In brief



A Kenyan woman has her eye examined with a new smartphone application called Peek Vision, at a temporary clinic for 5000 patients just west of Nairobi. The new app enables doctors to give patients a full eye examination using a smartphone, which performs cataract imaging and basic tests for acuity, visual fields, contrast and colour, and uses the phone's flash to illuminate the fundus for signs of retinal disease. It also geotags and sends all data recorded from a patient to a doctor for analysis.

From the NHMRC

The National Health and Medical Research Council and open access

The National Health and Medical Research Council (NHMRC) supports the worldwide open access movement being embraced by leading funding agencies. Research outcomes of publicly funded health and medical research should be publicly available as soon as possible in order to deliver maximum benefits to society.

This does not mean that the NHMRC requires publication in particular types of journals. Green Open Access (where accepted versions of manuscripts are made available in a public repository) and Gold Open Access (where final published versions are made publicly available at no charge to the reader) are both acceptable. Authors should decide the most appropriate mode of dissemination to

suit their particular needs.

The NHMRC's Open Access Policy now requires that all articles published in peer-reviewed journals that are based on research funded by the NHMRC are made publicly available within 12 months of publication. This policy came into effect on 1 July 2012, and the NHMRC expects that articles published in journals since that date will start to be made publicly available from 1 July 2013.

Articles can be made available through the peer-reviewed journal itself, a publicly available repository or an institutional repository. Most NHMRC administering institutions (those that administer funding provided by the NHMRC) now have institutional repositories, or



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can use the repositories of affiliated institutions.

The NHMRC is currently working with the National Library of Australia, the Council of Australian University Librarians, and PubMed Central to facilitate efficient data management, reporting and access to the publications. The NHMRC has now updated its website to provide a clear description of its Open Access Policy, including instructions to guide researchers.

New business models incorporating sustainable open access systems are being explored by journals and publishers for the long term. Sharing of research information paid for by the public for the public is gaining momentum, and the open access movement is here to stay.

Declining brain death rate impacts organ donation

The proportion of patients with brain injury who progress to brain death is decreasing, with implications for organ donation rates, says research in the *CMAJ*. A cohort of 2788 consecutive adult patients with traumatic brain injury, subarachnoid haemorrhage, intracerebral haemorrhage or anoxic brain injury admitted to regional intensive care units in southern Alberta, Canada, between 1 January 2002 and 30 June 2012 were assessed. At the start of the study period the proportion who progressed to brain death was 8.1%. The decreased death rate was seen



when the data were assessed by 3.5-year periods (1 January 2002 to 30 June 2005: 6.1%; 1 July 2005 to 31 December 2008: 3.4%; 1 January 2009 to 30 June 2012: 2.8%). The authors suggested the decrease may reflect "positive societal and health care system developments in injury prevention and care" such as seat belts, air bags and bicycle helmets. But the decline also coincides with stagnant or declining rates of deceased donor organ donation.

CMAJ 2013; 28 October (online). doi: 10.1503/cmaj.130271

VTE risk in children climbs from age 16

The risk of children and adolescents developing venous thromboembolism (VTE) following trauma increases "dramatically" at age 16 years, following a smaller increase in risk at age 13 years, according to research in JAMA Surgery. Participants included 402 329 patients aged 21 years or younger who were admitted following traumatic injury between 1 January 2008 and 31 December 2010 at US trauma centres participating in the National Trauma Data Bank. VTE was diagnosed in 1655 patients across all age groups under 21 years (0.4%). The risk of VTE was 0.1% in those aged 12 years or younger, 0.3% in those aged 13 to 15 years and 0.8% in those 16 years or older. The differences between age groups remained significant even after adjusting for other risk factors. An accompanying commentary said in the absence of national guidelines for VTE prophylaxis in paediatric and adolescent trauma settings, the research was "a great contribution".

JAMA Surg 2013; 30 October (online). doi: 10.1001/jamasurg.2013.3558; 10.1001/jamasurg.2013.3563

Safety checks suffer in expedited drug approval

Expedited approvals of drugs and weak enforcement of postmarketing studies are raising questions about the Food and Drug Administration's evaluation of the safety of new drugs, says research in JAMA Internal Medicine. The authors reviewed development times, clinical testing, postmarket follow-up and safety risks for the 20 drugs - eight with expedited review and 12 with standard review — approved by the FDA in 2008. They found expedited review (ER) drugs took on average 5.1 years from development to market approval, compared with 7.5 years for standard review (SR) drugs; ER drugs were tested on a median study population of 104 patients versus 580 for SR; and the FDA required 85 commitments to postmarketing studies for 19 out of the 20 drugs, of which only 26 (31%) had been completed by January 2013. An accompanying commentary said: "It is concerning that the FDA may alter the terms of the implicit approval contract with pharmaceutical manufacturers, that is, less clinical testing of drugs before approval with quicker review in exchange for more reliable and rigorous postapproval testing, and not enforce the postapproval requirements as it should."

JAMA Intern Med 2013; 28 October (online). doi: 10.1001/jamainternmed.2013.11813; 10.1001/jamainternmed.2013.9202

From the MJA archives MJA 1953; 23 May (edited extract)

Physical medicine and obesity

It has been estimated that the average man, if he is to lose one pound of fat, would need to climb to the top of the Washington Monument (555 feet) 48 times, or walk at least 36 miles at the rate of approximately three miles an hour. In fact, the amount of vigorous exercise required to achieve any appreciable reduction in weight is so great that such a regimen not only is very difficult, but also may be dangerous. According to Frank Krusen of the American Medical Association, "Proper reduction of the intake of food is the only logical method of reducing weight". Most

people who eat too much can be quite sincere when they say, "Oh doctor, I eat like a bird"; the reply of a friend of Krusen's, "yes, like a vulture", may be, in a sense, true, but it is kinder and more helpful to get these people to realize just how much they do eat. As Krusen states, "the best exercise for reducing is a rapid movement of the head from right to left when the mashed potatoes and gravy are passed".

Global burden of strokes on the rise

The global burden of strokes has increased, especially in low- and middle-income countries (LMICs), and particularly in young and middle-aged adults, says research in *The Lancet*. The authors conducted a systematic review and identified 119 studies (58 from high-income countries [HICs] and 61 from LMICs). From 1990 to 2010, the age-standardised incidence of stroke significantly decreased by 12% in HICs and increased by 12% in LMICs. Mortality rates decreased significantly worldwide. However, by 2010, there had been a significant increase in the absolute numbers of people with first stroke, stroke survivors, stroke-related deaths, and disability-adjusted life-years (DALYs) lost since 1990 (by 68%, 84%, 26%, and 12% respectively). Most of this increased burden occurred in LMICs. The proportion of people aged 20 years or younger, and of those aged 20 to 64 years, affected by stroke increased significantly, the great majority of cases in LMICs. "If these trends in stroke incidence, mortality, and DALYs continue, by 2030 there will be almost 12 stroke deaths, 70 million stroke survivors, and more than 200 million DALYs lost globally", the authors concluded. Lancet 2013; 24 October (online). doi: 10.106/S0140-6736(13)61953-4

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