AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

On the Radar

Issue 99
2 October 2012

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This week's content

Reports

Transforming the Delivery of Health and Social Care: The case for fundamental change
Ham C, Dixon A, Brooke B
London: The King's Fund, 2012.

Notes	Is our health system broken? Does it require tweaking or is a radical sea change called for? This report, published by The King's Fund in the UK, is unequivocal in that its authors are making a "case for fundamental change". The argue that "Fundamental change to the delivery system is needed, with greater emphasis on: • preventing illness and tackling risk factors, such as obesity, to help people remain in good health • supporting people to live in their own homes and offering a wider range of housing options in the community • providing high standards of primary care in all practices to enable more services to be delivered in primary care, where appropriate • making more effective use of community health services and related social care, and ensuring these services are available 24/7 when needed • using acute hospitals and care homes only for those people who cannot be treated or cared for more appropriately in other settings • integrating care around the needs of people and populations."

	They go on to suggest that "Fundamental changes in how acute hospitals work are essential. The quality of care provided in hospitals must be improved through further concentration of specialist services where this is supported by evidence, reduced duplication of local hospital services and more effective use of senior medical staff, including in the evenings and at weekends. There is an urgent need to care for frail older people and people at the end of life in alternative settings where appropriate." Also suggested are some of the key characteristics of the health and social care system that will be "fit for the future when": • patients and users are actively involved in designing care, are seen as key members of the care team and are given adequate support and information to enable them to self-care and manage their condition • we have more flexible professional roles that allow care to adapt to the changing needs of patients. This includes all team members being clear about their roles and responsibilities, and being empowered to undertake as many responsibilities as they are able (including patients and lay workers) • as much care as can be provided safely and efficiently is delivered at or near people's home, when assets are utilised to their full extent and are flexible to adapt to changing usage, and when community-based facilities promote integrated working and provide convenient access for users. • patients and users are able to interact with providers at a time and place convenient to them, using available technologies, and are supported to be cared for at home using telehealth and telecare. • when patients are given control of data about their health and care, and data are analysed in real time and fed back to those making decisions.
URL	http://www.kingsfund.org.uk/publications/case_for_change.html
TRIM	68870

Journal articles

Mortality after surgery in Europe: a 7 day cohort study
Pearse RM, Moreno RP, Bauer P, Pelosi P, Metnitz P, Spies C, et al
The Lancet 2012;380(9847):1059-1065.

Notes	Variation in care – processes and outcomes – is a topic attracting much interest. This paper reports on a 7-day cohort study of post-surgical mortality across Europe conducted during 4–11 April 2011 covering consecutive patients aged 16 years and older undergoing inpatient non-cardiac surgery in 498 hospitals across 28 European nations. Of 46,539 patients included 1855 (**4%) died before hospital discharge**. 3599 (8%) patients were admitted to critical care after surgery with a median length of stay of 1·2 days. 1358 (73%) patients who died were not admitted to critical care at any stage after surgery. **Crude mortality rates varied widely** between countries (**from 1·2% for Iceland to 21·5% for Latvia**). As the authors note, the "**mortality rate** for patients undergoing inpatient non-cardiac surgery **was higher than anticipated**. Variations in mortality between countries suggest the need for national and international strategies to improve care for this group of patients."
DOI	http://dx.doi.org/10.1016/S0140-6736(12)61148-9

Matching Michigan': a 2-year stepped interventional programme to minimise central venous catheter-blood stream infections in intensive care units in England
Bion J, Richardson A, Hibbert P, Beer J, Abrusci T, McCutcheon M, et al.
BMJ Quality & Safety 2012 [epub].

Notes	In a recent issue of *On the Radar* there was an item on how over a 1,000 US hospitals had collectively reduced their intensive care unit (ICU) central line associated blood stream infection (CLABSI) rate by 40%. This report on a similar approach in England describes an even greater reduction. A "2-year, four-cluster, stepped non-randomised study of technical and non-technical (behavioural) interventions" to prevent these infections in adult and paediatric ICUs in England was conducted. Of 223 ICUs in England, **215 ICUs**(196 adult, 19 paediatric) submitted data on 2479 of 2787 possible months and 147 (66%) provided complete data. The exposure rate was 438,887 (404,252 adult and 34,635 paediatric) central line-patient days. Over 20 months, 1092 infections were reported. Of these, 884 (81%) were ICU acquired. For adult ICUs, the **mean rate decreased over 20 months from 3.7 in the first cluster to 1.48 infection/1000 central line-patient days** for all clusters combined, and for paediatric ICUs from 5.65 to 2.89. The trend for infection rate reduction did not accelerate following interventions training. Central line utilisation rates remained stable. Pre-ICU infections declined in parallel with ICU-acquired infections.
DOI	http://dx.doi.org/10.1136/bmjqs-2012-001325

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

Why patients need leaders: introducing a ward safety checklist
Amin Y, Grewcock D, Andrews S, Halligan A
Journal of the Royal Society of Medicine 2012;105(9):377-383.

Notes	Piece in the *Journal of the Royal Society of Medicine* arguing that the traditional ward round could have a role in enhancing hospital inpatient care. The authors argue that the "traditional 'ward round' presents an obvious opportunity for systematically and collectively ensuring that proper standards of care are being achieved". They suggest a 'ward safety checklist' specifying a number of 'risk factors' that should be checked daily. The checklist would also include prompts for sharing and clarifying information between healthcare workers and with the patient. The authors report that the concept and the desire to improve ward rounds were well received, but also noted that barriers to adoption are "informative about the current culture on many inpatient wards". They report that "medical and nursing staff in many teams are failing to coordinate their workloads well enough to make multidisciplinary rounds a working reality. 'Nursing' and 'medical' care on the ward have become 'de-coupled' and the potential consequences for patient safety and good communication are largely self-evident. This problem is further complicated by a medical culture which values the primacy of clinical autonomy and as a result can be resistant to perceived attempts to 'systematize' medical care through instruments such as checklists."
DOI	http://dx.doi.org/10.1258/jrsm.2012.120098u
TRIM	69140

Improving Medication Safety with Accurate Preadmission Medication Lists and Postdischarge Education
Gardella JE, Cardwell TB, Nnadi M
Joint Commission Journal on Quality and Patient Safety 2012;38(10):452-458.

Notes	In many regards health is an information industry and the accurate transmission of information along the patient's journey is a key element to safe and high quality care. Given the importance and volume of medications, accurate and timely information about medications – particularly any changes to medication – is clearly vital. This paper describes two interventions aimed at improving medication safety. In 2007, a medication reconciliation project was begun at an integrated health care system to (1) improve the accuracy of preadmission medication lists (PAMLs) within 24 hours of admission for patients admitted through the emergency department (ED) and (2) enhance patient education through telephone calls by pharmacists to the patients most at risk for adverse drug events (ADEs) or readmission. The authors report an **increase in accurate medication lists from 16% to 89%** and **medication errors** classified as having the potential to cause moderate or serious harm **decreased from 13.17% to 1.50%**. The second intervention, the Postdischarge Education of Complex Patients by Pharmacists was associated with a statistically significant **reduction in** 30- and 60-day **readmissions**, ADE-associated 30- and 60-day readmissions, and 30- and 60-day ED visits.
URL	http://www.ingentaconnect.com/content/jcaho/jcjqs/2012/00000038/00000010/art00004
TRIM	69141

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

Medical Errors in US Pediatric Inpatients With Chronic Conditions
Ahuja N, Zhao W, Xiang H
Pediatrics 2012 [epub].

Notes	This paper reporting on an investigation of the association between chronic conditions and iatrogenic medical errors in US paediatric inpatients based upon an analysis of the 2006 Kids' Inpatient Database (KID). The authors report that 22.3% of paediatric inpatients in the database had 1 chronic condition, 9.8% had 2 chronic conditions, and 12.0% had ≥3 chronic conditions. The overall **medical error rate per 100 discharges was 3.0**; it was **5.3 in children with chronic conditions** and **1.3 in children without chronic conditions**. The medical error rate per 1000 inpatient days was also higher in children with chronic conditions. The association between chronic conditions and medical errors remained statistically significant in logistic regression models adjusting for patient characteristics, hospital characteristics, disease severity, and length of stay. These figures led the authors to conclude that the **number of chronic conditions was significantly associated with iatrogenic medical errors in paediatric inpatients**.
DOI URL	http://dx.doi.org/10.1542/peds.2011-2555 http://pediatrics.aappublications.org/content/early/2012/09/04/peds.2011-2555.full.pdf+html

A systematic review of hand hygiene improvement strategies: a behavioural approach
Huis A, van Achterberg T, de Bruin M, Grol R, Schoonhoven L, Hulscher M
Implementation Science 2012, 7:92

Notes	This review looked at hand hygiene (HH) improvement strategies from the perspective of determinants of behaviour change to give a different dimension to the analysis of these strategies. Behaviour change techniques (encompassing various activities) were categorised by determinant, for example, increasing memory or understanding of information was an example of knowledge, and providing opportunities for social comparison was an example of social influence. The authors reviewed 41 studies and found that **the most successful improvement strategies addressed combinations of different determinants**. In particular, the authors found that addressing only determinants such as knowledge, awareness, action control, and facilitation is not enough to change HH behaviour. This information can aid those developing HH improvement strategies to design more effective programs.
DOI	http://dx.doi.org/10.1186/1748-5908-7-92

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

Factors influencing the implementation of fall prevention programmes: a systematic review and synthesis of qualitative studies
Child S, Goodwin V, Garside R, Jones-Hughes T, Boddy K, Stein K
Implementation Science 2012, 7:91

Notes	The authors reviewed 19 articles presenting qualitative research on falls prevention interventions to examine barriers and facilitators to the effective implementation of these interventions among community-dwelling older people and healthcare professionals. Their data synthesis found 3 overarching concepts: practical considerations, adapting for communities, and psychosocial. The authors conclude that in order to improve the implementation of fall prevention programs, **beliefs and behaviours at individual, organisational, and societal levels need to be addressed**.
DOI	http://dx.doi.org/10.1186/1748-5908-7-91

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

BMJ Quality and Safety online first articles

Notes	*BMJ Quality and Safety* has published a number of 'online first' articles, including: • Evaluation of a predevelopment service delivery intervention: an application to improve **clinical handovers** (Guiqing Lily Yao, N Novielli, S Manaseki-Holland, Y-F Chen, M van der Klink, P Barach, P J Chilton, R J Lilford on behalf of the European HANDOVER Research Collaborative) • Using Healthcare Failure Mode and Effect Analysis to reduce **medication errors** in the process of drug prescription, validation and dispensing in hospitalised patients (Manuel Vélez-Díaz-Pallarés, Eva Delgado-Silveira, María Emilia Carretero-Accame, Teresa Bermejo-Vicedo) • Managing the **after effects of serious patient safety incidents** in the NHS: an online survey study (Anna Pinto, Omar Faiz, Charles Vincent) • Method for developing national **quality indicators** based on manual data

	extraction from medical records (Melanie Couralet, Henri Leleu, Frederic Capuano, Leah Marcotte, Gérard Nitenberg, Claude Sicotte, E Minvielle)
URL	http://qualitysafety.bmj.com/onlinefirst.dtl

BMJ Quality and Safety
October 2012, Vol 21, Issue 10

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: • Editorial: Understanding safety and performance in the cardiac **operating room**: from 'sharp end' to 'blunt end' (Ken Catchpole, Douglas Wiegmann) • Identifying and categorising **patient safety hazards in cardiovascular operating rooms** using an interdisciplinary approach: a multisite study (Ayse P Gurses, George Kim, Elizabeth A Martinez, Jill Marsteller, Laura Bauer, Lisa H Lubomski, Peter J Pronovost, David Thompson) • Impact of online education on **intern behaviour** around joint commission national patient safety goals: a randomised trial (Tim J Shaw, Luise I Pernar, Sarah E Peyre, J F Helfrick, K R Vogelgesang, E Graydon-Baker, Y Chretien, E J Brown, J C Nicholson, J J Heit, J P T Co, T Gandhi) • **Anaesthetic drug administration** as a potential contributor to healthcare-associated infections: a prospective simulation-based evaluation of aseptic techniques in the administration of anaesthetic drugs (Derryn A Gargiulo, Janie Sheridan, Craig S Webster, Simon Swift, Jane Torrie, Jennifer Weller, Kaylene Henderson, Jacqueline Hannam, Alan F Merry) • Older veterans and **emergency department discharge** information (Susan Hastings, Karen Stechuchak, Eugene Oddone, Morris Weinberger, Dana Tucker, William Knaack, Kenneth Schmader) • **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) • **Getting the message**: a quality improvement initiative to reduce pages sent to the wrong physician (Brian M Wong, C Mark Cheung, Hasan Dharamshi, S Dyal, A Kiss, D Morra, S Quan, K Sivjee, E E Etchells) • An institution-wide handoff task force to standardise and improve **physician handoffs** (Leora I Horwitz, Kevin M Schuster, S F Thung, D C Hersh, R L Fisher, N Shah, W Cushing, J Nunes, D G Silverman, G Y Jenq) • Viewpoint: Improving healthcare quality through organisational **peer-to-peer assessment**: lessons from the nuclear power industry (Peter J Pronovost, Daniel W Hudson) • Ten **challenges in improving quality** in healthcare: lessons from the Health Foundation's programme evaluations and relevant literature (Mary Dixon-Woods, Sarah McNicol, Graham Martin) • The effects of a '**discharge time-out**' on the quality of hospital discharge summaries (Namita Mohta, Prashant Vaishnava, Cathy Liang, Kye Ye, Matt Vitale, Anuj Dalal, Jeff Schnipper)
URL	http://qualitysafety.bmj.com/content/vol21/issue10/

Online resources

Australian Safety and Quality Goals for Health Care – Action Guides
http://www.safetyandquality.gov.au/our-work/national-perspectives/goals/australian-safety-and-quality-goals-for-health-care-overview-and-action-guides/
In August 2012 Australian Health Ministers agreed to the first set of Australian Safety and Quality Goals for Health Care (the Goals). These Goals are:
1. **Safety of care**: That people receive health care without experiencing preventable harm
2. **Appropriateness of care**: That people receive appropriate, evidence-based care
3. **Partnering with consumers**: That there are effective partnerships between consumers and healthcare providers and organisations at levels of healthcare provision, planning and evaluation.

Actions to achieve the Goals can occur in different ways and in different parts of in the health system. Everyone has a role to play in this process.
The Commission has developed an *Overview of the Goals*. In addition, for each Goal and priority area the Commission has written an *Action Guide* that describes some of the outcomes which could be achieved and activities that can be undertaken to support change and improvement in these areas.
