# AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE



### On the Radar

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#### On the Radar

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#### **Reports**

Emergency general surgery: challenges and opportunities

Research report

Watson R, Crump H, Imison C, Currie C, Gaskins M

London: Nuffield Trust; 2016. p. 60.

URL	http://www.nuffieldtrust.org.uk/publications/emergency-general-surgery-
	<u>challenges-and-opportunities</u>
	The Royal College of Surgeons of England commissioned the Nuffield Trust to
	examine the challenges facing emergency general surgery (EGS) and identify some
	of the possible opportunities for overcoming them.
	The authors found that the "most significant challenges faced by emergency
	general surgery include variation in outcomes, workforce, organisational and
	operational issues and underlying demographic and epidemiological trends. At the
Notes	heart of these challenges are two inter-related issues. Firstly, the desire to reduce
	variation in outcomes for EGS (particularly high risk surgery) and second, the need
	to resolve the tension between increasing pressures to centralise EGS services
	while political and demographic pressures argue for sustaining local access."
	The report suggests that the "quickest gains could be achieved through the
	systematic use of protocols and pathways" including evidence-based guidelines,
	protocols, checklists, and care bundles.

The report also suggests that the "most comprehensive means to address the challenges faced by EGS would be the development of managed clinical networks. We also recommend that all hospitals consider the potential for new roles in EGS. Finally, we have laid out options for future training models, which would be the longest-term solution to the challenges facing EGS."

The adoption and use of digital health and care record systems: International success factors Hillier K, Lisa-Nicole S, Mohla C, Franklin L, Millen D, Goriwoda R NHS England and US Department of Health and Human Services; 2016. p. 26.

URL	https://www.healthit.gov/sites/default/files/adoptionreport -branded final4.pdf
Notes	This short (26-page) report stems from a collaboration between NHS England and US Department of Health and Human Services that sought to "investigate 'what good looks like' in terms of the successful adoption and optimization of digital care records for patients." The report sets out what they term primary and secondary attributes of successful adoption. The primary attributes identified include:  • Ownership and inclusiveness needs to be felt by all staff, with support for patient care as the central focus of the deployment and genuine leadership commitment.  • A solid core standardised and reliable infrastructure is imperative (i.e. networks and databases) which is able to support clinical and reporting requirements.  • Establish and maintain a strong working relationship with the vendor/supplier.  • Interoperability with other systems is imperative.  Secondary attributes included:  • System workflow design should be a top priority and follow intuitive care pathways where possible.  • Training should be continuous.  • Local expertise and key roles need to be retained, achieving a stable and motivated workforce.  • Easy access and effective use of other health IT technology, including mobile technologies, should be an important part of digital strategy.

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

#### Journal articles

Essentials for improving service quality in cancer care

Berry LL, Mate KS

Healthcare [epub].

DOI	http://dx.doi.org/10.1016/j.hjdsi.2016.01.003
Notes	This commentary, drawing on site visits to cancer care centres and interviews with cancer patients, family members, clinicians, and health care leaders in the USA, proposes six "essentials" for improving service quality in cancer care. The six factors are:  1. Embrace team-based care 2. Offer concurrent palliative care 3. Prepare family members for caregiving 4. Facilitate continuous connection

- 5. Broaden the geographic reach of clinical excellence
- 6. Adopt payment-system reforms.

The extent of medication errors and adverse drug reactions throughout the patient journey in acute care in Australia

Roughead EE, Semple SJ, Rosenfeld E

International Journal of Evidence-Based Healthcare. 2016 [epub].

DOI	1 //1 1 //0.1005/XXDD 0000000000000
DOI	http://dx.doi.org/10.1097/XEB.000000000000000000000000000000000000
	This study combined a review of evidence with evidence from previous reviews of
	medication safety in the acute care setting in Australia conducted in 2002 and 2008
	in order to drive an estimate of the numbers of medication errors and adverse drug
	reactions that occur along a person's journey through their hospital stay in
	Australia.
	The authors report that the "Findings from the Australian literature across the two
	previous reviews of medication safety and the present review indicate the
	proportion of all hospital admissions that are medication-related is between 2
	and 3%. Furthermore,
	• there may be an overall rate of two errors for every three patients at the time
NI-4	of admission to hospital.
Notes	• prescription error rates of up to one error per patient occur in the hospital
	system. errors (excluding errors of timing) occur in around 9% of
	medication administrations in hospital.
	at hospital discharge, errors in medication documentation in discharge
	summaries may occur at a rate of up to two errors per patient.
	These lead the authors to conclude that " <b>Medication safety</b> in the various stages of
	the patient journey through acute care in Australia continues to be a significant
	<b>problem</b> . However, the extent of medication-related problems in acute care needs
	to be interpreted within the context of increasingly complex health care. There are
	an estimated 230 000 medication-related hospital admissions occurring per year.
	This suggests an annual cost of medication-related admissions of AU\$1.2 billion."
	This suggests an amidal cost of incurcation-related admissions of AC\$1.2 official.

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

Preventability and causes of readmissions in a national cohort of general medicine patients Auerbach AD, Kripalani S, Vasilevskis EE, Sehgal N, Lindenauer PK, Metlay JP, et al. JAMA Internal Medicine. 2016;176(4):484-93.

International validity of the hospital score to predict 30-day potentially avoidable hospital readmissions

Donzé JD, Williams MV, Robinson EJ, Zimlichman E, Aujesky D, Vasilevskis EE, et al JAMA Internal Medicine. 2016;176(4):496-502.

Readmissions, Observation, and the Hospital Readmissions Reduction Program Zuckerman RB, Sheingold SH, Orav EJ, Ruhter J, Epstein AM New England Journal of Medicine. 2016 [epub].

Quasi-experimental evaluation of the effectiveness of a large-scale readmission reduction program Jenq GY, Doyle MM, Belton BM, Herrin J, Horwitz LI JAMA Internal Medicine. 2016 [epub].

AMA Inter	rnal Medicine. 2016 [epub].
	Auerbach et al <a href="http://dx.doi.org/10.1001/jamainternmed.2015.7863">http://dx.doi.org/10.1001/jamainternmed.2015.7863</a>
DOI	Donzé et al <a href="http://dx.doi.org/10.1001/jamainternmed.2015.8462">http://dx.doi.org/10.1001/jamainternmed.2015.8462</a>
DOI	Zuckerman et al <a href="http://dx.doi.org/10.1056/NEJMsa1513024">http://dx.doi.org/10.1056/NEJMsa1513024</a>
	Jenq et al <a href="http://dx.doi.org/10.1001/jamainternmed.2016.0833">http://dx.doi.org/10.1001/jamainternmed.2016.0833</a>
	A series of items on the seemingly perennial topic of readmission.
	Auerbach and colleagues conducted an observation study covering 1000 general
	medicine patients readmitted within 30 days of discharge to 12 US academic
	medical centres by surveying surveyed patients and physicians, reviewed
	documentation, and performed 2-physician case review to determine preventability
	of and factors contributing to readmission. They found that "Approximately <b>one-</b>
	quarter of readmissions are potentially preventable when assessed using
	multiple perspectives. High-priority areas for improvement efforts include
	improved <b>communication</b> among health care teams and between health care
	professionals and patients, greater attention to patients' readiness for discharge,
	enhanced disease monitoring, and better support for patient self-management."
	Donzé and colleagues sought to validate a scoring tool (the HOSPITAL score) that
	may allow hospitals to identify patients at risk of re-admission. This was a
	retrospective cohort study of 117 065 adult patients consecutively discharged alive
	from the medical department of 9 large hospitals across 4 different countries. The
	HOSPITAL score includes the following predictors at discharge: haemoglobin,
	discharge from an oncology service, sodium level, procedure during the index
	admission, index type of admission (urgent), number of admissions during the last
	12 months, and length of stay. The conclusion here was that "The HOSPITAL
	score <b>identified patients</b> at high risk of 30-day potentially avoidable readmission
	with moderately high discrimination and excellent calibration when applied to a
Notes	large international multicenter cohort of medical patients. This score has the
	potential to easily identify patients in need of more intensive transitional care
	interventions to prevent avoidable hospital readmissions."
	Zuckerman and colleagues examined the [US] Hospital Readmissions Reduction
	Program, which is included in the Affordable Care Act (ACA), that applies
	financial penalties to hospitals that have higher-than-expected readmission rates for
	a range of targeted conditions. The study examined changes in readmission rates
	and stays in observation units over time for targeted and non-targeted conditions
	and assessed whether hospitals that had greater increases in observation-service use
	had greater reductions in readmissions. The authors report that
	• readmission rates for both targeted and non-targeted conditions began to fall
	faster in April 2010, after the passage of the legislation. Readmission rates
	continued to decline from October 2012 through May 2015, albeit at a
	slower rate.
	• the passage of the ACA was associated with a more substantial decline in
	readmissionsfor targeted than for non-targeted conditions.
	<ul> <li>the rate of observation-service use for both types of conditions was</li> </ul>
	increasing throughout the study periods.
	<ul> <li>there was no significant association within hospitals between increases in</li> </ul>
	observation-service use and reductions in readmissions during the
	implementation period.
	Jenq and colleagues report on an intervention in a US an urban academic medical

centre that targeted high-risk discharge patients. The intervention consisted of personalised transitional care, including education, medication reconciliation, follow-up telephone calls, and linkage to community resources and was provided to more than 10,000 patients. The authors report that "The **adjusted readmission rate decreased from 21.5% to 19.5%** in the target population and from 21.1% to 21.0% in the control population, a relative reduction of 9.3%. The number needed to treat to avoid 1 readmission was 50".

Characterising health care-associated bloodstream infections in public hospitals in Queensland, 2008–2012

Si D, Runnegar N, Marquess J, Rajmokan M and Playford EG. Med J Aust 2016; 204 (7): 276

DOI	http://dx.doi.org/10.5694/mja15.00957
	This item from the Centre for Healthcare Related Infection Surveillance and
	Prevention (CHRISP) adds important information to existing knowledge of the
	epidemiology of healthcare-acquired bloodstream infections (HA-BSIs). All
	episodes of BSI in adults (≥ 14 years old) in Queensland were subject to
	prospective surveillance by infection control practitioners using surveillance
	definitions adapted from the Centers for Disease Control and Prevention / National
	Healthcare Safety Network definitions. Surveillance results are reported for 23
	medium to large hospitals accounting for 85% of public hospital activity in
Notes	Queensland, between 2008 and 2012.
	Most of the 8092 HA-BSIs (79%) were associated with inpatient stay,s however
	21% were acquired during outpatient or same day admissions, including
	chemotherapy, haematology and haemodialysis settings. About one-third of HA-
	BSIs were intravascular catheter BSIs, mostly associated with central venous lines,
	but only 5% of these were attributable to ICUs. S. aureus was responsible for 18%
	of HA-BSIs. Twenty-four per cent of S. aureus BSIs (344 of 1429) were acquired
	in non-inpatient settings. The inpatient HA-BSI rate in Queensland public hospitals
	was 5.5–6.4 per 10 000 patient-days.

## *BMJ Quality and Safety* May 2016, Vol. 25, Issue 5

URL	http://qualitysafety.bmj.com/content/25/5
Notes	<ul> <li>A new issue of <i>BMJ Quality and Safety</i> has been published. Many of the papers in this issue have been referred to in previous editions of <i>On the Radar</i> (when they were released online). Articles in this issue of <i>BMJ Quality and Safety</i> include: <ul> <li>Editorial: The Zen of quality improvement: the waves and the tide form a unity (Charles L Bosk)</li> <li>Editorial: Paperless handover: are we ready? (Arpana R Vidyarthi, Maitreya Coffey)</li> <li>Secular trends and evaluation of complex interventions: the rising tide phenomenon (Yen-Fu Chen, Karla Hemming, A J Stevens, R J Lilford)</li> <li>Sleep deprivation and starvation in hospitalised patients: how medical care can harm patients (Tim Xu, Elizabeth C Wick, Martin A Makary)</li> <li>Computerised prescribing for safer medication ordering: still a work in progress (G D Schiff, T-T T Hickman, L A Volk, D W Bates, A Wright)</li> <li>The problem with preventable deaths (Helen Hogan)</li> <li>Half-life of a printed handoff document (Glenn Rosenbluth, Ronald Jacolbia, Dimiter Miley, Andrew D Auerbach)</li> </ul> </li> </ul>

•	Failure mode and effects analysis: a comparison of two common <b>risk</b>
	<b>prioritisation</b> methods (Lisa M McElroy, Rebeca Khorzad, Anna P
	Nannicelli, Alexandra R Brown, Daniela P Ladner, Jane L Holl)
•	Exploring the impact of consultants' experience on hospital mortality by
	day of the week: a retrospective analysis of hospital episode statistics
	(Milagros Ruiz, Alex Bottle, Paul P Aylin)
•	Implementation of <b>HIV treatment</b> as prevention strategy in 17 Canadian
	sites: immediate and sustained outcomes from a 35-month Quality
	Improvement Collaborative (Christina M Clarke, Tessa Cheng, Kathleen G
	Reims, Clemens M Steinbock, Meaghan Thumath, R S Milligan, R Barrios)
•	Psychometric properties of the AHRQ Community Pharmacy Survey on
	Patient Safety Culture: a factor analysis (Ephrem A Aboneh, Kevin A Look,
	Jamie A Stone, Corey A Lester, Michelle A Chui)
•	Role of emotional competence in residents' simulated emergency care
	performance: a mixed-methods study (Leonore Bourgeon, Mourad
	Bensalah, Anthony Vacher, Jean-Claude Ardouin, Bruno Debien)
•	Environmental factors and their association with <b>emergency department</b>
	hand hygiene compliance: an observational study (Eileen J Carter, Peter
	Wyer, James Giglio, Haomiao Jia, G Nelson, V E Kauari, E L Larson)
•	Implementation of a quality improvement initiative to <b>reduce daily chest</b>
	radiographs in the intensive care unit (Eric Sy, Michael Luong, Michael
	Quon, Young Kim, Sadra Sharifi, Monica Norena, Hubert Wong, Najib
	Ayas, Jonathon Leipsic, Peter Dodek)
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URL	http://intqhc.oxfordjournals.org/content/28/2?etoc
	A new issue of the 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 <i>On the Radar</i> (when they released online). Articles in this issue of the
	International Journal for Quality in Health Care include:
	Editorial: Work environment and quality improvement in healthcare
	(Usman Iqbal, Shabbir Syed-Abdul, Yu-Chuan (Jack) Li)
	• Lean interventions in healthcare: do they actually work? A systematic
	literature review (John Moraros, Mark Lemstra, Chijioke Nwankwo)
	Applying the WHO conceptual framework for the <b>International</b>
	Classification for Patient Safety to a surgical population (L M McElroy, D
Notes	M Woods, A F Yanes, A I Skaro, A Daud, T Curtis, E Wymore, J L Holl,
Notes	M M Abecassis, D P Ladner)
	Development and evaluation of an automated fall risk assessment system
	(Ju Young Lee, Yinji Jin, Jinshi Piao, Sun-Mi Lee)
	Patient assessment of diabetes care in a pay-for-performance program
	(Herng-Chia Chiu, Hui-Min Hsieh, Yi-Chieh Lin, Shou-Jen Kuo, Hao-Yun
	Kao, Shu-Chuan Jennifer Yeh, Wen-Hsin Chang, Pi-Jung Hsiao, Yao-Shen
	Chen, Shoei-Loong Lin, Gin-Ho Lo, Chen-Guo Ker, Yu-Han Hung, Hsien-
	An Cheng, Tiang-Hong Chou, Sze-Yuan Chou, J-H Wang, C-F Wang)
	• Development and psychometric characteristics of the <b>pediatric inpatient</b>
	experience survey (PIES) (Sonja I Ziniel, Jean A Connor, Dionne Graham,
	Jennifer Koch Kupiec, Nina A Rauscher, Amanda S Growdon, Anne

Berger, Kathy J Jenkins, Sion Kim Harris)

- Patients' informational needs while undergoing brachytherapy for cervical cancer (Deirdré Long, Hester Sophia Friedrich-Nel, G Joubert)
- Observations on **quality senior health business**: success patterns and policy implications (Ya-Ting Yang, Yi-Hsin Elsa Hsu, Ya-Mei Chen, Shyi Su, Yao-Mao Chang, Usman Iqbal, Handa Yujiro, Neng-Pai Lin)
- Types and patterns of safety concerns in home care: client and family caregiver perspectives (Catherine E Tong, Joanie Sims-Gould, Anne Martin-Matthews)
- Does the patient's inherent rating tendency influence reported **satisfaction scores** and affect division ranking? (Patricia Francis, Thomas Agoritsas, Pierre Chopard, Thomas Perneger)
- A randomized, controlled trial of team-based competition to increase learner participation in quality-improvement education (Charles D Scales Jr, Tannaz Moin, Arlene Fink, Sandra H Berry, Nasim Afsar-Manesh, Carol M Mangione, B Price Kerfoot)
- Using mixed methods to evaluate **perceived quality of care** in southern Tanzania (Tara Tancred, Joanna Schellenberg, Tanya Marchant)
- **Patient complaints** about hospital services: applying a complaint taxonomy to analyse and respond to complaints (Reema Harrison, Merrilyn Walton, Judith Healy, Jennifer Smith-Merry, Coletta Hobbs)
- Incidence and impact of proxy response in **measuring patient experience**: secondary analysis of a large postal survey using propensity score matching (Chris Graham)
- Nurse staffing and the work environment linked to **readmissions** among older adults following elective total hip and knee replacement (Karen B Lasater, Matthew D Mchugh)
- Should quality goals be defined for **multicenter laboratory testing**? Lessons learned from a pilot survey on a national surveillance program for diabetes (Limin Wang, Nanxun Mo, Richard Pang, Qian Deng, Yong Liu, Yan Hu, Chaohui Hu, Linhong Wang)

#### 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:
	Editorial: Learning how to make routinely available data useful in
	guiding regulatory oversight of hospital care (Martin Bardsley)
	<ul> <li>Intelligent Monitoring? Assessing the ability of the Care Quality</li> </ul>
	Commission's <b>statistical surveillance tool</b> to predict quality and prioritise
	NHS hospital inspections (Alex Griffiths, Anne-Laure Beaussier, David
Notes	Demeritt, Henry Rothstein)
	• Editorial: Exclusions in the <b>denominators of process-based quality</b>
	measures: the missing link in understanding performance or ecological
	fallacy? (Perla J Marang-van de Mheen, Brahmajee K Nallamothu)
	• A scoping review of <b>online repositories of quality improvement</b> projects,
	interventions and initiatives in healthcare (Jessica P Bytautas, Galina
	Gheihman, Mark J Dobrow)

International Journal for Quality in Health Care online first articles

URL	http://intqhc.oxfordjournals.org/content/early/recent?papetoc
	International Journal for Quality in Health Care has published a number of 'online
	first' articles, including:
Notes	• Development and testing of the cancer multidisciplinary team meeting
	observational tool (MDT-MOT) (Jenny Harris, Cath Taylor, Nick
	Sevdalis, Rozh Jalil, and James S A Green)

#### Online resources

[UK] NICE Guidelines and Quality Standards http://www.nice.org.uk

The UK's National Institute for Health and Care Excellence (NICE) has published new (or updated) guidelines and quality standards. The latest updates are:

• NICE Quality Standard QS121 *Antimicrobial stewardship* https://www.nice.org.uk/guidance/qs121

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

Draft Guidelines for Safe Use of Subcutaneous Insulin Delivery across the Continuum of Care <a href="http://www.ismp.org/sc?id=1707">http://www.ismp.org/sc?id=1707</a>

The Institute for Safe Medication Practices has released these draft guidelines. The guidelines were developed following a summit on the Safe Use of Subcutaneous Insulin Delivery across the Continuum of Care for adults held in November 2015. The summit reviewed the evidence surrounding the current risk and come to consensus on practice guidelines designed to facilitate the safe use of subcutaneous insulin. The guidelines were established through expert group consensus, based on knowledge of current practice as well as a review of the literature and professional and regulatory standards. These draft statements are now available for public consideration and comment.

For information on the Commission's work on medication safety, including the National Inpatient Medication Chart (subcutaneous insulin) see <a href="http://www.safetyandquality.gov.au/our-work/medication-safety/">http://www.safetyandquality.gov.au/our-work/medication-safety/</a>

[USA] Effective Health Care Program reports http://effectivehealthcare.ahrq.gov/

The US Agency for Healthcare Research and Quality (AHRQ) has an Effective Health Care (EHC) Program. The EHC has released the following final reports and updates:

- Imaging for the Pretreatment Staging of Small Cell Lung Cancer <a href="https://www.effectivehealthcare.ahrq.gov/search-for-guides-reviews-and-reports/?pageaction=displayproduct&productID=2210">https://www.effectivehealthcare.ahrq.gov/search-for-guides-reviews-and-reports/?pageaction=displayproduct&productID=2210</a>
- Diabetes Medications for Adults with Type 2 Diabetes: An Update <a href="https://www.effectivehealthcare.ahrq.gov/search-for-guides-reviews-and-reports/?pageaction=displayproduct&productID=2215">https://www.effectivehealthcare.ahrq.gov/search-for-guides-reviews-and-reports/?pageaction=displayproduct&productID=2215</a>

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