AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

# On the Radar

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**On the Radar**
Editor: Dr Niall Johnson niall.johnson@safetyandquality.gov.au
Contributors: Niall Johnson

**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 http://www.safetyandquality.gov.au/publications/exploring-healthcare-variation-in-australia/

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 **Friday 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

*Advances in the Prevention and Control of HAIs*
AHRQ Publication No 14-0003 Prepared by IMPAQ International, LLC, Columbia, MD, under contract no HHSA290200710071T
Rockville, MD: Agency for Healthcare Research and Quality; 2014. p. 252.

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| URL | http://www.ahrq.gov/professionals/quality-patient-safety/patient-safety-resources/resources/advances-in-hai/ |
| TRIM | D14-28253 |
| Notes | The (US) Agency for Healthcare Research and Quality has published this report that contains 19 original articles focused on the methods and implementation approaches that AHRQ-funded researchers used in their projects aimed at HAI prevention and risk identification for quality improvement.<br>The articles are provided in two sections: Development and Implementation of HAI Prevention Practices (11 papers) and HAI Risk Identification for Quality Improvement (eight papers).<br>The articles cover various topics including:<br>• Reducing cardiac and surgical site infections (SSI), including surveillance techniques<br>• Overcoming staff barriers in ICUs to prevent infections<br>• Decreasing antibiotic overuse in primary care<br>• Reducing HAIs in dialysis centres<br>• Improving antibiotic use in nursing homes<br>• Developing the capacity to implement antimicrobial stewardship<br>• Detecting and treating MRSA in nursing homes and the community. |

For information on the Commission's work on healthcare associated infection, see http://www.safetyandquality.gov.au/our-work/healthcare-associated-infection/

## Journal articles

*Risk factors for retained surgical items: a meta-analysis and proposed risk stratification system*
Moffatt-Bruce SD, Cook CH, Steinberg SM, Stawicki SP
Journal of Surgical Research. 2014;190(2):429-36.

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| DOI | http://dx.doi.org/10.1016/j.jss.2014.05.044 |
| Notes | Retained surgical items (RSI) are often considered sentinel or 'never' events. This paper reports on a meta-analysis (albeit based on a small number of studies). The authors report finding a number of **factors** that were **associated** with **increased risk** of RSI: **intraoperative blood loss** >500 mL (odds ratio [OR] 1.6); **duration** of operation (OR 1.7); **>1 sub-procedure** (OR 2.1); **lack of surgical counts** (OR 2.5); **>1 surgical team** (OR 3.0); **unexpected intraoperative factors** (OR 3.4); and **incorrect surgical count** (OR 6.1). |

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| | They also report that changes in nursing staff, emergency surgery, body-mass index, and operation "afterhours" were not significantly associated with increased RSI risk. |

*Identifying high-risk medication: a systematic literature review*
Saedder E, Brock B, Nielsen L, Bonnerup D, Lisby M
European Journal of Clinical Pharmacology. 2014 2014/06/01;70(6):637-45.

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| DOI | http://dx.doi.org/10.1007/s00228-014-1668-z |
| Notes | This systematic review of the literature on medication errors (augmented by analyses of Danish patient complaints, patient compensation, and reported medication errors datasets) reports that the authors found **seven drugs or classes** of medication **accounted for** almost half (**47%**) of the **serious errors**. The seven identified were **methotrexate**, **warfarin**, nonsteroidal anti-inflammatory drugs (**NSAIDS**), **digoxin**, **opioids**, **acetylic salicylic acid**, and **beta-blockers**. It was also noted that 30 drugs or drug classes caused 82 % of all serious medication errors and that the top ten drugs involved in fatal events accounted for 73 % of all drugs identified.<br>The authors suggest that by focusing efforts on the seven drugs/drug classes "can potentially reduce hospitalizations, extended hospitalizations, disability, life-threatening conditions, and death by almost 50 %". |

For information on the Commission's work on medication safety, see www.safetyandquality.gov.au/our-work/medication-safety/

*Decreasing Handoff-Related Care Failures in Children's Hospitals*
Bigham MT, Logsdon TR, Manicone PE, Landrigan CP, Hayes LW, Randall KH, et al
Pediatrics. 2014 August 1, 2014;134(2):e572-e9.

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| DOI | http://dx.doi.org/10.1542/peds.2013-1844 |
| Notes | In many of the efforts to improved handover (or handoff) the use of some form of standardised tool (or even of 'flexible standardisation') has been quite common. This paper describes how a standardised handoff process was implemented across 23 children's hospitals. Using evidence-based recommendations on aspects such as intent and content, standardised tools/methods, and clear transition of responsibility and then allowing the hospitals to tailor the processes and tools to local context led to improvements in handovers. The authors report "a significant decrease in handoff-related care failures, observed over all handoff types. Compliance to critical components of the handoff process improved, as did provider satisfaction." |

For information on the Commission's work on clinical communications, including clinical handover, see http://www.safetyandquality.gov.au/our-work/clinical-communications/

*BMJ Quality and Safety*
September 2014, Vol. 23, Issue 9

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| URL | http://qualitysafety.bmj.com/content/23/9 |
| Notes | A new issue of *BMJ Quality and Safety* has been published. Many of the papers in this issue have been referred to in previous editions of *On the Radar* (when they were released online). Articles in this issue of *BMJ Quality and Safety* include:<br>• Editorial: Simpson's paradox: how **performance measurement** can fail even with perfect risk adjustment (Perla J Marang-van de Mheen, Kaveh G Shojania) |

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| | • Editorial: After Mid Staffordshire: **from acknowledgement, through learning, to improvement** (Graham P Martin, Mary Dixon-Woods)<br>• **Deafening silence?** Time to reconsider whether organisations are silent or deaf when things go wrong (Aled Jones, Daniel Kelly)<br>• **'Between the flags'**: implementing a **rapid response system** at scale (Clifford Hughes, Charles Pain, Jeffrey Braithwaite, Kenneth Hillman)<br>• Validation of a **teamwork perceptions** measure to increase **patient safety** (Joseph R Keebler, Aaron S Dietz, Elizabeth H Lazzara, Lauren E Benishek, Sandra A Almeida, Phyllis A Toor, Heidi B King, Eduardo Salas)<br>• The frequency of **diagnostic errors in outpatient care**: estimations from three large observational studies involving US adult populations (Hardeep Singh, Ashley N D Meyer, Eric J Thomas)<br>• A multicentre cohort study assessing **day of week effect and outcome** from emergency appendicectomy (Henry JM Ferguson, Nigel J Hall, Aneel Bhangu)<br>• Contribution of **hospital mortality variations** to **socioeconomic disparities** in in-hospital mortality (Yoon Kim, Juhwan Oh, Ashish Jha)<br>• Dissemination of a simulation-based mastery learning intervention reduces **central line-associated bloodstream infections** (Jeffrey H Barsuk, Elaine R Cohen, Steven Potts, Hany Demo, Shanu Gupta, Joe Feinglass, William C McGaghie, Diane B Wayne)<br>• An observational study: associations between **nurse-reported hospital characteristics** and estimated **30-day survival** probabilities (Christine Tvedt, Ingeborg Strømseng Sjetne, Jon Helgeland, Geir Bukholm)<br>• Identifying **systems failures** in the pathway to a catastrophic event: an analysis of national incident report data relating to **vinca alkaloids** (Bryony Dean Franklin, Sukhmeet S Panesar, Charles Vincent, Liam J Donaldson)<br>• **Computerised provider order entry** combined with **clinical decision support** systems to improve **medication safety**: a narrative review (Sumant R Ranji, Stephanie Rennke, Robert M Wachter)<br>• Differences in case-mix can influence the comparison of **standardised mortality ratios** even with optimal risk adjustment: an analysis of data from paediatric intensive care (Bradley N Manktelow, T Alun Evans, Elizabeth S Draper) |

*International Journal for Quality in Health Care*
Vol. 26, No. 4, August 2014

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| URL | http://intqhc.oxfordjournals.org/content/26/4?etoc |
| Notes | A new issue of *International Journal for Quality in Health Care* has been published. Many of the papers in this issue have been referred to in previous editions of On the Radar (when they released online). Articles in this issue of *International Journal for Quality in Health Care* include:<br>• Editor's choice: **Patient care transitions** from the emergency department to the medicine ward: evaluation of a **standardized electronic signout tool** (Jed D Gonzalo, Julius J Yang, Heather L Stuckey, Christopher M Fischer, Leon D Sanchez, and Shoshana J Herzig<br>• Assessing the **role of regulatory bodies** in managing health professional issues and errors in Europe (Isabelle Risso-Gill, H Legido-Quigley, D Panteli, and M Mckee) |

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| | • Feasibility and evaluation of a pilot community health worker intervention to **reduce hospital readmissions** (Marguerite E Burns, Alison A Galbraith, Dennis Ross-Degnan, and Richard B. Balaban)<br>• **Patient safety in the operating theatre**: how A3 thinking can help reduce door movement (Frederique Elisabeth Simons, Kjeld Harald Aij, Guy A M Widdershoven, and Merel Visse)<br>• **Health service accreditation** reinforces a mindset of high-performance human resource management: lessons from an Australian study (D Greenfield, A Kellner, K Townsend, A Wilkinson, and S A Lawrence)<br>• The influence of corporate structure and quality improvement activities on outcome improvement in **residential care homes** (S Winters, R B Kool, N S Klazinga, and R Huijsman)<br>• **Does stewardship make a difference** in the quality of care? Evidence from clinics and pharmacies in Kenya and Ghana (Connor P Spreng, Ifelayo P Ojo, Nicholas E Burger, Neeraj Sood, J W Peabody, and L M Demaria)<br>• Medication Safety: an **audit of medication discrepancies** in transferring type 2 diabetes mellitus (T2DM) patients from Australian primary care to tertiary ambulatory care (Madonna Azzi, Maria Constantino, Lisa Pont, Margaret Mcgill, Stephen Twigg, and Ines Krass)<br>• Failure mode and effects analysis applied to the **maintenance and repair of anesthetic equipment** in an austere medical environment (Michael A Rosen, Benjamin H Lee, John B Sampson, Rahul Koka, A M Chima, O U Ogbuagu, M K Marx, T B. Kamara, M Koroma, and E V Jackson, Jr)<br>• The eCollaborative: using a **quality improvement collaborative** to implement the **National eHealth Record System** in Australian primary care practices (Andrew W Knight, Craig Szucs, Mia Dhillon, Tony Lembke, and Chris Mitchell)<br>• Barriers and success factors to the implementation of a multi-site **prospective adverse event surveillance system** (Chantal Backman, Alan J Forster, and Saskia Vanderloo)<br>• The impact of **clinicians' personality** and their interpersonal **behaviors** on the **quality of patient care**: a systematic review (Benjamin C M Boerebach, Renée A Scheepers, Renée M van der Leeuw, Maas Jan Heineman, Onyebuchi A. Arah, and Kiki M J M H Lombarts)<br>• **Healthcare service problems** reported in a national survey of **South Africans** (Takahiro Hasumi and Kathryn H. Jacobsen)<br>• **Non-surgical care** in patients with **hip or knee osteoarthritis** is modestly consistent with a stepped care strategy after its implementation (Agnes J Smink, Sita M A Bierma-Zeinstra, Henk J Schers, Bart A Swierstra, Joke H Kortland, Johannes W J Bijlsma, Steven Teerenstra, Theo B Voorn, Joost Dekker, Thea P M Vliet Vlieland, and Cornelia H M van den Ende) |

*BMJ Quality and Safety* online first articles

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| URL | http://qualitysafety.bmj.com/content/early/recent |
| Notes | *BMJ Quality and Safety* has published a number of 'online first' articles, including:<br>• Read-back improves **information transfer in** simulated **clinical crises** (Matt Boyd, David Cumin, Braam Lombard, Jane Torrie, N Civil, J Weller) |

**Online resources**

*[Canada] Paper to Electronic MedRec Implementation Toolkit*
http://www.saferhealthcarenow.ca/EN/Interventions/medrec/Pages/Paper-to-Electronic-MedRec-Implementation-Toolkit.aspx
This toolkit, including checklists, examines current electronic Medication Reconciliation (eMedRec) practices in Canada and provides guidance for organisations on migrating from a paper-based system to an electronic system for Medication Reconciliation.

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

*[Canada] Medication Bar Code System Implementation Planning – a Resource Guide*
http://www.patientsafetyinstitute.ca/English/toolsResources/MedicationBarCodeSystem/Pages/default.aspx
This resource has been written for use by senior practice leaders involved with medication management and system development, and by their executive leadership colleagues responsible for strategic funding and system acquisition.
The purpose of this document is to review the need for automated identification (e.g., bar coding) of medications within both community-based (e.g., nursing homes) and institutional (e.g., hospital and ambulatory) care.

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