# AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE



## On the Radar

Issue 206 19 January 2015

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 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 online, 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, you can subscribe on our website <a href="http://www.safetyandquality.gov.au/">http://www.safetyandquality.gov.au/</a> or by emailing us at <a href="mail@safetyandquality.gov.au">mail@safetyandquality.gov.au</a>. You can also send feedback and comments to <a href="mail@safetyandquality.gov.au">mail@safetyandquality.gov.au</a>.

For information about the Commission and its programs and publications, please visit <a href="http://www.safetyandquality.gov.au">http://www.safetyandquality.gov.au</a>

You can also follow us on Twitter @ACSQHC.

#### On the Radar

Editor: Dr Niall Johnson niall.johnson@safetyandquality.gov.au

Contributors: Niall Johnson, Luke Slawomirski

#### **Reports**

Exploring the costs of unsafe care in the NHS. A report prepared for the Department of Health Frontier Economics

London: Frontier Economics Ltd; 2014.

URL	http://www.frontier-economics.com/documents/2014/10/exploring-the-costs-of-unsafe-care-in-the-nhs-frontier-report-2-2-2-pdf
Notes	This report commissioned by the UK Department of Health drew together the evidence on errors and adverse events in order to estimate the cost of these to the NHS. In addition to the human toll these can have significant economic impacts. The authors suggest that for the NHS the "cost of preventable adverse eventsis likely to be more than £1 billion but could be up to £2.5 billion annually".

#### **Journal articles**

Relationships within inpatient physician housestaff teams and their association with hospitalized patient outcomes

McAllister C, Leykum LK, Lanham H, Reisinger HS, Kohn JL, Palmer R, et al Journal of Hospital Medicine. 2014;9(12):764-71.

DOI	http://dx.doi.org/10.1002/jhm.2274
Notes	This study sought to examine the association of healthcare provider relationships, mindfulness and trust with patient outcomes in a hospital setting. Investigators observed 11 teams at two hospitals in Texas over 352.9 hours, observing 1941 discussions of 576 individual patients. Relationship scores were significantly associated with complication rates, and presence of trust and mindfulness among teams was significantly associated with complication rates.  Health service culture is often cited as an important basis for quality of patient care. This is emphasised and promoted in the Commission's work, in particular the Clinical Communication and Open Disclosure programs. This study provides empirical support for the notion that inter-professional trust and relationships, key markers of culture, can be strong determinants of patient outcomes.

Improving the quality and safety of care on the medical ward: A review and synthesis of the evidence base

Pannick S, Beveridge I, Wachter RM, Sevdalis N

European Journal of Internal Medicine. 2014;25(10):874-87.

DOI	http://dx.doi.org/10.1016/j.ejim.2014.10.013
	This paper describes a study of the evidence around the organisation of care on the
	medical ward. The authors report finding that five common themes emerged:
Notes	staffing levels and team composition; interdisciplinary communication and
Notes	collaboration; standardisation of care; early recognition and treatment of the
	<b>deteriorating patient</b> ; and <b>local safety climate</b> . In itself this is not an unexpected
	list and would suggest areas in which interventions could be targeted.

Improving Hand Hygiene at Eight Hospitals in the United States by Targeting Specific Causes of Noncompliance

Chassin MR, Mayer C, Nether K

Joint Commission Journal on Quality and Patient Safety. 2015;41(1):4-12.

URL	http://www.ingentaconnect.com/content/jcaho/jcjqs/2015/00000041/00000001/art0 0002
Notes	Rates of hand hygiene compliance can be rather variable – by role and setting. This paper reports on a hand hygiene quality improvement project conducted across 9 US hospitals. The team used a range of methods (Lean, Six Sigma, and change management methods) to measure the magnitude of hand hygiene non-compliance, assess specific causes of hand hygiene failures, develop and test interventions targeted to specific causes, and sustain improved levels of performance. The initial assessment revealed 41 different causes of hand hygiene noncompliance (then grouped into 24 groups) of causes and that the key causes varied greatly among the hospitals.  Each hospital developed and implemented specific interventions targeted to its most important causes. The improvements were associated with a 70.5% increase in compliance across the eight hospitals from 47.5% to 81.0%.

For information on the Commission's work on healthcare associated infection, including hand hygiene, see <a href="https://www.safetyandquality.gov.au/our-work/healthcare-associated-infection/">www.safetyandquality.gov.au/our-work/healthcare-associated-infection/</a>

Best Practices for Improving Flow and Care of Pediatric Patients in the Emergency Department Barata I, Brown KM, Fitzmaurice L, Griffin ES, Snow SK, American Academy of Pediatrics Committee on Pediatric Emergency Medicine, et al Pediatrics. 2015 January 1, 2015;135(1):e273-e83.

DOI	http://dx.doi.org/10.1542/peds.2014-3425
Notes	This item from the American Academy of Pediatrics provides a summary of current
	best practices for improving flow, reducing waiting times, and improving the
	quality of care of paediatric patients in US emergency departments. The authors
	consulted that "ED care and flow can be improved by implementing best practices
	at several steps in the workflow. Several points of impact can reduce ED boarding,
	improve pediatric patient safety, and promote effective, efficient, timely, and
	patient-centered care. These points of impact include the <b>5-level triage system</b> and
	nurse-initiated emergency care pathways at the point of initial assessment
	without delay in seeing a provider, fast tracking and cohorting of patients,
	clinical pathways, and responsive staffing as patients advance through the ED
	system. Specific plans may be in place for any patient boarded while awaiting care
	for an emotional illness and/or substance abuse issue"

The Invisible Homebound: Setting Quality-Of-Care Standards For Home-Based Primary And Palliative Care

Leff B, Carlson CM, Saliba D, Ritchie C

Health Affairs. 2015 January 1, 2015;34(1):21-9.

DOI	http://dx.doi.org/10.1377/hlthaff.2014.1008
Notes	Home-based care is rather hidden from view. In this piece the authors attempt to describe the current status of home-based medical care in the United States. With two of the authors involved in the (US) National Home-Based Primary and Palliative Care Network they use that experience to discuss the Network's quality-of-care framework, which includes ten quality-of-care domains, thirty-two standards, and twenty quality indicators that are being tested in the field. The quality-of-care domains are Assessment, Care coordination, Safety, Quality of life, Provider competency, Goal attainment, Education, Access, Patient and caregiver experience, and Cost or affordable care.

Prescriber barriers and enablers to minimising potentially inappropriate medications in adults: a systematic review and thematic synthesis

Anderson K, Stowasser D, Freeman C, Scott I BMJ Open. 2014 December 1, 2014;4(12).

DOI	http://dx.doi.org/10.1136/bmjopen-2014-006544
Notes	Paper reporting on a systematic review into what factors affect prescribers using potentially inappropriate medications (PIMs). From the 21 relevant studies identified, "the barriers and enablers to minimising PIMs emerged within four analytical themes: <b>problem awareness</b> ; <b>inertia</b> secondary to lower perceived value proposition for ceasing versus continuing PIMs; <b>self-efficacy</b> in regard to personal ability to alter prescribing; and <b>feasibility</b> of altering prescribing in routine care environments given external constraints."

For information on the Commission's work on medication safety, see <a href="https://www.safetyandquality.gov.au/our-work/medication-safety/">www.safetyandquality.gov.au/our-work/medication-safety/</a>

A rapid synthesis of the evidence on interventions supporting self-management for people with long-term conditions: PRISMS - Practical systematic Review of Self-Management Support for long-term conditions

Taylor S, Pinnock H, Epiphanou E, Pearce G, Parke H, Schwappach A, et al. Health Services and Delivery Research. 2014 2014/12/22;2(53).

Reducing Care Utilisation through Self-management Interventions (RECURSIVE): a systematic review and meta-analysis

Panagioti M, Richardson G, Murray E, Rogers A, Kennedy A, Newman S, et al. Health Services and Delivery Research. 2014 2014/12/22:2(54).

Lealth Services and Delivery Research. 2014 2014/12/22;2(54).		
DOI	http://dx.doi.org/10.3310/hsdr02530 (Taylor et al)	
DOI	http://dx.doi.org/10.3310/hsdr02540 (Panagioti et al)	
	A pair of items from the NHS National Institute for Health Research into self-	
	management for patients, particularly those with chronic or long-term conditions	
	(LTCs).	
	Taylor et al report on a rapid, systematic overview of the evidence on self-	
	management support for long-term conditions to inform health-care commissioners	
	and providers about what works, for whom, and in what contexts.	
	The authors concluded that "supporting good self-management is inseparable from	
	the high-quality care all people with LTCs should receive. Supporting self-	
	management is not a substitute for care from doctors and nurses but a hallmark of	
	<b>good care</b> . Providers of services for people with LTCs should consider how they	
	can actively support self-management.	
	Effective self-management support usually has many components, should be	
	flexible, tailored to the individual and their LTC, and be underpinned by good	
	<b>collaboration</b> between the patient and a trusted health-care professional, all within	
Notes	a health-care organisation that actively promotes self-management.	
110105	Key activities include (1) provision of knowledge and information about the	
	LTC; (2) psychological strategies to support people adjusting to life with a LTC;	
	(3) practical support for physical care tailored to the specific LTC; (4) action plans	
	for LTCs that may deteriorate; and (5) social support as appropriate."	
	Panagioti et al report on research seeking to determine which models of self-	
	management support are associated with significant reductions in health services	
	utilisation (including hospital use) without compromising outcomes, among	
	patients with long-term conditions.	
	They report finding 184 studies that met their research criteria (with most studies in	
	patients with cardiovascular, respiratory and mental health problems) These studies	
	described various different types of self-management and it was found that self-	
	management support was associated with small improvements in quality of life.	
	The authors also report that "Some self-management interventions also reduced	
	utilisation of health care, with the best evidence in respiratory and cardiovascular	
	disorders. However, the effects were generally modest."	

American Journal of Medical Quality January/February 2015; 30 (1)

URL	http://ajm.sagepub.com/content/30/1?etoc
Notes	A new issue of the <i>American Journal of Medical Quality</i> has been published.
	Articles in this issue of the American Journal of Medical Quality include:

Eat Walk Engage: An Interdisciplinary Collaborative Model to Improve Care of Hospitalized Elders (Alison M Mudge, Prudence McRae, and Mark Cruickshank) Impact of an EHR-Based Diabetes Management Form on Quality and Outcomes of Diabetes Care in Primary Care Practices (Jeph Herrin, Briget da Graca, Phil Aponte, H Greg Stanek, Terianne Cowling, Cliff Fullerton, Priscilla Hollander, and David J Ballard) Outcome of Adverse Events and Medical Errors in the Intensive Care Unit: A Systematic Review and Meta-analysis (Adil H Ahmed, Jyothsna Giri, Rahul Kashyap, Balwinder Singh, Yue Dong, Oguz Kilickaya, Patricia J Erwin, M Hassan Murad, and Brian W Pickering) Incorporating Discrete **Event Simulation** Into Quality Improvement Efforts in Health Care Systems (Matthew Harris Rutberg, Sharon Wenczel, John Devaney, Eric Jonathan Goldlust, and Theodore Eugene Day) **Discharge Huddle** Outfitted With Mobile Technology Improves Efficiency of Transitioning Stroke Patients Into Follow-Up Care (Brittany R Tielbur, Donna E Rice Cella, Amanda Currie, Jonathan D Roach, Bryan Mattingly, Jack Boone, C Watwood, A McGauran, H S Kirshner, and P D Charles) Improving Service Quality in Primary Care (Denise M Kennedy, Jon T Nordrum, Frederick D Edwards, Richard J Caselli, and Leonard L Berry) Do Hospitals Without **Physicians on the Board** Deliver Lower Quality of Care? (Ge Bai and Ranjani Krishnan) A Multifaceted Quality Improvement Program Improves **Endotracheal Tube Confirmation** Documentation in the Emergency Department (Michael P. Phelan, Fredric M Hustey, Jonathan M Glauser, and J Bena) Impact of Electronic Health Record Clinical **Decision Support** on the Management of **Pediatric Obesity** (Ulfat Shaikh, Jeanette Berrong, Jasmine Nettiksimmons, and Robert S Byrd)

Access to Outpatient Specialty Care: Solutions From an Integrated Health Care System (Susan Kirsh, Grace L Su, Anne Sales, and Rajiv Jain)
 Training for Identity: Not Behavior in Ovelity and Sefety (Myles Leglice)

Changing Resident **Test Ordering Behavior**: A Multilevel Intervention to Decrease Laboratory Utilization at an Academic Medical Center (Arpana R Vidyarthi, Timothy Hamill, Adrienne L Green, Glenn Rosenbluth, and

- **Training** for Identity, Not Behavior, in Quality and Safety (Myles Leslie and Peter J Pronovost)
- Implementation of a **Standardized Sign-Out** in the Post-Anesthesia Care Unit (Weston Bettner, Michael Dorbad, Joseph Gentle, and Beth Hart)

#### BMJ Quality and Safety online first articles

URL	http://qualitysafety.bmj.com/content/early/recent
	BMJ Quality and Safety has published a number of 'online first' articles, including:
Notes	• Advancing the science of measurement of <b>diagnostic errors</b> in healthcare:
	the Safer Dx framework (Hardeep Singh, Dean F Sittig)

#### International Journal for Quality in Health Care online first articles

Robert B Baron)

URL	http://intqhc.oxfordjournals.org/content/early/recent?papetoc
Notes	<ul> <li>International Journal for Quality in Health Care has published a number of 'online first' articles, including:</li> <li>Multicentre study to develop a medication safety package for decreasing</li> </ul>

On the Radar Issue 206 5

- inpatient harm from **omission of time-critical medications** (Linda V Graudins, Catherine Ingram, B T Smith, W J Ewing, and M Vandevreede)
- Quality of care in primary health care settings in the Eastern Mediterranean region: a systematic review of the literature (Shadi Saleh, Mohamad Alameddine, Yara Mourad, and Nabil Natafgi)
- What are incident reports telling us? A comparative study at two Australian hospitals of medication errors identified at audit, detected by staff and reported to an incident system (Johanna I Westbrook, Ling Li, Elin C Lehnbom, Melissa T Baysari, J Braithwaite, R Burke, C Conn, R O Day)

### **Online resources**

Changing the paradigm of patient safety: resilient health care <a href="http://www.isqua.org/education/webinars/december-2014-webinar-with-jeffrey-braithwaite-and-dr-robyn-clay-williams">http://www.isqua.org/education/webinars/december-2014-webinar-with-jeffrey-braithwaite-and-dr-robyn-clay-williams</a>

Webinar presented by Professor Jeffrey Braithwaite (Professor of Health Systems Research, Macquarie University) and Dr Robyn Clay-Williams (Research Fellow, Australian Institute of Health Innovation, Macquarie University) suggesting a new approach to patient safety in acute care. Arguing that the vast bulk of care is delivered safely the approach seeks to leverage what's work to further improve the system.

Innovation Exchange, Agency for Clinical Innovation <a href="http://www.aci.health.nsw.gov.au/ie">http://www.aci.health.nsw.gov.au/ie</a>

The Innovation Exchange is intended to provide a collaborative online place for sharing and promoting local (NSW) innovation and improvement projects and resources.

The Innovation Exchange will share recognised sources of innovative projects such as the NSW Health Awards, Centre for Healthcare Redesign Diploma projects, Clinical Leadership Program projects, Whole of Hospital (or Health) projects, Rural Health Awards, Essentials of Care projects and more.

You can submit your project online, learn about new projects from local health services across NSW or read articles about what's happening to improve healthcare around the world.

[USA] 10 Things Every Hospital Needs to Know to be Safe <a href="http://www.ihi.org/resources/Pages/AudioandVideo/WIHI\_10ThingsEveryHospitalNeedstoKnowto">http://www.ihi.org/resources/Pages/AudioandVideo/WIHI\_10ThingsEveryHospitalNeedstoKnowto</a> beSafe.aspx

The [US] Institute for Healthcare Improvement (IHI) has uploaded a podcast of renowned hospitalist and health care safety expert Robert Wachter addressing IHI's 26th Annual National Forum on Quality Improvement in Health Care on 10 December.

[USA] An Illustrated Look at Quality Improvement in Health Care

<a href="http://www.ihi.org/resources/Pages/AudioandVideo/MikeEvansVideoQIHealthCare.aspx">http://www.ihi.org/resources/Pages/AudioandVideo/MikeEvansVideoQIHealthCare.aspx</a>

Also from the IHI comes this animated whiteboard video that introduces the concepts of quality improvement in health care.

#### Disclaimer

On the Radar is an information resource of the Australian Commission on Safety and Quality in Health Care. The Commission is not responsible for the content of, nor does it endorse, any articles or sites listed. The Commission accepts no liability for the information or advice provided by these external links. Links are provided on the basis that users make their own decisions about the

accuracy, currency and reliability of the information contained therein. Any opinions expressed are not necessarily those of the Australian Commission on Safety and Quality in Health Care.