesia is associated with an increased risk of respiratory complications, according to US researchers who have called for a review of strategies used to prevent residual postoperative neuromuscular blockade. The large, prospective, propensity score-matched cohort study, published in the *BMJ*, compared outcomes for 18 579 patients who received neuromuscular blocking agents with the same number who did not, and found that the use of these agents increased the risk of postoperative desaturation (haemoglobin oxygen saturation <90% with a decrease in oxygen saturation after extubation of >3%), and of reintubation requiring unplanned admission to an intensive care unit. Qualitative monitoring of neuromuscular transmission did not decrease this risk and neostigmine reversal increased the risk of respiratory complications. An editorial in the same issue cautioned that the study's findings may have been influenced by confounding factors such as the type and duration of surgery, the physical characteristics of the patients and clinician-related variables. "It would be a mistake to conclude that current recommended clinical practice should change on the basis of the findings of this one study, however large and well executed", the authors said.

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