AUSTRALIAN COMMISSION
ON SAFETY AND QUALITY IN HEALTH CARE

On the Radar

Issue 118
11 March 2013

On the Radar is a summary of some of the recent publications in the areas of safety and quality in health care. Inclusion in this document is not an endorsement or recommendation of any publication or provider.

Access to particular documents may depend on whether they are Open Access or not, and/or your individual or institutional access to subscription sites/services. Material that may require subscription is included as it is considered relevant.

On the Radar is available online, via email or as a PDF document from http://www.safetyandquality.gov.au/publications-resources/on-the-radar/

If you would like to receive *On the Radar* via email, you can subscribe on our website http://www.safetyandquality.gov.au/ or by emailing us at mail@safetyandquality.gov.au. You can also send feedback and comments to mail@safetyandquality.gov.au.

For information about the Commission and its programs and publications, please visit http://www.safetyandquality.gov.au/ You can also follow us on Twitter @ACSQHC.

On the Radar
Editor: Dr Niall Johnson niall.johnson@safetyandquality.gov.au
Contributors: Niall Johnson, Luke Slawomirski, Justine Marshall

Reports

The Essential Guide for Patient Safety Officers. 2nd ed.
Leonard M, Frankel A, Federico F, Frush K, Haraden C, editors.
Chicago: Joint Commission Resources with the Institute for Healthcare Improvement, 2013.

Notes	Coinciding with (US) National Patient Safety week, the Institute for Healthcare Improvement (IHI) has released the second edition of its *Essential Guide for Patient Safety Officers.* According to the IHI, this book "offers a roadmap that enables health care organizations to create the necessary strategy, structure, environment, and metrics to improve the safety and reliability of the care they provide. Topics include creating a culture of safety; strategies and best practices for safety initiatives and day-to-day operational issues; tools and guidelines to monitor and improve patient safety functions; leadership's role in safety; designing for reliability and resilience; ensuring patient involvement; using technology to enhance safety; and other essential topics."
URL	http://www.ihi.org/knowledge/Pages/Publications/EssentialGuideforPatientSafetyOfficers.aspx

Making Health Care Safer II: An Updated Critical Analysis of the Evidence for Patient Safety Practices
Shekelle PG, Wachter RM, Pronovost PJ, Schoelles K, McDonald KM,et al
Comparative Effectiveness Review No. 211. (Prepared by the Southern California-RAND Evidence-based Practice Center under Contract No. 290-2007-10062-I.) AHRQ Publication No. 13-E001-EF. Rockville, MD: Agency for Healthcare Research and Quality. March 2013.

Notes	In 2001 the US Agency for Healthcare Research and Quality (AHRQ) published a report titled *Making Health Care Safer: A Critical Analysis of Patient Safety Practices*. This report analysed the evidence to support patient safety practices (PSPs) that existed at that time. Over the past decade, a considerable amount of resources have been invested in efforts to improve safety and quality of health care. However, the evidence suggests variable success. Against this backdrop, AHRQ has published an updated report *Making Health Care Safer II: A Critical Analysis of Patient Safety Practices*. The new 955-page report, co-authored by many of the original researchers, uses similar methodology to the original with some important additions. For instance, the maturation of the field has produced a deeper appreciation for context, prompting the research team to place more emphasis on context and generalisability. Notably, the report recognises that many PSPs are complex socio-technical interventions not readily amenable to controlled experimental trials, and considers cost of PSPs as an evaluation criterion The research team reduced an initial list of 158 programs to 10 “strongly encouraged” and 12 “encouraged” PSPs. These represent practices that healthcare providers can consider for adoption now. The authors believe that “providers should not delay their consideration of adopting these practices, as enough is known now to permit health care systems to move forward.” The “strongly encouraged” programs include 1. Preoperative checklists and anaesthesia checklists to prevent operative and post-operative events. 2. Bundles that include checklists to prevent central line-associated bloodstream infections. 3. Interventions to reduce urinary catheter use, including catheter reminders, stop orders, or nurse-initiated removal protocols. 4. Bundles that include head-of-bed elevation, sedation vacations, oral care with chlorhexidine, and subglottic-suctioning endotracheal tubes to prevent ventilator-associated pneumonia. 5. Hand hygiene. 6. "Do Not Use" list for hazardous abbreviations. 7. Multi-component interventions to reduce pressure ulcers. 8. Barrier precautions to prevent healthcare-associated infections. 9. Use of real-time ultrasound for central line placement. 10. Interventions to improve prophylaxis for venous thromboembolisms. The “encouraged” programs 1. Multi-component interventions to reduce falls. 2. Use of clinical pharmacists to reduce adverse drug events. 3. Documentation of patient preferences for life-sustaining treatment. 4. Obtaining informed consent to improve patients' understanding of the potential risks of procedures.

	5. Team training. 6. Medication reconciliation. 7. Practices to reduce radiation exposure from fluoroscopy and computed tomography scans. 8. Use of surgical outcome measurements and report cards, like the American College of Surgeons National Surgical Quality Improvement Program. 9. Rapid response systems. 10. Utilization of complementary methods for detecting adverse events/medical errors to monitor for patient safety problems. 11. Computerized provider order entry. 12. Use of simulation exercises in patient safety efforts. A special supplement to the *Annals of Internal Medicine* features 10 articles on selected patient safety strategies featured in *Making Health Care Safer II*. The majority of these programs align with aspects of the Commission's work, including: • Healthcare associated infection • Falls Prevention • Medication safety • Information strategy and indicators • Australian safety and quality goals for health care • Clinical communication • End of life care • Collaboration with the Independent Hospital Pricing Authority • Safety in E-health.
URL	ARHQ report http://www.ahrq.gov/research/findings/evidence-based-reports/makinghcsafer.html Annals of Internal Medicine supplement http://www.annals.org/issue.aspx?journalid=90&issueid=926462
TRIM	ARHQ report 76181

Through the Eyes of the Workforce: Creating Joy, Meaning, and Safer Health Care
The Lucian Leape Institute at the National Patient Safety Foundation
Boston MA

Notes	Also coinciding with the start of (US) Patient Safety Awareness Week, the Lucian Leape Institute at the (US) National Patient Safety Foundation today released *Through the Eyes of the Workforce: Creating Joy, Meaning, and Safer Health Care*. This report focuses on the health and safety of the health care workforce and challenges health care organizations to initiate broad organizational changes in the belief that patient safety is inextricably linked to worker safety. The report recommends 7 strategies: • Strategy 1: Develop and embody shared **core values** of **mutual respect** and **civility**; **transparency** and **truth telling**; **safety of all** workers and patients; and **alignment** and **accountability** from the boardroom through the front lines. • Strategy 2: Adopt the **explicit aim** to **eliminate harm** to the workforce and to patients.

	• Strategy 3: **Commit to creating a high-reliability organisation** (HRO) and demonstrate the discipline to achieve highly reliable performance. This will require creating a learning and improvement system and adopting evidence-based management skills for reliability. • Strategy 4: **Create a learning and improvement system**. • Strategy 5: Establish data **capture**, database, and **performance metrics** for accountability and improvement. • Strategy 6: **Recognize** and **celebrate** the **work** and **accomplishments** of the workforce, regularly and with high visibility. • Strategy 7: **Support** industry-wide **research** to design and conduct studies that will explore issues and conditions in health care that are harming our workforce and our patients.
URL	http://www.npsf.org/about-us/lucian-leape-institute-at-npsf/lli-reports-and-statements/eyes-of-the-workforce/
TRIM	76121

Journal articles

Types and origins of diagnostic errors in primary care settings
Singh H, Giardina T, Meyerm AD, Forjuoh SN, Reis MD, Thomas EJ
JAMA Internal Medicine 2013:1-8 [epub].

Notes	This study sought to understand diagnostic errors in primary care by examining medical records of diagnostic errors detected at 2 sites through electronic health record–based triggers at a large urban US Veterans Affairs facility and a large integrated private health care system. The study examined 190 unique instances of diagnostic errors detected in primary care visits between October 1, 2006, and September 30, 2007. The authors report that in the 190 cases, a total of 68 unique diagnoses were missed. Most missed diagnoses were common conditions in primary care, with pneumonia (6.7%), decompensated congestive heart failure (5.7%), acute renal failure (5.3%), cancer (primary) (5.3%), and urinary tract infection or pyelonephritis (4.8%) being most common. Process breakdowns most frequently involved the patient-practitioner clinical encounter (78.9%) but were also related to referrals (19.5%), patient-related factors (16.3%), follow-up and tracking of diagnostic information (14.7%), and performance and interpretation of diagnostic tests (13.7%). A total of 43.7% of cases involved more than one of these processes. Patient-practitioner encounter breakdowns were primarily related to problems with history-taking (56.3%), examination (47.4%), and/or ordering diagnostic tests for further workup (57.4%). Most errors were associated with potential for moderate to severe harm. The authors suggest that "Preventive interventions should target common contributory factors across diagnoses, especially those that involve data gathering and synthesis in the patient-practitioner encounter."
DOI	http://dx.doi.org/10.1001/jamainternmed.2013.2777

Prevalence and nature of medication administration errors in health care settings: a systematic review of direct observational evidence
Keers RN, Williams SD, Cooke J, Ashcroft DM.
Annals of Pharmacotherapy 2013;47(2):237-256.

Notes	This review – based on 91 unique studies– found that the median error rate for medication administration errors (MAEs) was 19.6% of total opportunities for error including wrong-time errors and 8.0% without timing errors. The authors also report a higher median MAE rate for the intravenous route (53.3% excluding timing errors compared to when all administration routes were studied (20.1%). Wrong time, omission, and wrong dosage were among the 3 most common MAE subtypes. Common medication groups associated with MAEs were those affecting nutrition and blood, gastrointestinal system, cardiovascular system, central nervous system, and anti-infectives. The authors note that differing medication error definitions, data collection methods, and settings of included studies contribute to variation in reported rates in the studies.
DOI	http://dx.doi.org/10.1345/aph.1R147

Publicly Reported Quality-Of-Care Measures Influenced Wisconsin Physician Groups To Improve Performance
Lamb GC, Smith MA, Weeks WB, Queram C.
Health Affairs 2013;32(3):536-543.

Notes	Article reporting on a study that analysed fourteen publicly reported quality of ambulatory care measures for the Wisconsin Collaborative for Healthcare Quality (a voluntary consortium of physician groups) over 2004–2009. This information, along with a survey of the collaborative's members and billing data allow the researchers to report finding that "physician groups in the collaborative improved their performance during the study period on many measures, such as cholesterol control and breast cancer screening. Physician groups reported on the survey that publicly reported performance data motivated them to act on some, but not all, of the quality measures. Our study suggests that large group practices will engage in quality improvement efforts in response to public reporting, especially when comparative performance is displayed, as it was in this case on the collaborative's website."
DOI / URL	http://dx.doi.org/10.1377/hlthaff.2012.1275 http://content.healthaffairs.org/content/32/3/536.abstract?etoc

Advance care planning: lessons from a study of Tasmanian enduring guardianship forms
Ashby MA, Thornton RN, Thomas RL
Med J Aust 2013; 198 (4): 188-189

Notes	Tasmania is the only Australian jurisdiction, and one of few in the world, to operate a state-funded registry of enduring guardianship. From 1995 to 2010, 10 040 enduring guardianship forms were lodged with the agency, representing uptake by about 2.7% of the state's eligible adult population. This analysis of roughly 5% of those forms (n=502) looked at the kind of information included in these forms. The authors noted that, despite the fact that guardianship powers lapse at the time of death, "14% of the forms analysed provided direction to appointed guardians on wishes regarding organ donation". The authors conclude that there is a public need and desire for more direction around advance care planning.
DOI	http://dx.doi.org/10.5694/mja12.10498

Building capacity and capability for patient safety education: a train-the-trainers programme for senior doctors
Ahmed M, Arora S, Baker P, Hayden J, Vincent C, Sevdalis N
BMJ Quality & Safety 2013 [epub].

Notes	Belying the adage that 'you can't teach old dogs new tricks' is this paper that suggests senior doctors are very much willing and able to become leaders for patient safety training. The paper reports on an intervention that gave senior doctors from across 20 hospitals in the North Western Deanery, England, UK a half-day course in patient safety theory, root cause analysis and small-group facilitation, following which participants were invited to sign up as faculty for a region-wide patient safety training programme for trainees 'Lessons Learnt'. Patient safety knowledge, attitudes and skills were evaluated pre and post course and retention further evaluated 8 months post course. 216 senior doctors volunteered as faculty of whom 122 were appointed. Participants reported high levels of satisfaction with the course. Objective scores of patient safety knowledge significantly improved immediately post course and were sustained at 8 months Upon completion of the course, 88/122 (72%) participants facilitated 213 'Lessons Learnt' sessions from January 2011 to July 2012. The authors conclude that "There is considerable appetite for senior doctors to engage with training in patient safety as teachers and learners. Training senior doctors in patient safety is feasible, acceptable and effective as a means of building capacity and capability for delivering training".
DOI	http://dx.doi.org/10.1136/bmjqs-2012-001626

Healthcare Infection
Volume 18(1) 2013
Special Issue: Environmental Cleaning

Notes	The current issue of *Healthcare Infection* is a special issue on the theme of Environmental Cleaning. Articles in this issue include: • Cleaning – on the way to evidence-based knowledge (Walter Popp) • How quickly do hospital surfaces become contaminated after detergent cleaning? (Alexandra Bogusz, Munro Stewart, Jennifer Hunter, Brigitte Yip, Damien Reid, Chris Robertson and Stephanie J Dancer) • Observations on hospital room contamination testing (Philip W Smith, Shawn Gibbs, Harlan Sayles, Angela Hewlett, Mark E Rupp and P C Iwen) • Role of the hospital environment in disease transmission, with a focus on *Clostridium difficile* (William A. Rutala and David J. Weber) • Methods to evaluate environmental cleanliness in healthcare facilities (Brett G Mitchell, Fiona Wilson, Stephanie J Dancer and Alistair McGregor) • Surface cleaning and disinfection: insight into the situation in Germany and Europe (Jürgen Gebel, Stefanie Gemein and Martin Exner) • Cleaning and disinfection in outbreak control – experiences with different pathogens (Birgit Ross, Dorothea Hansen and Walter Popp) • How do we tackle contaminated hospital surfaces? (Jonathan A Otter) • Evaluation of cleaning effectiveness in a tertiary hospital following hydrogen peroxide (HPV) fumigation using surface contact plates and adenosine triphosphate (ATP) (Eleni Mavrogiorgou, Robert Ayres, Brian Ward, Margaret Graham and Nicholas Brown)

	• Healthcare environment decontamination (Markus Dettenkofer) • Hospital-based environmental hygiene: priorities for research (Stephan Harbarth)
URL	http://www.publish.csiro.au/nid/241/issue/6678.htm

American Journal of Medical Quality
March 2013; Vol. 28, No. 2

Notes	A new issue of *American Journal of Medical Quality* has been published. Articles in this issue include: • Accomplishing Much in a Short Time: Use of a Rapid Improvement Event to Redesign the Assessment and Treatment of **Patients With Alcohol Withdrawal** (Jeffrey Sankoff, Julie Taub, and David Mintzer) • Improved Patient Safety and Outcomes With a Comprehensive Interdisciplinary Improvement Initiative in **Kidney Transplant Recipients** (David J Taber, Nicole A Pilch, John W McGillicuddy, Charles F Bratton, Kenneth D Chavin, and Prabhakar K Baliga) • Implementing the Patient-Centered Medical Home Model for **Chronic Disease Care** in Small Medical Practices: Practice Group Characteristics and Physician Understanding (Louisa Baxter and David B Nash) • **Improving Pediatric Health Care** Delivery by Engaging Residents in Team-Based Quality Improvement Projects (Ulfat Shaikh, JoAnne E Natale, Jasmine Nettiksimmons, and Su-Ting T Li) • A National Study of **Nurse Leadership** and Supports for Quality Improvement in Rural Hospitals (Kathryn Paez, Claudia Schur, Lan Zhao, and Jennifer Lucado) • A **Clinical Deterioration Prediction** Tool for Internal Medicine Patients (Lisa L Kirkland, Michael Malinchoc, Megan O'Byrne, Joanne T Benson, Deanne T Kashiwagi, M C Burton, P Varkey, and T I Morgenthaler) • Quality of Comprehensive **HIV Care** in Underserved Communities: Does Clinical Training Lead to Improvement (Starley B Shade, Nathan Sackett, Kevin Khamarko, Kimberly A Koester, Jennifer Bie, Jay Newberry, Jeffrey Beal, R Culyba, K Jacobson, A Kinder, J Nusser, and J J Myers • Characteristics of **Primary Care** Safety-Net Providers and Their Quality Improvement Attitudes and Activities: Results of a National Survey of Physician Professionalism (Lenny López, Catherine M DesRoches, Christine Vogeli, Richard W Grant, Lisa I Iezzoni, and Eric G Campbell) • Association Between Conformity With Performance Measures and 1-Year **Postdischarge Survival** in Patients With Acute Decompensated Heart Failure (Domenico Scrutinio, Andrea Passantino, Vito Antonio Ricci, and Raffaella Catanzaro) • Q-Tip: "What Can I Do to Improve Your Care Today?"—One Question Closer to Patient-Centered Care (Andrew Carson-Stevens, Aled Jones, Anna Sofie Hansen, Alexandra Printz, E Patel, J Bhatt, and S S Panesar)
URL	http://ajm.sagepub.com/content/vol28/issue2/?etoc

BMJ Quality and Safety online first articles

Notes	*BMJ Quality and Safety* has published a number of 'online first' articles, including: • High-reliability emergency response teams in the hospital: improving quality and safety using in situ **simulation training** (Derek S Wheeler,

	Gary Geis, Elizabeth H Mack, Tom LeMaster, Mary D Patterson) • On higher ground: ethical reasoning and its relationship with **error disclosure** (Alexander Putnam Cole, Lauren Block, Albert W Wu) • The effect of failure mode and effect analysis on reducing percutaneous coronary intervention hospital door-to-balloon time and mortality in ST segment elevation **myocardial infarction** (Feng-Yu Kuo, Wei-Chun Huang, Kuan-Rau Chiou, Guang-Yuan Mar, Chin-Chang Cheng, Chen-Chi Chung, Han-Lin Tsai, Chen-Hung Jiang, Shue-Ren Wann, Shoa-Lin Lin, Chun-Peng Liu)
URL	http://qualitysafety.bmj.com/onlinefirst.dtl

International Journal for Quality in Health Care online first articles

Notes	The *International Journal for Quality in Health Care* has published a number of 'online first' articles, including: • Editorial: If quality is the answer … what is the question? (Roshan Perera and Helen Moriarty) • A comprehensive analysis of patients' perceptions of **continuity of care** and their associated factors (Marta-Beatriz Aller, I Vargas, S Waibel, J Coderch, I Sánchez-Pérez, L Colomés, J R Llopart, M Ferran, and M. L Vázquez) • Associations of patient safety outcomes with models of **nursing care organization** at unit level in hospitals (Carl-Ardy Dubois, Danielle D'Amour, Eric Tchouaket, Sean Clarke, Michèle Rivard, and Régis Blais) • A measurement instrument for **spread of quality improvement** in healthcare (S.S. Slaghuis, M.M.H. Strating, R.A. Bal, and A.P. Nieboer) • **Ethnic disparities** in the quality of hospital care in New Zealand, as measured by 30-day rate of unplanned readmission/death (Juliet Rumball-Smith, Diana Sarfati, Phil Hider, and Tony Blakely) • Profiling health-care **accreditation organizations**: an international survey (Charles D. Shaw, Jeffrey Braithwaite, Max Moldovan, Wendy Nicklin, Ileana Grgic, Triona Fortune, and Stuart Whittaker)
URL	http://intqhc.oxfordjournals.org/content/early/recent?papetoc

Online resources

[USA] Choosing Wisely
Consumer Reports is working with doctors to help patients avoid unnecessary and potentially harmful medical care
http://www.consumerreports.org/cro/choosingwisely.htm
Following the publication of the updated lists of diagnostics and treatments that may not always be necessary described in a previous edition of the *On the Radar*, is this resource from Consumer Reports. Consumer Reports is participating in the effort, by helping the medical societies produce videos and PDFs that doctors can share with patients about specific overused tests and treatments.

---

accuracy, currency and reliability of the information contained therein. Any opinions expressed are not necessarily those of the Australian Commission on Safety and Quality in Health Care.