AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

On the Radar

Issue 88
16 July 2012

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 whether 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 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, please email us at
mail@safetyandquality.gov.au or subscribe via our website.

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.

This week's content

Reports

Keeping patients safe when they transfer between care providers - getting the medicines right
Picton C, Wright H
London. Royal Pharmaceutical Society, 2012.

Notes	A report published by the Royal Pharmaceutical Society (RPS) calls for improvements to the transfer of information about medicines when patients move between care settings. The report outlines the results of a six-month project involving over 30 healthcare organisations which volunteered to implement RPS guidance on transfer of medicines information. The guidance was endorsed by the Royal College of General Practitioners, the Royal College of Nursing, the Royal College of Physicians and the Academy of Medical Royal Colleges. According to the RPS, the likelihood that an elderly medical patient will be discharged on the same medicines that they were admitted on is less than 10%. Between 28-40% of medicines are discontinued during hospitalisation and 45% of medicines prescribed at discharge are new medicines. Around 60% of patients have 3 or more medicines changed during their hospital stay and adverse drug events occur in up to 20% of patients after discharge. The report's recommendations:

	• Suppliers of IT systems to hospitals and general practice should ensure their systems can effectively transfer recommended core content of medicines records • All community pharmacies should have an NHS.net website address to enable secure communications between secondary and primary care • All clinical records should be structured in a recognised and nationally agreed format to assist interoperability and the transfer of information • National sharing of the most effective ways of signposting patients in secondary care to the post discharge Medicine Review Service and New Medicine Service provided by community pharmacists to enable patients to optimise benefits from their medicines • Commissioning of post-discharge MURs for vulnerable patients should be considered as part of the pharmacy contractual frameworks.
URL	http://www.rpharms.com/current-campaigns-pdfs/rps-transfer-of-care-final-report.pdf

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

For information on the Commission's work on safety in e-health, including electronic medications management, see http://www.safetyandquality.gov.au/our-work/safety-in-e-health/

Journal articles

Avoiding handover fumbles: a controlled trial of a structured handover tool versus traditional handover methods
Payne CE, Stein JM, Leong T, Dressler DD
BMJ Quality & Safety 2012 [epub].

Notes	Paper reporting on a study of internal medicine residents before and after introduction of a structured, web-based handover application. 80 residents were surveyed prior to the intervention and 161 residents during the intervention. After introduction of the handover application, 100% of handovers contained an updated problem list, active medications, and code status (compared to <55% at baseline); residents perceived approximately half as many near-miss events on call and were twice as likely to respond that they were confident or very confident in their patient handovers compared to traditional practices. These results led the authors to argue that '**Standardisation of information** transmitted during patient handovers through the use of a structured, web-based application led to **consistent transfer** of vital patient information and was associated with improved resident confidence and fewer perceived near-miss events.' In some other work in this area the focus has been on 'flexible standardisation' where the context is allowed to influence the process.
DOI	http://dx.doi.org/10.1136/bmjqs-2011-000308

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

Strategies for sustaining a quality improvement collaborative and its patient safety gains
Parand A, Benn J, Burnett S, Pinto A, Vincent C
International Journal for Quality in Health Care 2012;24(4):380-390.

Notes	Reporting on a qualitative interview study that sought to identify strategies to facilitate the sustainability of a UK quality and safety improvement collaborative (the Safer Patients Initiative (SPI)) and its successes. The authors report that their qualitative analysis identified three overarching factors (and 8 factors and 14 sub-factors) for the sustainability of SPI: 1. Using **programme improvement methodology and measurement** of its outcomes (Strategy factors: 1.1 Using 'small-scale tests of change' methodology and 1.2 Demonstration of sustained measurement); 2. **Organizational strategies to ensure sustainability** (Factors and sub-factors: 2.1. Integration of programme within organizational structures and processes; 2.1.1. Incorporating programme elements into reporting, accountability, performance targets and governance structures; 2.1.2. Incorporating elements into induction and other formalized training; 2.1.3. Changing programme associated terminology; 2.2. Building organizational capability; 2.2.1. Creating & transferring internal expertise; 2.2.2. Involving multi-disciplinary teams across organizational levels; 2.2.3. Involving staff in clinical governance meetings; 2.3. Maintaining a high profile 2.3.1. Continuation of setting, prioritizing and reporting on targets; 2.3.2. Reiteration of purpose and inspiring staff; 2.3.3. Keeping priorities on management agendas; 2.3.4. Feed back and data circulation of results; 2.4. Securing and creative use of resources; 2.4.1. Securing of human and financial resources; 2.4.2. Improvement activities incorporated into day jobs; 2.4.3. Utilizing existing teams for extra resources; 2.4.4. Ensuring data support) and 3. **Alignment of goals** with external requirements (Factors: 3.1. Integration of programme focus into other regional or national improvement drives; 3.2. External expert monitoring).
DOI	http://dx.doi.org/10.1093/intqhc/mzs030

Hospital-based medication reconciliation practices: a systematic review.
Mueller SK, Sponsler KC, Kripalani S, Schnipper JL
Archives of Internal Medicine. 2012 Jun 25 [epub]

Notes	Report on a systematic review of 26 studies of hospital-based medication reconciliation efforts. The majority of med rec approaches studied relied on pharmacists or technology-based interventions. While **pharmacist-led interventions** and interventions focusing on **high-risk patients** were generally reported as **successful at reducing potential adverse drug events** (ADEs), the conclusion proffered is the one that many reviews give: the literature base is insufficiently rigorous to draw firm conclusions.
DOI	http://dx.doi.org/10.1001/archinternmed.2012.2246

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

Medication Safety in Primary Care Practice: Results From a PPRNet Quality Improvement Intervention
Wessell AM, Ornstein SM, Jenkins RG, Nemeth LS, Litvin CB, Nietert PJ
American Journal of Medical Quality 2012 [epub].

Notes	Paper reporting on a medication safety intervention in primary care. The Medication Safety in Primary Care Practice project was designed to test the impact of a multi-method quality improvement intervention on 5 categories of preventable prescribing and monitoring errors in 20 Practice Partner Research Network (PPRNet) practices. The authors report that the intervention was associated with significant **improvements** in **avoidance** of potentially **inappropriate therapy**, potential **drug-disease** interactions, and monitoring of **potential adverse events** over 2 years. However, avoidance of potentially inappropriate dosages and drug-drug interactions did not change over time. The practices implemented a number of medication safety strategies that may be relevant to other primary care audiences, including use of EHR-based audit and feedback reports, medication reconciliation, decision-support tools, and refill protocols.
DOI	http://dx.doi.org/10.1177/1062860612445070u

The Henry Ford Health System No Harm Campaign: A Comprehensive Model to Reduce Harm and Save Lives
Conway WA, Hawkins S, Jordan J, Voutt-Goos MJ
Joint Commission Journal on Quality and Patient Safety 2012;38(7):318-327.

Notes	Paper documenting one US health organisation's approach to safety improvement. The Henry Ford Health System launched its 'No Harm Campaign' in 2008. The campaign was designed to 'integrate harm-reduction interventions into a system-wide initiative and, ultimately, to eliminate harm from the health care experience'. This was done by enhancing reporting and studying of harm events, researching causality, identifying priorities, and redesigning care to eliminate harm. A set of 27 measures for harm reduction, covering infection-, medication-, and procedure-related harm, as well as other types of harm, were combined to comprise a unique global harm score. The campaign's objective is to reduce all-cause harm events system-wide by 50% by 2013. From start to 2011, they have recorded a **31% reduction in harm events and an 18% reduction in inpatient mortality** system-wide. The authors report that 'building **infrastructure**, creating a **culture** of safety, providing employee **training** and education, and improving **work process** design are critical' and that key 'ongoing success focus on **leadership**, disseminating **performance**, putting **everyone** to work, and stealing ideas through national and local **collaborations**.' They also report that a financial model was created to assess **cost-savings of reducing harm events; early results total nearly $10 million in four years.**
URL	http://www.ingentaconnect.com/content/jcaho/jcjqs/2012/00000038/00000007/art00006

Seasonality and Temporal Correlation between Community Antibiotic Use and Resistance in the United States
Sun L, Klein EY, Laxminarayan R
Clinical Infectious Diseases 2012 [epub]

Notes	This article presents a study conducted on US data on antibiotic prescriptions from 1999-2007 to examine the rates of antibiotic resistance in relation to the seasonal patterns of use of antibiotics. The researchers observed that the prevalence of resistant *Escherichia coli* was significantly correlated with lagged (by 1 month) antibiotic prescriptions for aminopenicillins and fluoroquinolones, indicating that increased usage of antibiotics in winter can generate seasonal patterns of resistance. This study found that these increases in resistance were only short-term, and subsided again as rates of antibiotic prescribing declined. The high rates of community use of antibiotics reinforces the importance of targeting inappropriate use at the community level, as we have seen in Australia with the recent campaigns by the National Prescribing Service.
DOI	http://dx.doi.org/10.1093/cid/cis509

Standard admission orders can improve the management of acute myocardial infarction
Abrahamyan L, Austin PC, Donovan LR, Tu JV
International Journal for Quality in Health Care 2012;24(4):425-432.

Notes	Paper reporting on a study examining whether the use of standard admission orders for patients admitted with acute myocardial infarction (AMI) is associated with better hospital quality of care. The study involved 5,338 patients with AMI admitted directly to the coronary care/intensive care units of 78 participating acute hospitals in Canada in 2004/2005. The measures used were hospital performance on seven process-of-care measures and a combined composite process-of-care measure, with secondary outcomes being 30-day and 1-year mortality rates. The authors report that most patients (81%) were treated with standard admission orders. These patients were more likely to receive four of seven identified process-of-care measures. Use of standard admission orders was not associated with significantly lower 30-day or 1-year mortality. However, patients who met the composite process-of-care measure had lower 30-day and 1-year mortality These led the authors to conclude that 'use of standard admission orders was associated with improved hospital performance on several but not all acute process-of-care quality indicators. The utilization of standard admission orders should be considered as a strategy for improving hospital care in patients admitted with AMI.'
DOI	http://dx.doi.org/10.1093/intqhc/mzs022

Preventable deaths due to problems in care in English acute hospitals: a retrospective case record review study
Hogan H, Healey F, Neale G, Thomson R, Vincent C, Black N
BMJ Quality & Safety 2012 [epub].

Notes	Article reporting on an attempt to measure the scale of preventable deaths. This project undertook retrospective case record reviews of 1,000 adults who died in 10 acute hospitals in England in 2009. Trained physician reviewers estimated life expectancy on admission, to identified problems in care contributing to death and judged if deaths were preventable taking into account patients' overall condition at that time.

	These reviewers judged **5.2% of deaths as having a 50% or greater chance of being preventable**. The principal problems associated with preventable deaths were **poor clinical monitoring** (31.3%), **diagnostic errors** (29.7%), and **inadequate drug or fluid management** (21.1%). Most preventable deaths (60%) occurred in elderly, frail patients with multiple comorbidities judged to have had less than 1 year of life left to live. The authors argue that their work suggests that the incidence of preventable hospital deaths is lower than previous estimates, but concede that 'The burden of harm from preventable problems in care is still substantial.' They conclude that 'A focus on deaths may not be the most efficient approach to identify opportunities for improvement given the low proportion of deaths due to problems with healthcare.'
DOI	http://dx.doi.org/10.1136/bmjqs-2012-001159

BMJ Quality and Safety online first articles

Notes	*BMJ Quality and Safety* has published a number of 'online first' articles, including: • Failures in communication and information transfer across the surgical care pathway: interview study (Kamal Nagpal, Sonal Arora, Amit Vats, Helen W Wong, Nick Sevdalis, Charles Vincent, Krishna Moorthy) • Automated electronic reminders to prevent miscommunication among primary medical, surgical and anaesthesia providers: a root cause analysis (Robert E Freundlich, L Grondin, K K Tremper, K A Saran, S Kheterpal) • Uncharted territory: measuring costs of diagnostic errors outside the medical record (Alan Schwartz, Saul J Weiner, Frances Weaver, Rachel Yudkowsky, Gunjan Sharma, Amy Binns-Calvey, Ben Preyss, Neil Jordan) • Preventable deaths due to problems in care in English acute hospitals: a retrospective case record review study (Helen Hogan, Frances Healey, Graham Neale, Richard Thomson, Charles Vincent, Nick Black)
URL	http://qualitysafety.bmj.com/onlinefirst.dtl

International Journal for Quality in Health Care
August 2012, Vol 24, Issue 4

Notes	A new issue of the *International Journal for Quality in Health Care* has been published. Articles in this issue of the *International Journal for Quality in Health Care* include: • Investigating **patient safety culture** across a health system: multilevel modelling of differences associated with service types and staff demographics (B Gallego, M T Westbrook, A G Dunn, and J Braithwaite) http://intqhc.oxfordjournals.org/cgi/content/abstract/24/4/311?etoc • Using the patient safety indicators to detect potential **safety events** among US veterans with **psychotic disorders**: clinical and research implications (Eric G. Smith, Shibei Zhao, and Amy K. Rosen) http://intqhc.oxfordjournals.org/cgi/content/abstract/24/4/321?etoc • Using a logic model to **design and evaluate** quality and patient safety improvement programs (C A Goeschel, W M Weiss, and P J Pronovost) http://intqhc.oxfordjournals.org/cgi/content/abstract/24/4/330?etoc • HIVQUAL-T: monitoring and improving **HIV clinical care** in Thailand, 2002-08 (Sombat Thanprasertsuk, Somsak Supawitkul, Rangsima Lolekha, Peeramon Ningsanond, Bruce D Agins, et al) http://intqhc.oxfordjournals.org/cgi/content/abstract/24/4/338?etoc

	• Comparing **physician and patient perceptions of quality in ambulatory care** (Roger Levine, K Shore, J Lubalin, S Garfinkel, M Hurtado, and K Carman) http://intqhc.oxfordjournals.org/cgi/content/abstract/24/4/348?etoc • Improving **doctor-patient communication** in the outpatient setting using a facilitation tool: a preliminary study (Naama Neeman, Thomas Isaac, Suzanne Leveille, C Dimonda, J Y Shin, M D Aronson, and S D Freedman) http://intqhc.oxfordjournals.org/cgi/content/abstract/24/4/357?etoc • Do Spaniards know their **rights as patients**? (Jose Joaquin Mira, Susana Lorenzo, Mercedes Guilabert, and Virtudes Perez-Jover) http://intqhc.oxfordjournals.org/cgi/content/abstract/24/4/365?etoc • Are quality improvement methods a fashion for hospitals in Taiwan? (Kuo-Piao Chung and Tsung-Hsien Yu) http://intqhc.oxfordjournals.org/cgi/content/abstract/24/4/371?etoc • Development and validation of **comorbidity index** in South Korea (Seol-Ryoung Kil, Sang-Il Lee, Young-Ho Khang, Moo-Song Lee, Hwa-Jung Kim, Seon-Ok Kim, and Min-Woo Jo) http://intqhc.oxfordjournals.org/cgi/content/abstract/24/4/391?etoc • Building China's municipal **healthcare performance evaluation** system: a Tuscan perspective (Hao Li, Sara Barsanti, and Anna Bonini) http://intqhc.oxfordjournals.org/cgi/content/abstract/24/4/403?etoc • Feasibility of **evaluating quality cancer care** using registry data and electronic health records: a population-based study (A Caldarella, G Amunni, C Angiolini, E Crocetti, F Di Costanzo, A Di Leo, et al) http://intqhc.oxfordjournals.org/cgi/content/abstract/24/4/411?etoc • The process of implementation of the **diabetes register** in Primary Health Care (Ing-Marie Hallgren Elfgren, Eva Tornvall, and Ewa Grodzinsky) http://intqhc.oxfordjournals.org/cgi/content/abstract/24/4/419?etoc • User-**experience surveys** with **maternity** services: a randomized comparison of two data collection models (Oyvind Andresen Bjertnaes and Hilde Hestad Iversen) http://intqhc.oxfordjournals.org/cgi/content/abstract/24/4/433?etoc
URL	http://intqhc.oxfordjournals.org/content/vol24/issue4/index.dtl?etoc

Online resources

ISQua Knowledge

http://www.isquaknowledge.org/

The ISQua Knowledge site has had some recent updates. Among these has been the addition of a new Online Workshop, *The Fundamentals of Quality Improvement*. Two parts of this three-part series presented by Dr Cathy Balding have been uploaded. *Part 1: The Basics* was posted last year. *Part 2: Strategic Quality Planning & Governance* has been posted recently. These are available at http://www.isquaknowledge.org/activities/qi-series.html.
