AUSTRALIAN COMMISSION
ON SAFETY AND QUALITY IN HEALTH CARE

On the Radar

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Three years of *On the Radar*

Issue 1 of On the Radar appeared on 5 July 2010. 3 years on we have Issue 134.

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.

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On the Radar
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Journal articles

Information technology interventions to improve medication safety in primary care: a systematic review
Lainer M, Mann E, Sönnichsen A
International Journal for Quality in Health Care 2013 [epub].

Notes	This systematic review of the literature on IT interventions for medication safety found that there has been little done on the primary care setting (10 randomised control trails from the initial 3918 studies identified). However, one elements that does emerge is that where the intervention was pharmacist led the results were more positive. The authors note that the “positive results of pharmacist-led IT interventions indicate that IT interventions with inter-professional communication appear to be effective.”
DOI	http://dx.doi.org/10.1093/intqhc/mzt043

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

The Effects of Quality of Care on Costs: A Conceptual Framework
Nuckols TK, Escarce JJ, Asch SM
Milbank Quarterly 2013;91(2):316-353.

Value for money in health care: Varying performances across Canada
Barua B, Esmail N
Fraser Forum 2013;May/June 2013:22-25.

In Focus: Using Behavioral Economics to Advance Population Health and Improve the Quality of Health Care Services
Hostetter M, Klein S
Quality Matters 2013;June/July 2013.

Notes	This week has seen a number of items on the issue of quality and costs or economics. One of the more substantial pieces is a conceptual framework for examining issues of costs and quality that appeared in *Milbank Quarterly*. Nuckols and colleagues argue that that is a lack of a conceptual framework to understand how quality influences costs and that "A framework can help clarify important concepts and terms, facilitating communication among individuals working in a field. By describing plausible cause-and-effect relationships, a framework can sharpen analytical questions and aid the development of testable hypotheses. Because a conceptual framework delineates the factors influencing those cause-and-effect relationships, it can help investigators identify potential mediating variables, confounding factors, and sources of endogeneity, thereby revealing or improving analytical rigor and completeness. Finally, a framework can help investigators determine whether important questions might have been overlooked by previous researchers and thereby stimulate novel lines of inquiry." A much slighter piece, from the Canadian neo-liberal think-tank the Fraser Institute and published in their own journal, examined data from the Provincial Health Index to analyse value for money in Canadian healthcare and they argue that "**higher health spending does not lead to superior health system performance** in Canada. To the contrary, two of Canada's highest performing health care systems (Quebec and Ontario) are also among the least expensive. At the same time, Canada's most expensive universal access health care systems rank last, seventh, and eighth overall." An item by Hostetter and Klein in the June/July 2013 issue of *Quality Matters* from the (US) Commonwealth Fund looks at how a behavioural economics approach is being used to understand why health systems do not always function optimally and points to ways of encouraging providers to invest in new models of care and helping patients to engage in healthy behaviours. This approach moves away from a belief in people as rational economic beings and rather that **people are "predictably irrational"** in their decision-making and behaviour and attempts to understand how this can be used to influence behaviours, by all players in health care.

	Also in this issue of *Quality Matters* is an interview with Douglas Hough, the author of *Irrationality in Health Care: What Behavioral Economics Reveals About What We Do and Why*.
DOI / URL	Nuckols et al http://dx.doi.org/10.1111/milq.12015 Barua and Esmail http://www.fraserinstitute.org/uploadedFiles/fraser-ca/Content/research-news/research/publications/fraserforum-may-june-2013.pdf Hostetter and Klein http://www.commonwealthfund.org/Newsletters/Quality-Matters/2013/June-July/In-Focus.aspx Hough interview: http://www.commonwealthfund.org/Newsletters/Quality-Matters/2013/June-July/Q-A-Advancing-Quality-Improvement-One-Mind-at-a-Time.aspx

Developing quality measures to address overuse
Mathias JS, Baker DW
Journal of the American Medical Association 2013;309(18):1897-1898.

Notes	An important aspect to appropriateness of care is overuse or over-servicing. Here, **overuse is** defined as **the use of a service that is unlikely to improve patient outcomes or for which potential harms exceed likely benefits**. In this viewpoint piece Mathias and Baker highlight some of the pitfalls that need to be avoided in attempting to develop measures of overuse. As they conclude, "the rules of evidence for developing overuse measures are less well defined, and thoughtful strategies are needed to avoid unintended consequences of overuse measures". However, they do see potential as "When carefully developed, implemented, and monitored, overuse measures have the potential to be part of the solution to the cost, quality, and safety problems in the US health care system."
DOI	http://dx.doi.org/10.1001/jama.2013.3588

A Bundled Approach to Reduce Methicillin-Resistant Staphylococcus aureus *Infections in a System of Community Hospitals*
Perlin JB, Hickok JD, Septimus EJ, Moody JA, Englebright JD, Bracken RM
Journal for Healthcare Quality 2013;35(3):57-69.

Notes	Paper reporting on a multi-faceted program for MRSA infection prevention that was developed for implementation in 159 acute care facilities in the USA and was implemented in 2007. The program featured **five distinct tools—active MRSA surveillance** of high-risk patients, **enhanced barrier precautions**, **compulsive hand hygiene**, **disinfection and cleaning**, and **executive champions and patient empowerment**. The paper reports that post-intervention (2007/2008) that the volume of disposable gown and alcohol-based hand sanitizer use increased substantially, healthcare-associated **central line-associated bloodstream infections and ventilator-associated pneumonia due to MRSA decreased 39% and 54%, respectively**. Infection rates continued to decrease during the follow-up period (2009). The authors conclude that "This sustained improvement demonstrates that reducing healthcare-associated MRSA infections in a large number of diverse facilities is possible and that a "bundled" approach that translates science into clinical and executive performance expectations may aid in overcoming traditional barriers to implementation."
DOI	http://dx.doi.org/10.1111/jhq.12008

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

Achieving organisational competence for clinical leadership: The role of high performance work systems
Leggat SG, Balding C.
Journal of Health Organization and Management 2013;27(3):312-329.

Notes	This paper presents the findings of a qualitative study, involving 28 clinicians, that sought to gather views about the content of an educational initiative being planned to improve clinical leadership in quality and safety among medical, nursing and allied health professionals working in primary, community and secondary care. The clinician participants conceptualised clinical leadership in relation to organisational factors. They identified four **individual factors** (**emotional intelligence**, **resilience**, **self-awareness** and **understanding of other clinical disciplines**) as being important for clinical leaders and seven **organisational factors** (**role clarity** and **accountability**, **security** and **sustainability** for clinical leaders, **selective recruitment** into clinical leadership positions, **teamwork** and **decentralised decision making**, **training**, **information sharing**, and **transformational leadership**) were seen as essential. The human resource management literature adds with contingent reward, reduced status distinctions and measurement of management practices, as the essential organisational underpinnings of high performance work systems. The authors argue that "**clinical leadership is an organisational property**, suggesting that capability frameworks and educational programs for clinical leadership need a broader organisation focus" and not just focus on individual aspects.
DOI	http://dx.doi.org/10.1108/JHOM-Jul-2012-0132

The Kaiser Permanente implant registries: effect on patient safety, quality improvement, cost effectiveness, and research opportunities
Paxton EW, Inacio MC, Kiley ML
Permamente Journal 2012;16(2):36-44.

Notes	The US health care system Kaiser Permanente has developed registries across the group. This paper recounts some of the experiences and the benefits of the registry. Many of the benefits could be enhanced where registries can cover an entire population, as is with some existing registries and is planned to be the case with the national patient contact register for implantable devices, and two clinical quality registers for breast implants and cardiac devices. Kaiser Permanente (KP) has implemented eight implant registries and they have helped enhance patient safety through identification of affected patients during major recalls, identification of risk factors associated with outcomes of interest, development of risk calculators, and surveillance programs for infections and adverse events. The authors also assert that the **registries** provide important information and **affect** various areas, including **patient safety**, **quality improvement**, **cost-effectiveness**, and **research**.
URL	http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3383159/pdf/i1552-5775-16-2-36.pdf

American Journal of Medical Quality
July 2013; Vol. 28, No. 4

Notes	A new issue of the *American Journal of Medical Quality* has been published. This issue of *American journal of Medical Quality* includes the following items: • Identifying Hospital Organizational Strategies to **Reduce Readmissions** (Faraz S Ahmad, J P Metlay, F K Barg, R R Henderson, and R M Werner) • Impact of Pharmacist **Discharge Medication** Therapy Counseling and Disease State Education: Pharmacist Assisting at Routine Medical Discharge (Project PhARMD) (P Sarangarm, M S London, S S Snowden, T J Dilworth, L R Koselke, C O Sanchez, R D'Angio, and G Ray) • A Lean Six Sigma Quality Improvement Project to Increase **Discharge Paperwork Completeness** for Admission to a Comprehensive Integrated **Inpatient Rehabilitation** Program (N J Neufeld, E H Hoyer, P Cabahug, M González-Fernández, M Mehta, N C Walker, R L Powers, and R S Mayer) • Developing and Pilot Testing Practical Measures of Preanalytic **Surgical Specimen Identification Defects** (Paul J Bixenstine, Richard J Zarbo, Christine G Holzmueller, Gayane Yenokyan, Raymond Robinson, Daniel W Hudson, Arlene M Prescott, Ron Hubble, Mary M Murphy, Chris T George, R D'Angelo, S R Watson, L H Lubomski, and S M Berenholtz) • Improving Identification of **Postoperative Respiratory Failure** Missed by the Patient Safety Indicator Algorithm (Ann M Borzecki, Marisa Cevasco, Qi Chen, Marlena Shin, Kamal M Itani, and Amy K Rosen) • **Heart Failure Performance Measures**: Do They Have an Impact on 30-Day Readmission Rates? (Sula Mazimba, Nakash Grant, Analkumar Parikh, George Mwandia, Diklar Makola, C Chilomo, C Redko, and H S Hahn) • The Development of a Validated **Checklist for Adult Lumbar Puncture**: Preliminary Results (Katherine Berg, Lee Ann Riesenberg, Dale Berg, Kathleen Mealey, D Weber, D King, E M Justice, K Geffe, and G Tinkoff) • Reducing Costly **Falls of Total Knee Replacement Patients** (Quanjun Cui, Laura H Schapiro, M C Kinney, P Simon, A Poole, and W M Novicoff) • Big Things Come in Bundled Packages: Implications of **Bundled Payment Systems** in Health Care Reimbursement Reform (Dennis R. Delisle) • Using Qualitative Measures to Improve **Quality in Radiation Oncology** (Amy S Harrison, Yan Yu, Adam P Dicker, and Laura A Doyle) • **Predicting Surgical Risk**: Exclusion of Laboratory Data Set Maintains Predictive Accuracy (Athanasios Tsiouris, Vic Velanovich, Sarah Whitehouse, Zeeshan Syed, and Ilan Rubinfeld)
DOI	http://ajm.sagepub.com/content/vol28/issue4/?etoc

BMJ Quality and Safety online first articles

Notes	*BMJ Quality and Safety* has published a number of 'online first' articles, including: • Assessing **adverse events** among **home care** clients in three Canadian provinces using chart review (Régis Blais, Nancy A Sears, Diane Doran, G Ross Baker, Marilyn Macdonald, Lori Mitchell, Stéphane Thalès) • Reducing **cardiac arrests in the acute admissions unit**: a quality improvement journey (Daniel J Beckett, Monica Inglis, Sharon Oswald, Elaine Thomson, Wilma Harley, Jennifer Wilson, R C Lloyd, K D Rooney)

	• An intervention to improve **transitions from NICU to ambulatory care**: quasi-experimental study (Virginia A Moyer, Lu-Ann Papile, Eric Eichenwald, Angelo P Giardino, Myrna M Khan, Hardeep Singh) • Incorporating **evidence review into quality improvement**: meeting the needs of innovators (Margie Sherwood Danz, Susanne Hempel, Yee-Wei Lim, Roberta Shanman, A Motala, S Stockdale, P Shekelle, L Rubenstein) • Editorial: **Medication safety**: opening up the black box (Barbara Mintzes) • What is the probability of detecting poorly performing hospitals using **funnel plots**? (Sarah E Seaton, Lisa Barker, Hester F Lingsma, Ewout W Steyerberg, Bradley N Manktelow)
URL	http://qualitysafety.bmj.com/onlinefirst.dtl

International Journal for Quality in Health Care online first articles

Notes	*International Journal for Quality in Health Care* has published a number of 'online first' articles, including: • Validation of the French version of the **Hospital Survey on Patient Safety Culture** questionnaire (P. Occelli, J-L. Quenon, M. Kret, S. Domecq, F. Delaperche, O. Claverie, B. Castets-Fontaine, R. Amalberti, Y. Auroy, P. Parneix, and P. Michel)
URL	http://intqhc.oxfordjournals.org/content/early/recent?papetoc

Online resources

Lead Clinicians Group (LCG) Initiative evaluation
http://www.hoi.com.au/projects
The Lead Clinicians Group (LCG) Initiative is to be evaluated for the Department of Health and Ageing. The evaluation seeks the input of clinicians and others in the health sector.

Quality health records in Australian primary healthcare: A guide
http://www.racgp.org.au/your-practice/business/tools/support/qualityhealthrecords/
This guide was developed by an inter-professional Advisory Group in consultation with colleagues across the Australian primary healthcare sector. The guide is:

- designed to assist health professionals produce, manage and use high quality health records that are fit for a range of purposes including safe clinical decision making, good communication with other health professionals, trustworthy partnerships with patients and effective continuity of patient care.
- applicable to all health professionals operating in the Australian primary healthcare sector whether as solo practitioners, members of single-discipline practice teams, members of multidisciplinary practice teams or members of larger organisations.
- comprehensive in covering electronic health record systems, paper-based health record systems and hybrid health record systems and describes a set of core principles and practical examples to illustrate particular principles in day-to-day clinical practice.

[Canada] Quality Compass
http://qualitycompass.hqontario.ca/
Compiled by Health Quality Ontario, *Quality Compass* is an online searchable tool to help health system leaders and healthcare providers improve performance. Quality Compass focuses on best practices and quality indicators, targets and measures, along with tools and resources to bridge care gaps and improve the uptake of best practices.

[USA] Checklists to Improve Patient Safety
http://www.hpoe.org/resources/hpoehretaha-guides/1398
The (US) Partnership for Patients Hospital Engagement Networks are designed to improve patient care across 10 areas of patient harm through the implementation and dissemination of best practices in clinical quality. This guide includes checklists, developed by Cynosure Health, for these 10 areas:

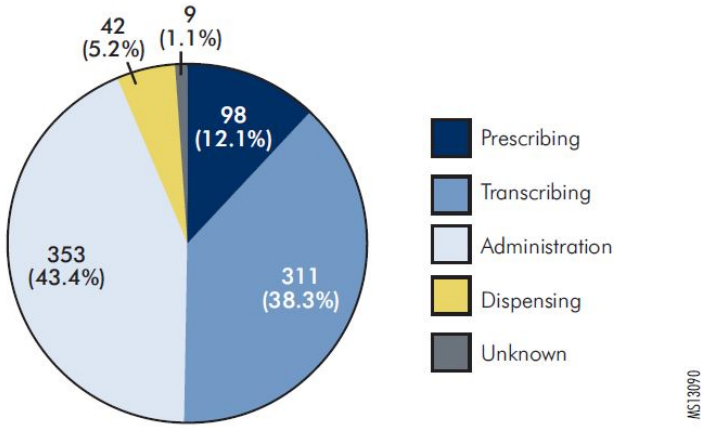
- **Adverse drug events (ADEs)**
- **Catheter-associated urinary tract infections (CAUTIs)**
- **Central line-associated blood stream infections (CLABSIs)**
- **Early elective deliveries (EEDs)**
- **Injuries from falls and immobility**
- **Hospital-acquired pressure ulcers (HAPUs)**
- **Preventable readmissions**
- **Surgical site infections (SSIs)**
- **Ventilator-associated pneumonias (VAPs) and ventilator-associated events (VAEs)**
- **Venous thromboembolisms (VTEs)**

Each checklist identifies the top 10 evidence-based interventions hospitals can implement, as well as tools, detailed steps and process maps for implementing these best practices.

[USA] Gallup: 7 Ways to Enhance Patient Safety
http://www.beckershospitalreview.com/quality/gallup-7-ways-to-enhance-patient.html
Short media item on results of a Gallup poll of staff at the Loma Linda University Medical Center in California. The survey showed that to take advantage of the additive nature of employee safety and employee engagement, administrators should:
1. Ensure adequate staffing. Keep enough staff on hand to manage patient care in a reasonable fashion.
2. Limit use of temporary staff.
3. Implement a culture of transparency. It allows staff to better understand, implement and respond to best practices.
4. Monitor knowledge transfer about patients between shifts so that important information is not overlooked.
5. Encourage feedback from staff to leadership on patient safety.
6. Respond to staff feedback about patient safety to let them know their suggestions are valued, regardless of implementation.
7. Keep staff members informed of errors and discuss them as learning experiences so that they do not occur again.

[USA] Wrong-Patient Medication Errors: An Analysis of Event Reports in Pennsylvania and Strategies for Prevention
http://www.patientsafetyauthority.org/ADVISORIES/AdvisoryLibrary/2013/Jun;10%282%29/Pages/41.aspx
A brief analysis of 813 wrong-patient medication errors were reported to the Pennsylvania Patient Safety Authority in the period 1 July–31 December 2011.

Figure. Wrong-Patient Errors by Node, as Reported to the Pennsylvania Patient Safety Authority, July 2011 to December 2011



[USA] Health IT Patient Safety Action and Surveillance Plan
http://www.healthit.gov/policy-researchers-implementers/health-it-and-patient-safety
The (US) Office of the National Coordinator (ONC) for Health Information Technology has announces the publication of the final version of the *Health IT Patient Safety Action and Surveillance Plan*. The Plan builds on recommendations of the 2011 Institute of Medicine (IOM) report, *Health IT and Patient Safety: Building Safer Systems for Better Care*, and provides a roadmap for increasing knowledge of health IT safety and ensuring that health IT is used to make care safer.

[USA] Hospitals seek high-tech help for hand hygiene
http://www.modernhealthcare.com/article/20130628/INFO/306289977/
Media piece on how various technologies are being used to help increase hand hygiene in US hospitals.
