On the Radar

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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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Reports

Evidence scan: Involving patients in improving safety
The Health Foundation

Notes

| Notes | Short (26 pages) report from the (UK) Health Foundation describing ways in which patients have been brought into safety improvement. According to the Health Foundation, the scan addresses the questions:
| How have patients and carers been involved in improving safety in healthcare?
| Is there any evidence that patient involvement leads to improved safety?
The main approaches to involving patients in safety improvement that the scan identifies include:
| collecting feedback retrospectively
| asking patients to help plan broad service change
| encouraging patients to help identify risks when they are receiving care. |
| TRIM | 74550 |
Phase 3 Consultation Paper Number 2 on a Draft Health Professionals Prescribing Pathway (HPPP) in Australia
Health Workforce Australia

Notes
Health Workforce Australia (HWA) has developed a draft Health Professionals Prescribing Pathway (HPPP). As part of the project they have now also released a consultation paper. This paper is to communicate about the draft HPPP and to seek feedback as an important part of the testing and finalising stage of the proposed pathway.

The HPPP project aims to develop a nationally consistent approach to prescribing by health professionals, other than medical practitioners, that supports safe practice, quality use of medicines and effectiveness of healthcare services.

The consultation paper is available on the HWA website. Respondents have until 8 March 2013 to compile and return their feedback.

URL Consultation site and video www.hwacnect.net.au/hppp
HPPP project page https://www.hwa.gov.au/hppp

Journal articles

Infusing fun into quality and safety initiatives

Notes
Safety and quality are rather serious subjects. But, as with many subjects, injecting a degree of levity can be effective in communicating and engaging. This paper describes how nursing staff in a single unit at a US health service used a “little creativity to significantly improve compliance with hand hygiene and reduce infection rates”. Activities included a song/jingle, video, t-shirts, outreach, games, etc. and were associated with markedly increased hand hygiene compliance.


The incidence of adverse events among home care patients

Notes
Much of the literature on adverse events focuses on acute care/hospitals. This paper describes the incidence of adverse events experienced by patients in three Canadian home care programs. Using a sample of cases from 2004/05 the study reported at least one of their search criteria being found in 286 (66.5%) of 430 cases.

“Physician reviewers identified 61 AEs in 55 (19.2%) of the 286 (12.8% of the 430) cases. The AE rate was 13.2 per 100 home care cases. 32.7% (20 of 61 AEs) of the AEs were rated as having >50% probability of preventability; 6 deaths (10.9% of patients with an AE; 1.4% of all patients) occurred in AE-positive patients. The most common AEs were falls and adverse drug events.”

The authors conclude that “Providing health care through home care programs creates unintended harm to patients. The incidence rate of AEs of 13.2% suggests a significant number of home care patients experience AEs, one-third of which were considered preventable. Improvements in patient and informal caregiver education, skill development and clinical planning may be useful interventions to reduce AEs.”

DOI http://dx.doi.org/10.1093/intqhc/mzs075
The issue of preventable hospital admissions and re-admissions is one that occupies a lot of minds. Among the more recent material in this area is a commentary piece with authors from the Institute for Healthcare Improvement and The Commonwealth Fund published in *JAMA* (one of a number of papers on readmission in this issue of *JAMA*). In this piece the authors argue that efforts to improve care transitions and reduce unnecessary readmissions should be a collaborative effort in which hospitals, home health agencies, and social service providers—as well as patients and family caregivers—all participate. They also argue that payment systems need to reflect this by spreading both costs and savings across all providers. Further, reducing hospital use, including readmissions, require a stronger primary and preventive care foundation and better chronic disease management for those populations most at risk.

Also from the Commonwealth Fund is a series of case studies of hospital and health system innovations to improve care transitions and reduce readmissions. The case studies describe Cincinnati Children’s Hospital Medical Center’s Asthma Improvement Collaborative, UCSF Medical Center's Heart Failure Care Management Program, and the Visiting Nurse Service of New York's Choice Health Plans. Each has developed a bundle of interventions involving multi-disciplinary teams focused on improving provider communication, patient and family education, transitions from the hospital, and follow-up ambulatory care.

Report on a US community hospital’s experience on introducing a bundle of four evidence-based interventions to reduce their catheter-associated urinary tract infection (CAUTI) rates. The four interventions were:

- exclusive use of silver alloy catheters in the hospital's acute care areas
- a securing device to limit the movement of the catheter after insertion
- re-positioning of the catheter tubing if it was found to be touching the floor
- removal of the indwelling urinary catheter on post-operative Day 1 or 2, for most surgical patients.

The CAUTI rate for the pre-intervention period was **5.2/1000**. For the 7 months following the implementation of the fourth intervention, the rate was **1.5/1000 catheter days**, a significant reduction. The annualized projection for the cost of implementing this bundle of four interventions is USD23 924.
This article explores the use of patient reported outcome measures (PROMs) to improve health care and compare provider performance. Distinct from patient reported experience measures, PROMs seek to ascertain patients’ views of their symptoms, their functional status, and their health-related quality of life. They can be disease or condition specific, or generic. The article looks at current use of PROMs in routine practice in England. It identifies some challenges to their use, such as minimising the time and cost of their collection and analysis, increasing patient participation, and ensuring that PROMs recognise all three dimensions of quality: safety, effectiveness, experience. The article also proposes five priorities for maximising the contribution of PROMs to health care improvement:

- Combine initiatives to use PROMs for clinical management and for provider comparisons, to contribute to both goals,
- Encourage the adoption of new data collection technologies such that PROMs become part of everyday care,
- Identify priority diseases and treatments,
- Tackle the methodological challenges that remain unresolved to ensure PROMs are used appropriately, and
- Make use of the opportunity that PROMs presents to develop value based care in which health services can be driven by health outcomes.

DOI http://dx.doi.org/10.1136/bmj.f167

The promotion of a patient-centred approach in health care has made much progress in recent years. However, some of the models proposed can be static and one-dimensional. For example, cultural problems, and power and information asymmetries are often not addressed, but 'worked around'. This paper by a team from from the Centre for Health Communications, University of Technology Sydney is a useful contribution. Drawing on previous empirical work in this area, they describe a systems approach to safety that openly acknowledges the multiple interdependencies between patients, carers, clinicians and the institutions they interact in. An adaptive and context-dependent model is recommended, that requires both attitudinal as well as practice changes. The authors note that patient-involvement itself needs to be defined collaboratively, and cannot be prescribed from a distance. This applies at the clinical interface, at policy level and in research. Particularly interesting are sections addressing the issues of power in the patient-provider relationship, and of responsibility. The latter unpacks the question of patients being potentially held responsible for adverse outcomes.

DOI http://dx.doi.org/10.1177/1363459312472082

**Medication administration errors by nurses: adherence to guidelines**

Kim J, Bates DW  

| Notes | Paper reporting on an observational study of medication administration by nurses to measure compliance with guidelines. The guidelines included including the key ‘Five Rights’:—administering the right medication, in the right dose, at the right time, by the right route, to the right patient.  
The study observed total 293 cases of “medication activities”. From these the authors report that just 45·6% of nurses verified the amount of medication indicated on the vial at least once for at least one-second., 6·5% read the name of the patient from the wristband. Administering the medication at the correct time guideline was observed 41·0% of the time. The guideline regarding hand washing before external and oral medications was followed 4·5% of the time; the figure for intravenous medications was 96·6%. Overall, among 31 categories regarding drug administration, 17·2 (± 3·6) items per person were followed, whereas 5·7 (± 1·2) items per person were violated.  
DOI [http://dx.doi.org/10.1111/j.1365-2702.2012.04344.x](http://dx.doi.org/10.1111/j.1365-2702.2012.04344.x) |


**Continuous innovation: developing and using a clinical database with new technology for patient-centred care—the case of the Swedish quality register for arthritis**

Ovretveit J, Keller C, Forsberg HH, Essén A, Lindblad S, Brommels M  
International Journal for Quality in Health Care 2013 [epub].

| Notes | Clinical quality registries can provide much valuable information about real world populations, including information that can be used for monitoring safety and quality of care, including the use of treatments and technologies. This paper reports on development of one of the ‘fleet’ of registers extant in Sweden.  
The authors seek to “describe and explain” the development of a clinical quality register and its use for different clinical, management and patient empowerment purposes over the period 1993–2009. The authors describe how various innovations were introduced over time continually to increase the utility of the clinical data and extend the coverage The paper offers lessons for current strategies for innovation for quality in health care and of the need to consider ‘innovolution’ processes, rather than discrete innovations, given the pace of change in technologies.  
DOI [http://dx.doi.org/10.1093/intqhc/mzt002](http://dx.doi.org/10.1093/intqhc/mzt002) |


**Early-Career Registered Nurses' Participation in Hospital Quality Improvement Activities**

Djukic M, Kovner CT, Brewer CS, Fatehi FK, Bernstein I  
Journal of Nursing Care Quality 2012 [epub]

| Notes | This study looked at two cohorts of newly registered nurses employed in hospitals across 15 US states, two years apart, to compare participation in QI activities, and found that, with the exception of QI practices specific to reducing nosocomial infection rates through the use of hand washing, no significant differences were noted between the two cohorts.  
| DOI [http://dx.doi.org/10.1093/jnca/jgt002](http://dx.doi.org/10.1093/jnca/jgt002) |
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:

- **Editorial** Recipes for checklists and bundles: one part active ingredient, two parts measurement (Vineet Chopra, Kaveh G Shojania)
- Perceived causes of **prescribing errors** by junior doctors in hospital inpatients: a study from the PROTECT programme (Sarah Ross, Cristin Ryan, Eilidh M Duncan, Jillian J Francis, Marie Johnston, J S Ker, A J Lee, M J MacLeod, S Maxwell, G McKay, J McLay, D J Webb, C Bond)
- **Medication discrepancies** in integrated **electronic health records** (Amy Linsky, Steven R Simon)
- ‘Matching Michigan’: a 2-year stepped interventional programme to minimise **central venous catheter-blood stream infections** in intensive care units in England (Julian Bion, Annette Richardson, Peter Hibbert, Jeanette Beer, Tracy Abrusci, Martin McCutcheon, J Cassidy, J Eddleston, K Gunning, G Bellingan, M Patten, D Harrison THE MATCHING MICHIGAN COLLABORATION & WRITING COMMITTEE)
- Comparing the utility of a novel neonatal **resuscitation cart** with a generic code cart using simulation: a randomised, controlled, crossover trial (Ritu Chitkara, Anand K Rajani, H C Lee, S F Snyder Hansen, L P Halamek)
- Comparison of traditional trigger tool to data warehouse based screening for identifying **hospital adverse events** (Kevin J O'Leary, Vikram K Devisetty, Amitkumar R Patel, David Malkenson, Pradeep Sama, William K Thompson, Matthew P Landler, Cynthia Barnard, Mark V Williams)
- The accident and emergency department questionnaire: a measure for **patients’ experiences** in the accident and emergency department (Nanne Bos, Steve Sizmur, Chris Graham, Henk F van Stel)
- Self-reported **patient safety competence** among new graduates in medicine, nursing and pharmacy (L R Ginsburg, D Tregunno, P G Norton)
- Method for developing **national quality indicators** based on manual data extraction from medical records (Melanie Couralet, Henri Leleu, Frederic Capuano, Leah Marcotte, Gerard Nitenberg, Claude Sicotte, E Minvielle)
- Real-time situation awareness assessment in critical illness management: adapting the situation present assessment method to **clinical simulation** (Clifford Leigh Shelton, Ruth Kinston, A J Molyneux, L J Ambrose)
- Quality improvement initiative: enhanced communication of newly identified, suspected GI malignancies with direct **critical results messaging** to surgical specialist (Travis Browning, Jared Kasper, Neil M Rofsky, Geoffrey Camp, John Mang, Adam Yopp, Ronald Peshock)
- **Personal accountability** in healthcare: searching for the right balance (Robert M Wachter)
**BMJ Quality and Safety** online first articles

**Notes**

**BMJ Quality and Safety** has published a number of ‘online first’ articles, including:

- Home-care nurses’ perceptions of unmet **information needs** and **communication difficulties** of older patients in the immediate post-hospital discharge period (Katrina M Romagnoli, Steven M Handler, Frank M Ligons, Harry Hochheiser)
- Identifying attributes required by Foundation Year 1 doctors in multidisciplinary teams: a tool for **performance evaluation** (Patricia McGettigan, Jean McKendree, N Reed, S Holborow, C D Walsh, T Mace)
- Matching identifiers in **electronic health records**: implications for duplicate records and patient safety (Allison B McCoy, Adam Wright, Michael G Kahn, Jason S Shapiro, Elmer Victor Bernstam, Dean F Sittig)
- Process evaluation of a tailored multifaceted feedback program to improve the quality of **intensive care** by using **quality indicators** (Maartje L G de Vos, Sabine N van der Veer, Wilco C Graafmans, Nicolette F de Keizer, Kitty J Jager, Gert P Westert, Peter H J van der Voort)
- **Statistical process control charts** for attribute data involving very large sample sizes: a review of problems and solutions (Mohammed A Mohammed, Jagdeep S Panesar, David B Laney, Richard Wilson)
- **Patient-centred healthcare**, social media and the internet: the perfect storm? (Ronen Rozenblum, David W Bates)

**URL** [http://qualitysafety.bmj.com/onlinefirst.dtl](http://qualitysafety.bmj.com/onlinefirst.dtl)

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**International Journal for Quality in Health Care**

Vol. 25, No. 1

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**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 were released online). Articles in this issue of the *International Journal for Quality in Health Care* include:

- Prospects for **comparing European hospitals** in terms of quality and safety: lessons from a comparative study in five countries (Susan Burnett, Anna Renz, Siri Wiig, Alexandra Fernandes, Anne Marie Weggelaar, Johan Callopp, Janet E. Anderson, Glenn Robert, Charles Vincent, and N Fulop)
- Continuing differences between **health professions' attitudes**: the saga of accomplishing systems-wide interprofessionalism (Jeffrey Braithwaite, M Westbrook, P Nugus, D Greenfield, J Travaglia, W Runciman, A R Foxwell, R A Boyce, T Devinney, and J Westbrook)
- Editor's choice: The incidence of **adverse events among home care patients** (Nancy Sears, G. Ross Baker, Jan Barnsley, and Sam Shortt)
- A qualitative exploration of **patients' attitudes** towards the ‘Participate Inform Notice Know’ (PINK) patient safety video (Anna Pinto, Charles Vincent, Ara Darzi, and Rachel Davis)
- The effect of a workflow-based response system on hospital-wide voluntary **incident reporting rates** (Szu-Chang Wang, Ying-Chun Li, and Hung-Chi Huang)
- Reduction in **catheter-associated urinary tract infections** by bundling interventions (Karen Clarke, David Tong, Yi Pan, Kirk A. Easley, Bonnie Norrick, Christin Ko, Alan Wang, Behzad Razavi, and Jason Stein)
| Notes | *International Journal for Quality in Health Care* has published a number of ‘online first’ articles, including:  
- The effect of a **checklist** on the quality of post-anaesthesia patient **handover**: a randomized controlled trial (Cornelie Salzwedel, Hans-Jürgen Bartz, Ina Kühnelt, Daniel Appel, Oliver Haupt, Stefan Maisch, and Gunter Nils Schmidt)  
- **Timeliness of cancer care** from diagnosis to treatment: a comparison between patients with breast, colon, rectal or lung cancer (Xue Li, Andrew Scarfe, Karen King, David Fenton, Charles Butts, and Marcy Winget)  
- The effectiveness of **cultural competence** programs in ethnic minority patient-centered health care—a systematic review of the literature (A. M. N. Renzaho, P. Romios, C. Crock, and A. L. Sønderlund) |
| URL | [http://intqhc.oxfordjournals.org/content/early/recent?papetoc](http://intqhc.oxfordjournals.org/content/early/recent?papetoc) |

**Online resources**

*[USA]* Scaling Telehealth Programs: Lessons from Early Adopters  
A further set of case studies from the Commonwealth Fund. These case studies demonstrate how telehealth – in the form of remote patient monitoring – is already delivering benefits to patients and providers in the USA. The case studies describe:  
- The Veterans Health Administration’s Care Coordination/Home Telehealth program that demonstrates the possibility of implementing telehealth on a broad scale and achieving cost-effective, high-quality outcomes for chronic care patients
• Partners HealthCare’s Connected Cardiac Care Program for heart failure patients is estimated to have generated total cost savings of more than $10 million since 2006 for more than 1,200 enrollees
• Colorado-based Centura Health at Home, which has merged a clinical call center with telehealth to improve outcomes for older patients discharged from the hospital.

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