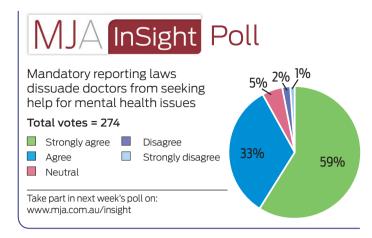


An electronic patient chart is shown on the wall of a hospital room at the newly constructed Kaiser Permanente San Diego Medical Center in San Diego, California, which opened for patients on 25 April. Each patient room in the state-of-the-art facility includes virtual guardrails to aid in fall prevention, pain level monitoring, caregiver alerts, and a 190 cm monitor that gives the patient bedside access to on-demand education, room controls, room service, internet and entertainment. An integrated video visit platform will allow physicians to virtually check on their patients as needed. Each room also features a special lighting system that mimics the natural rhythms of daylight, a feature that improves health and wellbeing.

Photo: Mike Blake/Reuters/Picture Media



MJA Podcasts

Professor Nicky Hudson is MB BS Coordinator at the University of Adelaide, and Conjoint Professor in the School of Medicine and Public Health at the University of Newcastle. She discusses her co-authored perspective in this issue on changes in medical education to help physicians meet future health care needs.

Professor Claire Jackson is Director of Primary Care Research at the University of Queensland. She talks about her co-authored perspective in this issue on laying the right foundations for success with Health Care Homes.

Podcasts are available at www.mja.com.au/multimedia/podcasts and from iTunes. Also available as videos at www.mja.com.au/multimedia

One-handed people point way to new brain theory

In people born with one hand, the brain region that would normally light up with that missing hand's activity lights up instead with the activity of other body parts — including the arm, foot, and mouth — that fill in for the hand's lost function, according to an international study published in Current Biology. Scientists from Israel and the UK say that the discovery could change fundamental understanding of how the brain is organised. The researchers studied 17 people who lacked a hand from birth along with 24 matched, two-handed controls. A video of each participant was recorded while they completed five everyday tasks, such as wrapping a present or handling money, to see how they went about it. Participants were also asked to move various parts of their bodies while their brains were scanned using functional magnetic resonance imaging. "We found that the traditional hand area gets used up by a multitude of body parts in congenital one-handers," said researcher Tamar Makin, from University College London. "Interestingly, these body parts that get to benefit from increased representation in the freedup brain territory are those used by the one-handers in daily life to substitute for their missing-hand function — say when having to open a bottle of water. In intact participants, all this is carried by the non-dominant hand," she continued. "But the fact that we see such a strikingly different representation in that area in congenital one-handers may suggest that this is not actually the hand area. If true, this means we've been misinterpreting brain organisation based on body part, rather than based on function. The implications, if this interpretation is correct, are massive." Her hope is to find a way to encourage the brain to represent and control artificial body parts, such as a prosthetic arm, using the brain area that would have controlled the missing hand.

doi: http://dx.doi.org/10.1016/j.cub.2017.03.053

Australian ad linking alcohol with cancer is a winner

Australian-led research published in *BMJ Open* has found that the effectiveness of alcohol harm reduction campaigns may be improved by directly communicating alcohol's long term harms to the general adult population of drinkers, along with drinking guidelines. Researchers from the Cancer Council Victoria, Curtin University and Ohio State University in the US, randomly assigned 2174 Australian adult weekly drinkers to view three of 83 English-language alcohol harm reduction ads. Each ad

Most read MJA articles online

1. *Narrative review*: Diagnostic triage for low back pain: a practical approach for primary care

Bardin et al; doi: 10.5694/mja16.00828

2. Editorial: Older doctors and retirement

Draper; doi: 10.5694/mja16.01424

3. Research: Human papillomavirus vaccination and genital warts in young Indigenous Australians: national sentinel surveillance data

Ali et al; doi: 10.5694/mja16.00597

4. *Research*: Physical comorbidities of post-traumatic stress disorder in Australian Vietnam War veterans

McLeav et al: doi: 10.5694/mia16.00935

5. Editorial: Death from an untreatable infection may signal the start of the post-antibiotic era

Jones et al; doi: 10.5694/mja17.00077

Most read MJA InSight articles

- 1. Views: Flaws in the system are killing young doctors
 Barker; https://www.doctorportal.com.au/mjainsight/2017/14/flaws-in-the-system-are-killing-young-doctors/
- 2. Views: The myth of the white-tailed spider McCredie; https://www.doctorportal.com.au/mjainsight/2017/13/the-myth-of-the-white-tailed-spider/
- 3. *Views*: Thunderstorm asthma: one airway, one disease Thompson et al; https://www.doctorportal.com.au/mjainsight/2017/13/thunderstorm-asthma-one-airway-one-disease/
- 4. Views: Why are we communicating so badly?
 Dando; https://www.doctorportal.com.au/mjainsight/2017/14/why-are-we-communicating-so-badly/
- 5. News: Working to avoid a post-antibiotic world MacKee; https://www.doctorportal.com.au/mjainsight/2017/14/working-to-avoid-a-post-antibiotic-world/



was viewed and rated by a mean of 79 participants. After viewing each ad, participants reported the extent to which they felt motivated to reduce their drinking. Ads were ranked from most to least motivating using predicted means adjusted for demographic characteristics and alcohol consumption. The researchers then compared the characteristics of the top-ranked 15% of ads (most motivating) with the middle 70% and bottom 15%. An Australian ad about the link between alcohol and cancer ("Spread") was most motivating, whereas an ad that encouraged drinking water instead of beer ("Add nothing") was least motivating. Top-ranked ads were more likely than other ads to feature a "why change" message and less likely to carry a "how to change" message, more likely to address long term harms, more likely to be aimed at the general adult drinking population and more likely to include drinking guidelines. There was substantial overlap in top-ranked ads for younger versus older adults, men versus women and high risk versus low risk drinker subgroups. With a mean score of 3.77, the highest ranked ad was "Spread", developed and funded by the Western Australian state government as part of their Alcohol and cancer mass media campaign. The second most effective ad — "What you can't see" (mean score of 3.62) — was from the same Western Australian campaign. The authors acknowledge that further research is needed to determine whether the motivation measure predicts subsequent reduced alcohol consumption.

doi: http://dx.doi.org/10.1136/bmjopen-2016-014193