# AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE



# On the Radar

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#### On the Radar

Editor: Dr Niall Johnson <u>niall.johnson@safetyandquality.gov.au</u> Contributors: Niall Johnson, Catherine Marshall, Lucia Tapsall.

# Consultation on Exploring Healthcare Variation in Australia: Analyses Resulting from an OECD Study

Consultation extended to 22 August 2014

The Australian results of an Organisation for Economic Co-operation and Development (OECD) study on healthcare variation were published in the *Exploring Healthcare Variation in Australia: Analyses Resulting from an OECD Study* discussion paper authored by the Australian Commission on Safety and Quality in Health Care (the Commission) and the Australian Institute of Health and Welfare. The paper is available at <u>http://www.safetyandquality.gov.au/publications/exploring-healthcare-variation-in-australia/</u>

The paper examines variation in the rates of several common procedures, selected by the OECD, including: knee surgery (knee arthroscopy and knee replacement); cardiac procedures (cardiac catheterisation, percutaneous coronary interventions and coronary artery bypass grafting; caesarean section; and hysterectomy. The procedures measured were undertaken in hospitals and day procedure centres, both public and private, during 2010-11. Variation was measured according to the Medicare Local area where patients lived, but the approach can be applied to any desired geographic scale.

The Commission is inviting comment and feedback on the paper. Consultation has been extended until 22 August 2014. Details about how to make a submission are included in the paper.

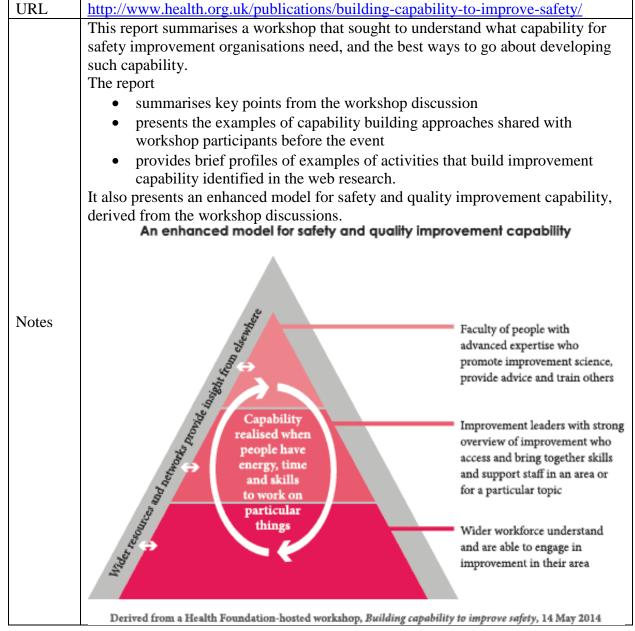
The contact person for this consultation is Mr Luke Slawomirski, Program Manager, Implementation Support. Mr Slawomirski can be contacted on (02) 9126 3600 or via email at medicalpracticevariation@safetyandquality.gov.au

## Reports

Building capability to improve safety

The Health Foundation

London: The Health Foundation; 2014. p. 18.



## Journal articles

*Evidence based medicine: a movement in crisis?* Greenhalgh Trisha, Howick Jeremy, Maskrey Neal BMJ 2014; 348:g3725

DOI	http://dx.doi.org/10.1136/bmj.g3725
Notes	<ul> <li>While ostensibly about evidence-based medicine (EBM) and some of the concerns about how EBM has evolved, this piece explores the implications and opportunities for improving many aspects of medicine, particularly health care delivery by a recalibration that focuses on the patient and their needs and how evidence can be used to make their care more appropriate.</li> <li>While "research evidence may still be key to making the right decision it does not determine that decision". "Real shared decision making" involves finding out what matters to the patient, the extent to which the patient wants to be empowered in decision making and introducing evidence in a what to informs a dialogue about what is best to do and why. In the renaissance of evidence-based medicine, providing individualised evidence in a format that patients and clinicians can understand is key.</li> <li>As clinicians and patients have varying levels of statistical literacy, the paper encourages the use of different approaches in the presentation of evidence, such as plain language summaries, infographics, option grids and other decision aids. Only a fraction of the available evidence is currently presented in usable form and there is a lack of awareness among clinicians that such usable shared decision aids exist. The routine offering of usable evidence to patients is encouraged and patients are encouraged to demand evidence that is better presented and explained.</li> <li>In regards to training, skills in critical appraisal are identified as prerequisites for competence in evidence-based medicine. The importance of teaching students to share both evidence and uncertainty with patients, use appropriate decision aids and adapt their approach to individual needs, circumstances and preferences is highlighted. Publishers are also urged to raise the bar for authors to improve the usability of evidence.</li> </ul>

Effectiveness of the Surgical Safety Checklist in Correcting Errors: A Literature Review Applying Reason's Swiss Cheese Model

Collins SJ, Newhouse R, Porter J, Talsma A

AORN Journal. 2014;100(1):65-79.e5.

DOI	http://dx.doi.org/10.1016/j.aorn.2013.07.024
Notes	In recent years checklists of various forms have become relatively commonplace as an element in safety efforts. This paper reviews the literature on the WHO surgical safety checklist – one of the more widely adopted checklists – using the Swiss cheese model as its framework. The authors report that their analysis indicated "the effectiveness of the surgical checklist in reducing the incidence of wrong-site surgeries and other medical errors; however, checklists alone will not prevent all errors. Successful implementation requires perioperative stakeholders to understand the nature of errors, recognize the complex dynamic between systems and individuals, and create a just culture that encourages a shared vision of patient safety."

#### The WHO surgical safety checklist: survey of patients' views Russ SJ, Rout S, Caris J, Moorthy K, Mayer E, Darzi A, et al. BMJ Quality & Safety [epub].

DOI	http://dx.doi.org/10.1136/bmjqs-2013-002772
Notes	Another item reflecting on the WHO surgical safety checklist, this time from the perspective of the patient. This study interviewed 141 post-operative patients from surgical wards at two large London teaching hospitals who had been provided with information about the checklist and procedures prior to checklist implementation. The authors report that " <b>Patients were positive</b> towards the checklist, <b>strongly agreeing that it would impact positively on their safety and on surgical team performance</b> . Those worried about coming to harm in hospital were particularly supportive." The authors suggest that this level of patient support can help overcome resistance to use of the checklist. The authors also note that the patients did not feel they had a strong role to play in safety improvement more broadly.

The legibility of prescription medication labelling in Canada: Moving from pharmacy-centred to patient-centred labels

Leat SJ, Ahrens K, Krishnamoorthy A, Gold D, Rojas-Fernandez CH

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Canadian Pharmacists Journa	al / Revue des Pharm	naciens du Canada	. 2014;147(3):179-87.

DOI /	http://dx.doi.org/10.1177/1715163514530094
URL	http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4025884/
Notes	There has been much interest in naming and labelling of medications in order to address issues of mis-identification, mis-selection and confusion. Often that has focussed on the health care worker. This study examined labels provided for a hypothetical prescription from a sample of 45 pharmacies in a region in Ontario and compared these with the recommendations for prescription labels by pharmaceutical and health organisations and for print accessibility by non-governmental organisations. While most labels followed guidelines for font style, contrast, print colour and nonglossy paper many did not comply in terms of type size (44% complying for instructions and none for thee drug and patient name), best use of space (5%) or alignment (51%). None of the labels provided instructions in sentence case, as is recommended. As the authors conclude, " <b>Improvements in pharmacy labelling are possible</b> without moving to new technologies or changing the size of labels and would
	be expected to enhance patient outcomes."

For information on the Commission's work on medication safety, including medication reconciliation and labelling, see <u>www.safetyandquality.gov.au/our-work/medication-safety/</u>

Interventions to Reduce Pediatric Medication Errors: A Systematic Review
Rinke ML, Bundy DG, Velasquez CA, Rao S, Zerhouni Y, Lobner K, et al
Pediatrics [epub].

DOI	http://dx.doi.org/10.1542/peds.2013-3531
Notes	This systematic review sought to determine the effectiveness of interventions to reduce paediatric medication errors. The study found many limitations of and gaps in the literature. The review did note a number of interventions that improved medication safety, including <b>clinical decision support tools</b> , <b>provider education programs</b> , and <b>pre-printed order sheets</b> .

Unit of Measurement Used and Parent Medication Dosing Errors Yin HS, Dreyer BP, Ugboaja DC, Sanchez DC, Paul IM, Moreira HA, et al Pediatrics [epub].

DOI	http://dx.doi.org/10.1542/peds.2014-0395
DOI	http://dx.doi.org/10.1542/peds.2014-0395Linking the issue of medication labelling and paediatric medication is this paper which specifically examined how the unit of measurement can contribute to errors when parents are giving their children medications.This study found that errors were common (of the 287 parents in the study, 39.4% made an error in measurement of the intended dose, 41.1% made an error in the prescribed dose). Further, parents using teaspoons or tablespoons had twice the odds of making an error. Language and health literacy could also contribute. The authors conclude that using only a millilitre measurement would aid in
	reducing such errors.

Characteristics associated with postdischarge medication errors

Mixon AS, Myers AP, Leak CL, et al.

Mayo Clinic Proceedings [epub].

DOI	http://dx.doi.org/10.1016/j.mayocp.2014.04.023
Notes	Medication errors are one of the most categories of error and a significant proportion happen 'in the community' or at home. This paper describes some of the characteristics of medication errors once a patient has been discharged. This US study examined the association of patient- and medication-related factors with post-discharge medication errors by examining 471 patients in the Vanderbilt Inpatient Cohort Study hospitalised for acute coronary syndromes or congestive heart failure. Among this patient group the study found that <b>post-discharge</b> <b>medication errors</b> occurred in almost <b>half of all cases</b> and were <b>more common</b> <b>among patients with lower numeracy or health literacy</b> . Medication reconciliation may be one strategy for preventing some of these post- discharge errors.

For information on the Commission's work on medication safety, including medication reconciliation and labelling, see <u>www.safetyandquality.gov.au/our-work/medication-safety/</u>

*Strategies to enhance adoption of ventilator-associated pneumonia prevention interventions: a systematic literature review* 

Goutier JM, Holzmueller CG, Edwards KC, Klompas M, Speck K, Berenholtz SM Infection Control and Hospital Epidemiology. 2014;35:998-1005.

DOI	http://dx.doi.org/10.1086/677152
	Ventilator-associated pneumonia (VAP) is considered to be one of the more
	dangerous healthcare associated infections (HAI). This paper reports on a
	systematic literature review on the adoption of interventions to prevent VAP.
	Looking at recent (2002–2012) literature the authors report finding 27 studies.
	Engagement strategies reported included multidisciplinary teamwork,
Notes	involvement of local champions, and networking among peers.
INOLES	Educational strategies reported included training sessions and developing
	succinct summaries of the evidence.
	Execution strategies reported included standardisation of care processes and
	building redundancies into routine care.
	Evaluation strategies included measuring performance and providing feedback
	to staff.

For information on the Commission's work on healthcare associated infection, see <a href="http://www.safetyandquality.gov.au/our-work/healthcare-associated-infection/">http://www.safetyandquality.gov.au/our-work/healthcare-associated-infection/</a>

#### Resilience and Resilience Engineering in Health Care

Fairbanks RJ, Wears RL, Woods DD, Hollnagel E, Plsek P, Cook RI Joint Commission Journal on Quality and Patient Safety. 2014;40(8):376-83.

URL	http://www.ingentaconnect.com/content/jcaho/jcjqs/2014/00000040/0000008/art0
UKL	<u>0006</u>
	Resilience has emerged in recent years as a trait to be developed – in both
	individuals and organisations. This paper summarises a workshop on resilience in
	healthcare held in Washington DC. The authors hope e to provide an overview of
	resilience and resilience engineering and to stimulate innovations in safety that
	might be produced by viewing health care safety through the lens of resilience
	engineering. Staring from the premise that "A system is resilient if it can adjust its
	functioning before, during, or following events (changes, disturbances, or
	opportunities) and thereby sustain required operations under both expected and
	unexpected conditions" the paper describes some examples in healthcare in
	addition to looking factors that build or erode resilience. They also caution
Notes	resilience itself is not an actual endpoint, as "resilience does not invariably lead
	to success, and lack of resilience does not invariably lead to failure. Resilience
	may allow limited success in the face of severe disturbance, and the lack of
	resilience may lead to failure in the face of minor disturbance. The current
	exploration of resilience should prompt us to look more critically at success to
	build a more accurate picture of important systems in operation. The complex
	adaptive system that delivers care to patients is deploying resilience, mostly
	without being noticed. The surprising thing is not that there are so many accidents
	in health care but that there are not even more. Because our successes so regularly
	depend on it, finding ways to identify and enhance resilience is a critical need
	for patient safety"

*The "weekend effect" in pediatric surgery — increased mortality for children undergoing urgent surgery during the weekend* 

Goldstein SD, Papandria DJ, Aboagye J, Salazar JH, Van Arendonk K, Al-Omar K, et al Journal of Pediatric Surgery. 2014;49(7):1087-91.

DOIhttp://dx.doi.org/10.1016/j.jpedsurg.2014.01.001It has been noted previously that there is often a 'weekend' or 'after hours' effect and that hospitals do not display a uniform level of performance/outcomes 24/7/365. This paper examined the issue in relation to paediatric surgery, particularly among children undergoing urgent surgery by comparing paediatric surgical outcomes following weekend versus weekday procedures. Examining US data of some 439,457 paediatric admissions from 1988 to 2010 that required a selected index surgical procedure (abscess drainage, appendectomy, inguinal hernia repair, open fracture reduction with internal fixation, or placement/revision of ventricular shunt) on the same day of admission the authors found "Pediatric patients undergoing common urgent surgical procedures during a weekend admission have a higher adjusted risk of death, blood transfusion, and procedural complications "				
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#### BMJ Quality and Safety online first articles

URL	http://qualitysafety.bmj.com/content/early/recent
Notes	BMJ Quality and Safety has published a number of 'online first' articles, including:
	• Use of non-indicated cardiac testing in low-risk patients: Choosing
	Wisely (Carrie H Colla, Thomas D Sequist, Meredith B Rosenthal, William
notes	L Schpero, Daniel J Gottlieb, Nancy E Morden)
	• The systems approach to medicine: controversy and misconceptions
	(Sidney W A Dekker, Nancy G Leveson)

International Journal for Quality in Health Care online first articles

DOI	http://intqhc.oxfordjournals.org/content/early/recent?papetoc
	<i>International Journal for Quality in Health Care</i> has published a number of 'online first' articles, including:
Notes	Trends in hospital performance in acute myocardial infarction care: a
	retrospective longitudinal study in Japan (Naoto Ukawa, Hiroshi Ikai, and
	Yuichi Imanaka)

#### **Online resources**

## Choosing Wisely

https://www.youtube.com/watch?v=FqQ-JuRDkl8

A parody of the infectious Pharrell Williams song "Happy" extolling the virtues of 'choosing wisely'– choose wisely when it comes to making health care decisions and if you choose wisely it will make you happy.

*Pharmacist guide to cultural responsiveness with Aboriginal and Torres Strait Islander people* <u>http://www.psa.org.au/wp-content/uploads/Guide-to-providing-pharmacy-services-to-Aboriginal-</u> and-Torres-Strait-Islander-people-2014.pdf

The Pharmaceutical Society of Australia has released this guide in recognition of the importance of pharmacists and pharmacy staff being responsive to the health beliefs, practices, culture and linguistic needs of Aboriginal and Torres Strait Islander people, families and communities. The guide covers cultural awareness and responsiveness, communication skills and relationship building. The guide also contains links to resources, including consumer and community resources, and checklists.

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