AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

On the Radar

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This week's content

Books

First, Do Less Harm: Confronting the Inconvenient Problems of Patient Safety
Koppel R, Gordon S, editors
Ithaca, NY: Cornell University Press, 2012.

Notes	AHRQ PSnet synopsis: "This publication examines patient safety from various perspectives to address why, despite tactics like health care information technology implementation, problems such as hospital-acquired infections and medication errors persist."
URL	http://www.cornellpress.cornell.edu/book/?GCOI=80140100383500

Reports

QuarterWatch: Anticoagulants the Leading Reported Drug Risk in 2011
Moore TJ, Furberg CD, Cohen MR
Horsham, PA: Institute of Safe Medication Practices, 2012.

Notes	Latest edition of *QuarterWatch* published by the Institute of Safe Medication Practices (ISMP) in the United States on 31 May 2012. *QuarterWatch* monitors domestic, serious adverse drug events reported to the FDA to "identify trends in drug safety, report signals for specific drugs, and to seek to improve the system".

	From the executive summary: “For the calendar year of 2011 an estimated 2 to 4 million persons suffered serious, disabling, or fatal injury associated with prescription drug therapy, based on our analysis of a full year of reports to the U.S. Food and Drug Administration. The most frequently identified suspect drugs in direct reports to the FDA were the anticoagulants dabigatran and warfarin, showing that inhibiting clotting ranks among the highest risk of all drug treatments.”
URL	http://www.ismp.org/quarterwatch/pdfs/2011Q4.pdf

Journal articles

Death of teenager from a drug error a decade ago has made UK a leader in safety
Coombes R
BMJ 2012;344:e3826

Appetite for patient safety in England falls behind that in the rest of the UK, conference hears
Limb M
BMJ 2012;344:e3884

Notes	Two news items published recently in the BMJ: The first (Coombes) is a news report on advances in medication safety in the UK following a series of serious incidents involving medicines administered via the wrong route. The UK has developed and adapted safe connectors that make it impossible to inject into the spine medicines designed for intravenous use. This article underscores the importance of using information from salient events to improve safety, develop innovative solutions, and prevent errors from recurring. The UK has also built on experiences from the Shipman murders and events at the Bristol Royal Infirmary to share knowledge and tackle systems errors. The second item (Limb) is a report from the 2012 Patient Safety Congress, held in Birmingham, England. The conference heard concerns from several high profile participants, including the Health Foundation’s chief executive, Stephen Thornton, that the impetus to learn from salient events in England was fading, to the detriment of patient safety. Thornton said that he hoped the report of the public inquiry into failings at Mid Staffordshire Foundation Trust would be “the kick-start for a renewed focus on safety in England.”
DOI	Combes http://dx.doi.org/10.1136/bmj.e3826 Limb http://dx.doi.org/10.1136/bmj.e3884

The Nordic Patient Experiences Questionnaire (NORPEQ): cross-national comparison of data quality, internal consistency and validity in four Nordic countries
Skudal KE, Garratt AM, Eriksson B, Leinonen T, Simonsen J, Bjertnaes OA
BMJ Open 2012;2(3)

Notes	The eight-item NORPEQ was developed to examine core aspects of inpatient experiences across Nordic countries, and to enable cross-national comparisons. This article details the evaluation of the NORPEQ for data quality, reliability and validity following surveys of patients in Finland, Norway, Sweden and the Faroe Islands. Results indicate that the survey was both reliable and valid.
DOI	http://dx.doi.org/10.1136/bmjopen-2012-000864
TRIM	63926

For information on the Commission's work on patient experience in hospitals, see http://www.safetyandquality.gov.au/our-work/information-strategy/indicators/hospital-patient-experience/

Factors Associated with Reported Preventable Adverse Drug Events: A Retrospective, Case-Control Study
Beckett RD, Sheehan AH, Reddan JG
The Annals of Pharmacotherapy 2012;46(5):634-641.

Notes	This study sought to identify independent factors affecting the risk of reported preventable adverse drug events (ADEs – medication errors contributing to patient harm). The authors undertook a retrospective, case-control study across 3 hospitals within a US large health system. 4,321 medication error reports from 1 July 2009 to 30 June 2010 were assessed and it was found that 182 **(4%) contributed to patient harm**. Factors associated with increased independent risk of harm were **30-day readmission, time of day** (03:00-06:59), and Institute for Safe Medication Practices (ISMP) **high-alert medications**. The authors conclude that "Health systems should develop programs to promote safe, conscientious use of ISMP high-alert medications, promote pharmacist review, control the use of cabinet overrides, and direct provider attention toward recently admitted patients. Efforts should be made to determine factors associated with risk of harm at local levels."
DOI	http://dx.doi.org/10.1345/aph.1Q785

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

Impact of a pharmacist-prepared interim residential care medication administration chart on gaps in continuity of medication management after discharge from hospital to residential care: a prospective pre- and post-intervention study (MedGap Study)
Elliott RA, Tran T, Taylor SE, Harvey PA, Belfrage MK, Jennings RJ, Marriott JL
BMJ Open 2012;2:e000918

Notes	Prospective pre-intervention and post-intervention study of 428 patients discharged to a residential care facility from an inpatient ward over two 12-week periods in Victoria, Australia. This is the first study to evaluate the impact of a hospital provided interim residential care medication administration chart (IRCMAC) on medication errors or use of locum medical services after discharge from hospital to residential care. For this study, 7-day IRCMACs were generated via hospital pharmacy dispensing software during the processing of discharge prescriptions, with auto-population of the chart with patient, prescriber and medication data (name, strength and directions). The discharge prescription and IRCMAC were reviewed by a hospital pharmacist (including reconciliation with pre-admission medications and inpatient medication charts) and errors corrected. The authors consider the results as very promising with a **reduction in medication errors**: "In the pre-intervention period, 75 medications for 37 (18.3%) patients had one or more doses missed or significantly delayed within 24 hours of discharge from hospital. Following implementation of the IRCMAC, nine medications for six (2.7%) patients were missed or delayed."
DOI	http://dx.doi.org/10.1136/bmjopen-2012-000918
TRIM	63944

For information on the Commission's work on a national interim residential medication administration chart, see
http://www.safetyandquality.gov.au/our-work/medication-safety/medication-chart/national-interim-residential-medication-administration-chart/

Six Features Of Medicare Coordinated Care Demonstration Programs That Cut Hospital Admissions Of High-Risk Patients
Brown RS, Peikes D, Peterson G, Schore J, Razafindrakoto CM
Health Affairs 2012;31(6):1156-1166.

Notes	Good coordination and continuity of care are regarded as important elements to safe and high quality care, particular for those with chronic conditions. This paper reports on a number of programs that were part of the [US] Medicare Coordinated Care Demonstration program. This paper reports that four of eleven programs showed **reduced hospitalisations** (by 8–33 percent) among enrollees who had a high risk of near-term hospitalisation. The six approaches practiced by care coordinators in at least three of the four programs were: supplementing telephone calls to patients with frequent in-person meetings; occasionally meeting in person with providers; acting as a communications hub for providers; delivering evidence-based education to patients; providing strong medication management; and providing timely and comprehensive transitional care after hospitalisations. They also found that, when care management fees were included, the programs were essentially **cost-neutral**, but none of these programs generated net savings to Medicare.
DOI	http://dx.doi.org/10.1377/hlthaff.2012.0393

Integrated care: a story of hard won success
Vize R
BMJ 2012;344

Notes	Article examining the effects of the North West London integrated care pilot, launched in 2011 to meet the needs of people with diabetes and those aged over 75. The pilot brings together primary care, community services, acute care, social care, and mental health. Challenges faced by the pilot included difficulties getting clinicians to sign up, GPs' perceptions of a 'takeover' by the hospitals, and skepticism, suspicion, and animosity between different cadres of clinicians based on years of mistrust and misunderstanding. Results included a **greater involvement of patients** in their care and in clinical governance. A **culture of interprofessional respect and cooperation** also developed between clinicians. The success of the pilot has been credited to its clinician-led, patient-focused nature, and the support it received from managers and funders.
DOI	http://dx.doi.org/10.1136/bmj.e3529

Costs For 'Hospital At Home' Patients Were 19 Percent Lower, With Equal Or Better Outcomes Compared To Similar Inpatients
Cryer L, Shannon SB, Van Amsterdam M, Leff B
Health Affairs 2012;31(6):1237-1243.

Notes	In previous issues of *On the Radar* items on 'Hospital in the home' programs, including those in Victoria, have been discussed. This paper reports on the experiences of US health service in adapting and implementing the Hospital at Home® model developed by the Johns Hopkins University Schools of Medicine and Public Health to provide acute hospital–level care within patients' homes. The authors report that their patients had "**comparable or better clinical outcomes** compared with similar inpatients, and they show higher satisfaction levels". They also report that the "program achieved **savings of 19 percent over costs for similar inpatients**" and that savings largely stemmed from a shorter average length-of-stay and the use of fewer lab and diagnostic tests compared with similar patients in hospital acute care.
DOI	http://dx.doi.org/10.1377/hlthaff.2011.1132

Mortality and morbidity meetings: an untapped resource for improving the governance of patient safety?
Higginson J, Walters R, Fulop N
BMJ Quality & Safety 2012 [epub]

Notes	A characteristic of an improving health system or unit is being self-reflexive, examining and acting upon information about what is done and how well it is being done. This paper suggests that an existing activity in many settings, the mortality and morbidity meeting (M&M), could be enhanced and possibly standardised. This study sought to examine examines whether and how these M&M meetings can contribute to the governance of patient safety. The study involved observing 9 M&M meetings in an English hospital and semi-structured interviews with 19 meeting chairs. Following this, a structured mortality review process was designed and introduced into three clinical specialties over 12 months. A qualitative approach of observations (n=30) and interviews (n=40) was used to examine the impact on meetings and on frontline clinicians, managers and board members. The authors report that their initial study of M&M meetings showed a considerable variation in the way deaths were reviewed and a lack of integration of these meetings into the hospital's governance framework. The introduction of a standardised mortality review process strengthened these processes. Clinicians supported its inclusion into M&M meetings and managers and board members saw that a standardised trust-wide process offered greater levels of assurance. These led the authors to conclude that M&M meeting "can improve accountability of mortality data and support quality improvement without compromising professional learning, especially when facilitated by a standardised mortality review process."
DOI	http://dx.doi.org/10.1136/bmjqs-2011-000603

Judging Whether a Patient is Actually Improving: More Pitfalls from the Science of Human Perception
Redelmeier DA, Dickinson VM
Journal of General Internal Medicine 2012 [epub].

Notes	Among the areas the Commission has been working in has been that of recognising and responding to clinical deterioration. This piece looks at similar issues but with the focus on recognising if the patient is actually improving. Logically, recognition of clinical state (diagnosis) and changes can have safety and quality implications. The paper's abstract reads: "Fallible human judgment may lead clinicians to make mistakes when assessing whether a patient is improving following treatment. This article provides a narrative review of selected studies in psychology that describe errors that potentially apply when a physician assesses a patient's response to treatment. Comprehension may be distorted by **subjective preconceptions** (lack of double blinding). Recall may fail through **memory lapses** (unwanted forgetfulness) and tacit **assumptions** (automatic imputation). Evaluations may be further compromised due to the effects of **random chance** (regression to the mean). Expression may be swayed by **unjustified overconfidence** following conformist groupthink (group polarization). An awareness of these five pitfalls may help clinicians avoid some errors in medical care when determining whether a patient is improving."
DOI	http://dx.doi.org/10.1007/s11606-012-2097-2

For information on the Commission's work on recognising and responding to clinical deterioration, see http://www.safetyandquality.gov.au/our-work/recognising-and-responding-to-clinical-deterioration/

A pilot study of rapid benchtop sequencing of Staphylococcus aureus *and* Clostridium difficile *for outbreak detection and surveillance*
Eyre DW, Golubchik T, Gordon NC, et al
BMJ Open 2012;2(3)

Notes	Newly available Illumina MiSeq benchtop sequencing was used to undertake case studies investigating potential outbreaks of methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile*, using isolates obtained from potential outbreaks associated with three UK hospitals. The researchers successfully sequenced and analysed 26 MRSA and 15 *C difficile* isolates within five days of culture, providing early outbreak detection and identifying previously undetected probable community transmission. From the abstract: "Next-generation sequencing has the potential to resolve uncertainties surrounding the route and timing of person-to-person transmission of healthcare-associated infection, which has been a major impediment to optimal management."
DOI	http://dx.doi.org/10.1136/bmjopen-2012-001124

For information on the Commission's work on national surveillance of healthcare associated infections, see *http://www.safetyandquality.gov.au/our-work/healthcare-associated-infection/national-hai-surveillance-initiative/*

Patient safety disconnect
Spigelman A
MJA InSight 4 June 2012 [epub]

Notes	Commentary from Professor Allan Spigelman on the teaching of patient safety in Australian medical schools. Spigelman recently published a paper reporting on a University of NSW study into how Australian medical deans, educators and students perceive the teaching of the 22 learning topics included in the Australian National Patient Safety Education Framework (*Patient safety teaching in Australian medical schools: a national survey*. Spigelman AD, Debono DS, Oates K, Dunn AG, Braithwaite J. Clinical Risk 2012;18(2):46-51 http://dx.doi.org/10.1258/cr.2012.012004). Spigelman argues for further investigation into how doctors in Australia are educated about patient safety.
URL	http://www.mjainsight.com.au/view?post=allan-spigelman-patient-safety-disconnect&post_id=9420&cat=comment
TRIM	64017

Surgeon Fatigue: A Prospective Analysis of the Incidence, Risk, and Intervals of Predicted Fatigue-Related Impairment in Residents
McCormick F, Kadzielski J, Landrigan CP, Evans B, Herndon JH, Rubash HE.
Archives of Surgery 2012;147(5):430-435.

Notes	Debates around working hours, fatigue, performance, quality and safety are not a new phenomenon. This paper looks at fatigue in orthopaedic surgeons, reporting that in their sample of orthopaedic residents they were **fatigued 48% of their waking hours** and had **impaired mental effectiveness 27% of that time**. The study examined 27 orthopaedic surgical residents at 2 US academic tertiary care centres using a prospective cohort study with a minimum 2-week continuous assessment period. The residents' sleep and wake periods were continuously recorded and a daily questionnaire was used to analyse mental fatigue. **Residents' fatigue levels were predicted to increase the risk of medical error by 22%** compared with well-rested historical control subjects. The authors conclude that "Resident **fatigue is prevalent, pervasive, and variable**. To guide targeted interventions, fatigue modelling can be conducted in hospitals to identify periods, rotations, and individuals at risk of medical error."
DOI	http://dx.doi.org/10.1001/archsurg.2012.84

Healthcare Infection
June 2012, Vol 17, No. 2

Notes	The latest issue of *Healthcare Infection* has been published and includes: • Surveillance of surgical site infections after open heart surgery (Rosanna Loss, Günter Marggraf, J. Adam Piotrowski, Jaroslaw Benedik, Birgit Ross, Dorothea Hansen, Heinz G. Jakob and Walter Popp) • Surgical site infections following caesarean section at Royal Darwin Hospital, Northern Territory (Katie Henman, Claire L. Gordon, Tain Gardiner, Jane Thorn, Brian Spain, Jane Davies and Robert Baird) • A new approach to improving hand hygiene practice in an inner city acute hospital in Australia (Giulietta Pontivivo, Ketty Rivas, Julie Gallard, Nickolas Yu and Lin Perry) • Formative and process evaluation of a healthcare-associated infection surveillance program in residential aged care facilities, Grampians region,

	Victoria (Mary Smith, Ann L. Bull, David Dunt, Michael Richards, Badrika Suranganie Wijesundara and Noleen J. Bennett)
URL	http://www.publish.csiro.au/?nid=241

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

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: • Strategies for sustaining a quality improvement collaborative and itspatient safety gains (Anam Parand, J Benn, S Burnett, A Pinto, and C Vincent) http://intqhc.oxfordjournals.org/cgi/content/abstract/mzs030v1?papetoc • HIVQUAL-T: monitoring and improving HIV clinical care in Thailand, 2002-08 (Sombat Thanprasertsuk, Somsak Supawitkul, Rangsima Lolekha, Peeramon Ningsanond, Bruce D. Agins, Michelle S. Mcconnell, Kimberley K. Fox, Saowanee Srisongsom, Suchin Chunwimaleung, Robert Gass, Nicole Simmons, Achara Chaovavanich, Supunnee Jirajariyavej, Tasana Leusaree, Somsak Akksilp, Philip A. Mock, Sanchai Chasombat, Cheewanan Lertpiriyasuwat, Jordan W. Tappero, and William C. Levine) http://intqhc.oxfordjournals.org/cgi/content/abstract/mzs008v1?papetoc • 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/mzs025v1?papetoc

Online resources

AHRQ Morbidity and Mortality rounds on the web
http://webmm.ahrq.gov
The US Agency for Healthcare Research and Quality has released the latest issue of AHRQ WebM&M.
The Perspectives on Safety section explores safety in the UK. This includes an interview (and podcast) **Charles Vincent**. Vincent is Director of the Imperial Centre for Patient Safety and Service Quality (CPSSQ) and the Clinical Safety Research Unit, based in the Department of Surgery and Cancer. There is also a piece on differences in the patient safety movements in the UK and US.
The Spotlight Case, "Transfer Troubles," discusses how an elderly woman was transferred to a tertiary hospital for surgical repair of hip fracture, without complete information or records. The receiving surgeons were not informed that she had had a cardiac arrest during induction of anaesthesia at the community hospital. Surgery proceeded, but the patient died a few days later. The commentary, written by Isla M. Hains of the University of New South Wales explains the **safety risks of patient transfers and recommends strategies to prevent errors**. A slide presentation is available for download.
A second case, "A Painful Dilemma," discusses a woman with end-stage renal disease, who often skipped dialysis sessions, was admitted to the hospital with fever and given intravenous opiates for pain. Because her permanent arteriovenous graft was clotted, she had been receiving dialysis via a temporary femoral catheter, increasing her risk for infection. Blood cultures grew yeast; the patient was diagnosed with fungal endocarditis, likely caused by self-injections of opiates through her catheter. The commentary discusses the appropriate management of **chronic pain in dialysis patients**.

A third case, “Comanagement: Who’s in Charge?,” discusses how, following surgery for hip fracture, an elderly man with a history of chronic obstructive pulmonary disease developed worsening shortness of breath. At this hospital, the orthopaedic surgery service has hospitalists co-manage its patients. Inadequate communication between the services led to a delay in diagnosing the patient with pneumonia and initiating treatment. Hugo Q. Cheng details how **co-management agreements** can help clarify each physician’s responsibility when **coordinating care** among different teams.

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