AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

On the Radar

Issue 191
15 September 2014

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 http://www.safetyandquality.gov.au/ or by emailing us at mail@safetyandquality.gov.au.
You can also send feedback and comments to mail@safetyandquality.gov.au.

For information about the Commission and its programs and publications, please visit
http://www.safetyandquality.gov.au
You can also follow us on Twitter @ACSQHC.

On the Radar
Editor: Dr Niall Johnson niall.johnson@safetyandquality.gov.au
Contributors: Niall Johnson

Shared Decision Making events
The Australian Commission on Safety and Quality in Health Care – in collaboration with partner organisations – is holding two free events on shared decision making. Both events feature international experts in the area:
Professor Richard Thomson (Newcastle University, United Kingdom) and
Professor Dawn Stacey (University of Ottawa, Canada)

The use of shared decision making and patient decision aids in practice: A workshop for clinicians, medical educators, carer and consumer advocates, health services and policy makers
Melbourne
This event is co-hosted by the Commission and the Department of Health, Victoria. The workshop will explore:

- International initiatives in promoting shared decision making and use of patient decision aids
- Research and evidence of effectiveness
- Implementation in acute health care situations
- Practical implications for health services to improve patient participation in health care decisions

- Key issues in the training of health professionals

Time: 8.30am–3.30pm
Date: Monday 13 October 2014.
Location: Department of Health, 50 Lonsdale St, Melbourne

Registration: Free
Registration by 19 September is essential by RSVP to Andrew.Clarke@health.vic.gov.au

Shared Decision Making Symposium: Developing tools and skills for clinical practice
Sydney
Co-hosted by the Australian Commission on Safety and Quality in Health Care and the University of Sydney's Centre for Medical Psychology and Evidence-Based Decision Making (CeMPED) the symposium will include:

- Tools and skills for effective shared decision making
- Current implementation issues for clinical practice
- Presentations by International and Australian experts & panel discussion.

Time: 8.30am–1.00pm
Date: Thursday, 16 October 2014.
Location: Rydges World Square, 389 Pitt Street, Sydney.

Registration: Free and open to the public.
Registration by 24 September is essential by RSVP to shannon.mckinn@sydney.edu.au

For further information, see http://whatson.sydney.edu.au/events/published/shared-decision-making-symposium-developing-tools-and-skills-for-clinical-practice

Reports

Framework for Australian clinical quality registries
Sydney: Australian Commission on Safety and Quality in Health Care; 2014.

URL	http://www.safetyandquality.gov.au/wp-content/uploads/2014/09/Framework-for-Australian-Clinical-Quality-Registries.pdf
Notes	In Australia there is limited capacity to measure and monitor the degree to which health care benefits the patient (effectiveness) and how closely that care aligns with evidence-based practice (appropriateness). Clinical quality registries are organisations which monitor and report on the appropriateness and effectiveness of health care. Currently however, only a small number of data collections capture and report process and outcomes data for specific clinical conditions or interventions. The development of a number of high-priority national registries, within national arrangements, has the potential to address the current gap in health care quality measurement and inform improvements in the quality of patient care. In collaboration with the states and territories, the Commission has developed national arrangements for clinical quality registries, described within a *Framework for Australian clinical quality registries*. This framework has been endorsed by the Australian Health Ministers' Advisory Council (AHMAC).

	The *Framework for Australian clinical quality registries* describes a mechanism by which jurisdictions can authorise and secure record-level data, within high-priority clinical domains, to measure, monitor and report on the appropriateness and effectiveness of health care. The information can be used to inform improvements in healthcare quality and safety within those domains. In addition to improved patient outcomes, the use of these clinical quality registries significantly improves compliance with evidence-based guidelines and standards and informs the development of new guidelines and standards.

The new era of thinking and practice in change and transformation: A call to action for leaders of health and care
Bevan H, Fairman S
Leeds: NHS Improving Quality; 2014.

URL	http://www.nhsiq.nhs.uk/resource-search/publications/white-paper.aspx
Notes	The NHS Improving Quality has published this White Paper examining trends in change and transformation from multiple industries across the world. The White Paper covers the implications and opportunities of these trends for leaders of health and care. These include a fundamental rethink about what organisational and system change means, including: • Who does it (many change agents, not just a few) • Where it happens (increasingly 'at the edge' of organisations and systems) • The skills and mindsets that change agents need. The White Paper's authors argue that such a rethink means embracing disruption and 'disruptors' within organisations and wider systems to create an environment where innovation is encouraged; no longer seeking to 'overcome resistance to change' but welcoming difference, diversity and dissent as core operating principles of our organisations. The White Paper concludes with a call to action: **join the new breed of leaders across the world who are rewriting the rules of change and leading change from the future to get different results**.

Evidence for Success: The guide to getting evidence and using it
Knowledge Translation Network
Edinburgh: Evaluation Support Scotland.

URL	http://www.evaluationsupportscotland.org.uk/media/uploads/resources/ess-evidenceforsuccess-weblinked.pdf
Notes	From Evaluation Support Scotland comes this guide offering step-by-step guidance and resources to support organisations to use evidence to influence policy and practice. It is designed for anyone wanting to use evidence to improve policy and practice, regardless of the level of experience they have in doing so. It is intended that this guide will also be of value to a wide range of people, including: practitioners, service managers, funders and commissioners, and policy makers and planners.

Journal articles

Patient Engagement: Four Case Studies That Highlight The Potential For Improved Health Outcomes And Reduced Costs
Laurance J, Henderson S, Howitt PJ, Matar M, Al Kuwari H, Edgman-Levitan S, et al
Health Affairs. 2014 September 1, 2014;33(9):1627-34.

DOI	http://dx.doi.org/10.1377/hlthaff.2014.0375
Notes	The issue of patient engagement and how patients can be engaged to enhance care has been prominent for a while now. However there are questions as to just what sort of engagement and to what ends. This paper provides a number of case studies, from different settings/countries, describing the possibilities of patient engagement. The case studies include a UK online mental health community, a genetic screening program in the United Arab Emirates, a World Health Organization checklist for new mothers, and a hospital-based patient engagement initiative in the USA. The authors suggest that the evidence from these (and similar activities) indicates that "closer collaboration on the part of patients, families, health care providers, health care systems, and policy makers at multiple levels could help diverse nations provide more effective and population-appropriate health care with fewer resources."

Mentorship for newly appointed physicians: a strategy for enhancing patient safety?
Harrison R, McClean S, Lawton R, Wright J, Kay C
Journal of Patient Safety. 2014 Sep;10(3):159-67.

DOI	http://dx.doi.org/10.1097/PTS.0b013e31829e4b7e
Notes	The authors of this paper report on their surveys of a small number of clinical leaders in 9 NHS trusts regarding the possible value in providing mentors to junior doctors in their first substantive role. Respondents considered mentors "may be a useful strategy to support the development of their clinical, professional, and personal skills in this transitional period that may also enhance the safety of patient care." Such mentoring could also help foster a safety culture.

Impact of a reengineered electronic error-reporting system on medication event reporting and care process improvements at an urban medical center
McKaig D, Collins C, Elsaid KA
Joint Commission Journal on Quality and Patient Safety. 2014;40(9).

URL	http://www.ingentaconnect.com/content/jcaho/jcjqs/2014/00000040/00000009/art00003
Notes	Paper describing how an error reporting system at a large (719-bed) 'multidisciplinary urban medical center' was re-designed and the impact of that change. The development of a web-based electronic medication error reporting system along with new work processes contributed to increased error reporting, with the majority of errors being near-misses. As an ARHQ PSNet item on this paper noted, "This finding suggests that under-reporting of medication errors via standard incident reporting mechanisms can be addressed using human factors engineering approaches, which apply to and enhance both the error reporting tool and clinicians' workflow."

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

Indication alerts intercept drug name confusion errors during computerized entry of medication orders
Galanter WL, Bryson ML, Falck S, Rosenfield R, Laragh M, Shrestha N, et al.
PLoS ONE. 2014;9(7):e101977.

DOI	http://dx.doi.org/10.1371/journal.pone.0101977
Notes	One source of medication errors is confusion or mistaken drug name. This paper describes an attempt to address this problem in a computerised provider order entry (CPOE) system. This particular system was designed to prompt users to enter the indication when certain medications were ordered and required them to click "OK" to ignore the alert, to add the drug to a problem list, or to cancel the order The authors report that this mechanism intercepted 1.4 drug name confusion errors per 1000 alerts in the 127,458 alerts analysed. The authors recommend that such alerts be implemented to decrease medication errors but also suggest that the number of medications that generate such alerts needs to be carefully managed so as to reduce risk of alert fatigue in users.

Implementation of an emergency department sign-out checklist improves transfer of information at shift change
Dubosh NM, Carney D, Fisher J, Tibbles CD
The Journal of Emergency Medicine [epub].

DOI	http://dx.doi.org/10.1016/j.jemermed.2014.06.017
Notes	Paper describing the implementation and impact of a checklist tool used for resident handover in a US emergency department. Examining 115 and 114 sign-outs before and after the implementation, the authors report improvements in "four sign-out components: reporting of history of present illness increased from 81% to 99%, ED course increased from 75% to 86%, likely diagnosis increased from 60% to 77%, and team awareness of plan increased from 21% to 41%. Use of the repeat-back technique decreased from 13% to 5% after checklist implementation and time to sign-out showed no significant change." They conclude that "Implementation of a checklist **improved the transfer of information without increasing time to signout**."

For information on the Commission's work on clinical communications, including clinical handover, see www.safetyandquality.gov.au/our-work/clinical-communications/

Lessons From Eight Countries On Diffusing Innovation In Health Care
Keown OP, Parston G, Patel H, Rennie F, Saoud F, Al Kuwari H, et al.
Health Affairs. 2014 September 1, 2014;33(9):1516-22.

DOI	http://dx.doi.org/10.1377/hlthaff.2014.0382
Notes	One of the challenges of innovation is how to get successful innovations taken up elsewhere, how to get those ideas diffused and adopted. One of the challenges of diffusion is that of context and ensuring that the innovation is adopted sensitive to the new setting and appreciating that often one size does not quite fit all. In this paper the authors describes the results of a qualitative and quantitative study to assess the factors and behaviours that foster the adoption of health care innovation in Australia, Brazil, England, India, Qatar, South Africa, Spain, and the United States. They describe the **front-line cultural dynamics** that must be fostered to achieve cost-effective and high-impact transformation of health care, and argue that there is a necessity for greater focus on vital, yet currently underused, **organizational action to support the adoption of innovation**.

Antimicrobial Resistance: Addressing The Global Threat Through Greater Awareness And Transformative Action
Keown OP, Warburton W, Davies SC, Darzi A
Health Affairs. 2014 September 1, 2014;33(9):1620-6.

DOI	http://dx.doi.org/10.1377/hlthaff.2014.0383
Notes	The potential danger of **antimicrobial resistance** (and the loss of effective treatment against antimicrobial agents) is now well-recognised. This paper adds to the literature on how to face this issue and summarises the work of the Antimicrobial Resistance Working Group from the 2013 World Innovation Summit for Health. The authors offer a framework of principles and tasks for key policy makers to raise international **awareness** of antimicrobial resistance and lead transformative **action** through policy-driven **improvements in sanitation, antimicrobial conservation, agricultural practices, and research and development.**

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

Health Care-Associated Infections Among Critically Ill Children in the US, 2007–2012
Patrick SW, Kawai AT, Kleinman K, Jin R, Vaz L, Gay C, et al.
Pediatrics. 2014 [epub].

DOI	http://dx.doi.org/10.1542/peds.2014-0613
Notes	Healthcare associated infections (HAI) is one area where there is a consistent literature of 'good news' stories. A range of interventions have been shown to work in a range of setting for many healthcare associated infections. This item details how the rate of HAI among critically ill children has fallen across the USA. The study examined changes in HAIs, specifically central line–associated bloodstream infections (CLABSIs), ventilator-associated pneumonias (VAP), and catheter-associated urinary tract infections (CAUTIs), by analysing data in the US National Healthcare Safety Network for 173 neonatal intensive care units (NICUs) and 64 paediatric intensive care units (PICUs) for the period 1 January 2007 to 30 September 2012. Rates of CLABSIs in NICUs decreased from 4.9 to 1.5 per 1,000 central-line days and in PICUs from 4.7 to 1.0 per 1,000 central-line days. These suggest reductions of 4% per quarter and 61% over the study period in both NICUs and PICUs. Rates of VAP decreased from 1.6 to 0.6 per 1,000 ventilator days in NICUs and from 1.9 to 0.7 per 1,000 ventilator days in PICUs. The declines reflect a decrease of 3% per quarter, or 50% over the study period, in NICUs and 5% per quarter, or 76% over the study period, in PICUs. CAUTI rates did not change significantly. The authors also estimate the **reductions in CLABSIs** alone brought **significant savings** – roughly **$USD61 million in NICUs** and **$USD70 million in PICUs** during the 5-year study.

Identifying critically ill patients at risk for inappropriate antibiotic therapy: a pilot study of a point-of-care decision support alert.
Micek ST, Heard KM, Gowan M, Kollef MH
Critical Care Medicine. 2014 Aug;42(8):1832-8.

DOI	http://dx.doi.org/10.1097/CCM.0000000000000337
Notes	One part of the issue around antimicrobial usage is that of appropriate and inappropriate use. This paper report on the possibility of a point of care decision support tool that clinicians can use to help them in their selection of antimicrobial agents. The study examined the experience of 3,616 critically ill (ICU) patients receiving treatment with antibiotics targeting healthcare-associated infections due to Gram-negative bacteria in a single large (1,250 bed) US hospital. Upon antibiotic order entry in the ICU for a Gram-negative antibiotic, the antibiotic and microbiologic history for each patient was electronically queried in real time across all hospitals in the group. Patients were assigned to the alert group if they had exposure to the same antibiotic class currently being prescribed (cefepime, meropenem, or piperacillin-tazobactam) or had a positive culture isolating a Gram-negative organism with resistance to the prescribed antibiotic in the previous 6 months. 900 of the 3,616 (24.2%) patients generated an alert and patients in the alert group had significantly greater hospital mortality (29.9% vs. 23.6%) and length of stay (median, 13.1 vs. 10.7 days) compared with non-alert patients. The authors conclude that "a **simple automated alert could identify more than 40%** of critically ill patients **prescribed inappropriate antibiotic therapy** for healthcare-associated infections. These data suggest that an opportunity exists to employ hospital informatics systems to improve the prescription of antibiotic therapy in ICU patients with suspected healthcare-associated infections."

Economic Impact of Redundant Antimicrobial Therapy in US Hospitals
Schultz L, Lowe TJ, Srinivasan A, Neilson D, Pugliese G.
Infection Control and Hospital Epidemiology. 2014;35(10):1229-35.

URL	http://www.jstor.org/stable/10.1086/678066
Notes	Inappropriate or unnecessary treatment can have various 'costs'. As the authors note, "Overutilization of antimicrobial therapy places patients at risk for harm and contributes to antimicrobial resistance and escalating healthcare costs. Focusing on redundant or duplicate antimicrobial therapy is 1 recommended strategy to reduce overutilization and its attendant effects on patient safety and hospital costs." This paper reports on an attempt to estimate the incidence and economic impact of redundant antimicrobial use in American hospitals by retrospective analysis of inpatient administrative data for 505 US hospitals for all hospitalised patients discharged between 1 January 2008, and 31 December 2011. The authors report evidence of potentially inappropriate, redundant antimicrobial coverage in 394 of the 505 (78%) hospitals, covering 32,507 cases and involving 23 different drug combinations. Three drug regimens for anaerobic bacteria accounted for 70% of the cases, with the combination of metronidazole and piperacillin-tazobactam alone accounting for 53% of cases. The analysis revealed **148,589 days of redundant therapy**, representing more than **$USD12 million in potentially avoidable costs over the 4 years**. According to the Society for Healthcare Epidemiology of America, if this was **replicated across the USA, , the amount would be $USD163 million**.

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

Health Affairs
September 2014; Volume 33, Issue 9

URL	http://content.healthaffairs.org/content/33/9.toc
Notes	A new issue of *Health Affairs* has been published. This issue has the theme 'Advancing Global Health Policy'. Articles in this issue include: • **Our Health Is Global Health** (Alan R Weil) • Global Health Leaders Recommit To **Reducing Child Deaths** (J Bylander) • **Accountable Care Around The World**: A Framework To Guide Reform Strategies (Mark McClellan, James Kent, Stephen J Beales, Samuel I.A Cohen, Michael Macdonnell, Andrea Thoumi, M Abdulmalik, and A Darzi) • Lessons From Eight Countries On **Diffusing Innovation In Health Care** (Oliver P Keown, Greg Parston, Hannah Patel, Fiona Rennie, Fathy Saoud, Hanan Al Kuwari, and Ara Darzi) • Developing Public Policy To Advance The Use Of **Big Data In Health Care** (Axel Heitmueller, Sarah Henderson, Will Warburton, Ahmed Elmagarmid, Alex "Sandy" Pentland, and Ara Darzi) • THE CARE SPAN: Transitional Care Interventions **Prevent Hospital Readmissions** For Adults With Chronic Illnesses (Kim J Verhaegh, Janet L MacNeil-Vroomen, Saeid Eslami, Suzanne E Geerlings, Sophia E de Rooij, and Bianca M Buurman) • **Chronic Care Model Strategies** In The United States And Germany Deliver **Patient-Centered, High-Quality Diabetes Care** (Stephanie Stock, James M Pitcavage, Dusan Simic, S Altin, C Graf, W Feng, and T R Graf) • **Integrated Care Experiences And Outcomes** In Germany, The Netherlands, And England (Reinhard Busse and Juliane Stahl) • A Comparison Of How Four Countries Use **Health IT** To Support Care For People With **Chronic Conditions** (Julia Adler-Milstein, Nandini Sarma, Liana R Woskie, and Ashish K Jha) • A Comparison Of **Hospital Administrative Costs** In Eight Nations: US Costs Exceed All Others By Far (David U Himmelstein, Miraya Jun, Reinhard Busse, Karine Chevreul, Alexander Geissler, Patrick Jeurissen, Sarah Thomson, Marie-Amelie Vinet, and Steffie Woolhandler) • Policy Actions To Achieve **Integrated Community-Based Mental Health** Services (Mary DeSilva, Chiara Samele, S Saxena, V Patel, and A Darzi) • How Google's 'Ten Things We Know To Be True' Could Guide The Development Of **Mental Health Mobile Apps** (Sarah P Jones, Vikram Patel, Shekhar Saxena, Naomi Radcliffe, Salih Ali Al-Marri, and Ara Darzi) • Innovation Can Improve And Expand Aspects Of **End-Of-Life Care** In Low- And Middle-Income Countries (Mark R Steedman, Thomas Hughes-Hallett, Felicia Marie Knaul, A Knuth, O Shamieh, and A Darzi) • **Antimicrobial Resistance**: Addressing The Global Threat Through Greater Awareness And Transformative Action (Oliver P Keown, Will Warburton, Sally C Davies, and Ara Darzi) • **Patient Engagement**: Four Case Studies That Highlight The Potential For Improved Health Outcomes And Reduced Costs (J Laurance, S Henderson, P J Howitt, M Matar, H Al Kuwari, S Edgman-Levitan, and A Darzi) • Challenges In Adapting International **Best Practices In Cancer** Prevention, Care, And Research For Qatar (Peter J Howitt, Karen Kerr, Hanan Al Kuwari, Faleh Mohamed Husain Ali, Alexander Knuth, and Ara Darzi)

	• **Social Networking Strategies** That Aim To Reduce Obesity Have Achieved Significant Although Modest Results (Hutan Ashrafian, Tania Toma, Leanne Harling, Karen Kerr, Thanos Athanasiou, and Ara Darzi) • The Affordable Care Act **Reduces Emergency Department Use** By Young Adults: Evidence From Three States (Tina Hernandez-Boussard, Carson S Burns, N Ewen Wang, Laurence C Baker, and Benjamin A Goldstein) • **Reducing Variation In Hospital Admissions From The Emergency Department** For Low-Mortality Conditions May Produce Savings (Amber K Sabbatini, Brahmajee K Nallamothu, and Keith E Koche)

BMJ Quality and Safety online first articles

URL	http://qualitysafety.bmj.com/content/early/recent
Notes	*BMJ Quality and Safety* has published a number of 'online first' articles, including: • Creating spaces in intensive care for **safe communication**: a video-reflexive ethnographic study (Su-yin Hor, Rick Iedema, Elizabeth Manias) • The Hawthorne effect in measurements of **hand hygiene compliance**: a definite problem, but also an opportunity (Sarah Haessler)

Online resources

National patient experience question set for public hospitals
http://www.safetyandquality.gov.au/our-work/information-strategy/indicators/hospital-patient-experience/
Information about the experience of patients is important in supporting and guiding local quality improvement. Many hospitals and organisation conduct surveys to monitor and improve patient experience, using a range of instruments and methodologies.
In July 2014, the Australian states and territories purchased a national patient experience licence from the US-based National Research Corporation. The licence is effective through to 14 July 2015. It allows Australian public hospitals to use the following:

- 3 national core, common patient experience question sets
- 5 Picker core surveys
- 4 Picker modules
- Admitted inpatient surveys available on the UK National Health Service website.

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.