



On the Radar

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On the Radar

Editor: Niall Johnson. Contributors: Niall Johnson, Justine Marshall

Reports

Person Driven Care: A study of The Esther Network in Sweden and the lessons that can be applied to enable NHS Wales to become a patient-centred healthcare system. Improving Healthcare White Paper Series - No. 7

Davies J, Fuge B, Harris A, Barrett-Lee P

Cardiff. 1000 Lives Plus, NHS Wales, 2012.

Notes	Short white paper from the Welsh 1000 Lives Plus program that examines that Swedish Esther Network as a model of 'person-driven care'. The Esther Network has been described as one of the best patient-centred healthcare services in the world. According to the website, the paper "offers supportive prompts to ...staff who want to improve the experiences and outcomes of patients. It provides useful real-life story of service change at both the frontline and at board level."
URL	http://www.1000livesplus.wales.nhs.uk/news/22913 http://www.1000livesplus.wales.nhs.uk/sitesplus/documents/1011/Person%20Drive%20Care%203%20May%2028Final%29.pdf

For information about the Commission's work on patient and consumer centred care, see <http://www.safetyandquality.gov.au/our-work/patient-and-consumer-centred-care/>

Quality in the new health system: Maintaining and improving quality from April 2013
National Quality Board
London. Department of Health, 2013.

Notes	<p>The (English) National Quality Board (NQB) has published a report setting out how quality will be maintained and improved in the changed English health system. The report focuses on how the new system should prevent, identify and respond to serious failures in quality and provides a collective statement from NQB members as to:</p> <ol style="list-style-type: none"> a. the nature and place of quality in the new health system b. the distinct roles and responsibilities for quality of the different parts of the system c. how the different parts of the system should work together to share information and intelligence on quality and to ensure an aligned and coordinated system wide response in the event of a quality failure d. the values and behaviours that all parts of the system will need to display in order to put the interests of patients and the public first and ahead of organisational interests. <p>In the Foreword, the Chair of the NQB, Sir David Nicholson observes that “The NHS is organising itself around a single definition of quality: care that is effective, safe and provides as positive an experience as possible.” He also notes that “that the provision of high quality care is an inherently complex and fragile operation. Quality is systemic—the patient journey cuts across primary and secondary care, health and social care, links with public health services and involves multiple professionals. Therefore, it is a collective endeavour, requiring collective effort and collaboration at every level of the system.”</p> <p>He goes on to cite a King’s Fund report arguing for “three lines of defence ‘in the battle against serious quality failures in healthcare’:</p> <ul style="list-style-type: none"> • The first line of defence is frontline professionals, both clinical and managerial, who deal directly with patients, carers and the public and are responsible for their own professional conduct and competence and for the quality of the care that they provide. • The second line of defence is the boards and senior leaders of healthcare providers responsible for ensuring the quality of care being delivered by their organisations. They are ultimately accountable when things go wrong. • The third line of defence is the structure and systems that are external, usually at national level, for assuring the public about the quality of care.” <p>In the report information is given on the establishment and operation of Quality Surveillance Groups.</p>
URL	http://www.dh.gov.uk/health/2013/01/quality-health-system/
TRIM	74092

Journal articles

Integrated health and post modern medicine

HRH The Prince of Wales

Journal of the Royal Society of Medicine 2012;105(12):496-498.

Notes	<p>This editorial penned by Prince Charles calls for a broadening of the scope of healthcare. Possibly stemming from a more patient-centric view of health he writes of a holistic vision of health that includes broader factors, such as the physical and social environment, education, agriculture and architecture.</p>
DOI	http://dx.doi.org/10.1258/jrsm.2012.12k095

Medical errors in primary care clinics -- a cross sectional study

Khoo EM, Lee WK, Sararaks S, Abdul Samad A, Liew SM, Cheong AT, et al.

BMC Family Practice 2012;13(1):127.

Notes	<p>The aim of the study is to determine the extent of diagnostic inaccuracies and management errors in public funded primary care clinics using 1753 medical records in 12 Malaysian primary care clinics in Malaysia.</p> <p>The vast majority of patient encounters (81%) were with medical assistants. Diagnostic errors were present in 3.6% of medical records and management errors in 53.2%. For management errors, medication errors were present in 41.1% of records, investigation errors in 21.7% and decision making errors in 14.5%. A total of 39.9% of these errors had the potential to cause serious harm. Problems of documentation including illegible handwriting were found in 98.0% of records.</p> <p>Nearly all errors (93.5%) detected were considered preventable.</p>
DOI	http://dx.doi.org/10.1186/1471-2296-13-127

Changes in adverse event rates in hospitals over time: a longitudinal retrospective patient record review study

Baines RJ, Langelaan M, de Bruijne MC, Asscheman H, Spreeuwenberg P, van de Steeg L, et al

BMJ Quality & Safety 2013.

Notes	<p>This study sought to determine the change in adverse event (AE) rates and preventable AE rates over time, identify certain patient risk groups and discuss factors influencing the outcome in Dutch hospitals. The study undertook longitudinal retrospective patient record review study in a random sample of 21 hospitals 2004, and 20 hospitals in 2008. In each hospital, 400 patient admissions were included in 2004, and 200 in 2008, with a total of 11,883 patient records (7,887 in 2004, 3,996 in 2008).</p> <p>The author report that the rate of patients experiencing an AE increased from 4.1% in 2004 to 6.2% in 2008. The preventable AE rate remained relatively stable at 1.8% in 2004 and 1.6% in 2008. More than 50% of all AEs were related to surgery.</p> <p>The authors conclude “Patient harm related to healthcare is a persistent problem that is hard to influence. Measuring AEs over time stresses the continuing urgency, and also identifies possible areas for improvement.”</p>
DOI	http://dx.doi.org/10.1136/bmjqs-2012-001126

Identifying optimal postmarket surveillance strategies for medical and surgical devices: implications for policy, practice and research

Gagliardi AR, Umoquit M, Lehoux P, Ross S, Ducey A, Urbach DR

BMJ Quality & Safety 2013.

Notes	<p>The issue of post-market surveillance of (implantable) devices has become more prominent in recent years, associated with events such as the revelations about PIP breast implants that contained industrial-grade silicone. This paper summarises a North American consultative process that developed a range of possible strategies for post-market surveillance, including the use of registries.</p>
DOI	http://dx.doi.org/10.1136/bmjqs-2012-001298

Integrating Human Factors Research and Surgery: A Review

Shouhed D, Gewertz B, Wiegmann D, Catchpole K

Arch Surg. 2012;147(12):1141-1146

Notes	<p>The potential of human factors to enhance safety and quality of care has been raised often in recent years. This review article examines the literature on how human factors research has been integrated into surgical safety programs. The authors report finding the themes of the development of human factors theories, the application of those theories within surgery, a specific interest in the concept of flow, and the theoretical basis and value of human-related interventions for improving safety and flow in surgery.</p> <p>They conclude that “...errors routinely continue to occur in surgical care. Disruptions in the flow of an operation, such as teamwork and communication failures, contribute significantly to such adverse events. ...there is much evidence in medicine and other fields that systems can be better designed to prevent or detect errors before a patient is harmed.” They go on to argue that given the “complexity of factors leading to surgical errors requires collaborations between surgeons and human factors experts to carry out the proper prospective and observational studies. Only when we are guided by this valid and real-world data can useful interventions be identified and implemented.”</p>
DOI	<p>http://dx.doi.org/10.1001/jamasurg.2013.596 http://archsurg.jamanetwork.com/article.aspx?articleid=1485772</p>

Surgical never events in the United States

Mehtsun WT, Ibrahim AM, Diener-West M, Pronovost PJ, Makary MA

Surgery 2012 [epub].

Notes	<p>This study sought to understand that scale of the problem of surgical ‘never events’ in the USA by examining the (US) National Practitioner Data Bank (a federal repository of medical malpractice claims) to describe the number and magnitude of paid malpractice claims for surgical never events, as well as associated patient and provider characteristics.</p> <p>The authors report finding “9,744 paid malpractice settlement and judgments for surgical never events occurring between 1990 and 2010. Malpractice payments for surgical never events totalled USD1.3 billion. Mortality occurred in 6.6% of patients, permanent injury in 32.9%, and temporary injury in 59.2%. They also estimate that 4,082 surgical never event claims occur each year in the United States and note that for physicians named in a surgical never event claim, 12.4% were later named in at least 1 future surgical never event claim.</p>
DOI	<p>http://dx.doi.org/10.1016/j.surg.2012.10.005</p>

Thirty-day outcomes support implementation of a surgical safety checklist

Bliss LA, Ross-Richardson CB, Sanzari LJ, Shapiro DS, Lukianoff AE, Bernstein BA, et al

Journal of the American College of Surgeons 2012;215(6):766-776.

Notes	<p>Further validation to the use of surgical checklists. In this instance the use of a checklist is associated with a reduction in 30-day morbidity. The authors report that comparison of 30-day morbidity using data from the American College of Surgeons National Surgical Quality Improvement Program that was compared with 2,079 historical control cases demonstrated a statistically significant reduction in overall adverse event rates from 23.60% for historical control cases and 15.90% in cases with only team training, to 8.20% in cases with checklist use.</p>
DOI	<p>http://dx.doi.org/10.1016/j.jamcollsurg.2012.07.015</p>

Simulation-Based Trial of Surgical-Crisis Checklists

Arriaga AF, Bader AM, Wong JM, Lipsitz SR, Berry WR, Ziewacz JE, Hepner DL, Boorman DJ, Pozner CN, Smink DS, Gawande AA

New England Journal of Medicine 2013;368(3):246-253.

Notes	<p>This study sought to investigate the use of crisis checklists and their effect on performance during intraoperative crises such as massive hemorrhage or cardiac arrest. Researchers conducted 106 simulated surgical-crisis scenarios, in half of which, randomly chosen, the team had access to a previously developed set of checklists for crisis events. In the other half, the team worked from memory, as in usual care. The primary outcome measure was failure to adhere to critical processes of care, and participants were also surveyed regarding their perceptions of the usefulness and clinical relevance of the checklists.</p> <p>Results showed that every team performed better when the crisis checklists were available than when they were not. Overall, checklist use during operating-room crises resulted in nearly a 75% reduction in failure to adhere to critical steps in management (6% of steps missed with checklists available vs. 23% without checklists available, P<0.001). Furthermore, participants reported that the checklists were easy to use, that the checklists helped them feel better prepared, and that they would use the checklists if presented with these operative emergencies in real life.</p>
DOI	http://dx.doi.org/10.1056/NEJMsa1204720

National Study on the Distribution, Causes, and Consequences of Voluntarily Reported Medication Errors Between the ICU and Non-ICU Settings

Latif A, Rawat N, Pustavoitau A, Pronovost PJ, Pham JC.

Critical Care Medicine 2012 [epub].

Notes	<p>Report on a comparison of medication errors voluntarily reported (to the US MEDMARX system between 1999 and 2005) in intensive care and non-intensive care settings in US hospitals. Analysing 839,553 errors reported from 537 hospitals, the authors reports that errors were more frequent in the ICU and that errors in ICU patients were more likely to result in serious patient harm or death. Apparently, less than 2% of all errors were disclosed to patients, regardless of the error's severity or setting in which it occurred.</p> <p>Errors most often originated in the administration phase (ICU 44% vs. non-ICU 33%). The most common error type was omission (ICU 26% vs. non-ICU 28%). Among harmful errors, dispensing devices (ICU 14% vs. non-ICU 7.1%) and calculation mistakes (ICU 9.8% vs. non-ICU 5.3%) were more commonly identified to be the cause in the ICU compared to the non-ICU setting. ICU errors were more likely to be associated with any harm, permanent harm, harm requiring life-sustaining intervention, or death.</p>
DOI	http://dx.doi.org/10.1097/CCM.0b013e318274156a

For information about the Commission's work on medication safety, see

<http://www.safetyandquality.gov.au/our-work/medication-safety/>

Improving Situation Awareness to Reduce Unrecognized Clinical Deterioration and Serious Safety Events

Brady PW, Muething S, Kotagal U, Ashby M, Gallagher R, Hall D, et al
 Pediatrics 2013;131(1):e298-e308.

Notes	Paper reporting on the impact of an intervention designed to identify, mitigate, and escalate risk in a quaternary care children’s hospital. The project reviewed recent serious safety events (SSEs) and floor-to-ICU transfers. Five risk factors were associated with each event: family concerns, high-risk therapies , presence of an elevated early warning score , watcher/clinician gut feeling , and communication concerns . Using the model for improvement, an intervention was developed and tested to reliably and proactively identify patient risk and mitigate that risk through unit-based huddles. A 3-times daily inpatient huddle was added to ensure risks were escalated and addressed. Later, a “robust” and explicit plan for at-risk patients was developed and spread. The intervention was associated with a near 50% reduction in transfers (4.4 to 2.4 per 1,000 non-ICU inpatient days) and SSEs .
DOI	http://dx.doi.org/10.1542/peds.2012-1364

For information about the Commission’s work on recognition and response to clinical deterioration, see <http://www.safetyandquality.gov.au/our-work/recognition-and-response-to-clinical-deterioration/>

Impact of proactive rounding by a rapid response team on patient outcomes at an academic medical center

Butcher BW, Vittinghoff E, Maselli J, Auerbach AD
 Journal of Hospital Medicine 2013;8(1):7-12.

Notes	Whereas the previous item discussed an intervention to better identify deterioration, this paper reports on the use of rapid response teams to undertake rounds on patients discharged from ICU that sought to proactively detect deterioration by seeking out patients considered to be at greater risk of deterioration. However, this study reported no improvement in outcomes for the patients. The study involved all adult patients discharged alive from the ICU at the University of California San Francisco Medical Center between January 2006 and June 2009.
DOI	http://dx.doi.org/10.1002/jhm.1977

Contributions of tele-intensive care unit (Tele-ICU) technology to quality of care and patient safety

Khunlertkit A, Carayon P
 J Crit Care 2012 [epub].

Notes	The potential for technology to enhance the safety and quality of health care is not an unfamiliar subject. This piece looks at how ‘tele-health’ technologies are being used in some ICUs. Based on interviews with 61 staff of 5 remotely monitored intensive care units (tele-ICUs) the authors report various ways in which tele-ICUs were apparently improving safety and quality, mainly through anticipating and preventing complications. The study also report that “tele-ICU physicians can make poor care decisions leading to medication errors if they lack patient-related information” and “the tele-ICU has no impact on patient care processes and outcomes when the technology is not accepted and used by ICU staff.”
DOI	http://dx.doi.org/10.1016/j.jcrc.2012.10.005

Doing Better by Doing Less: Approaches to Tackle Overuse of Services

Berenson RA, Docteur E

The Urban Institute [epub] January 2013

Notes	<p>This article provides a summary of the problem of overuse in the US health care system, an issue which has been attracting a lot of attention and discussion. It has been suggested that as much as a third of US health care spending is unnecessary and wasteful. This unnecessary spending includes the overuse of services – services that are provided more frequently than necessary or services that are higher-cost, but no more beneficial than lower-cost alternatives.</p> <p>The authors look at the problem of overuse, the difficulties of measurement of overuse, the reasons behind overuse and strategies to decrease it. The article contains a lengthy discussion of how various payment mechanisms help or hinder overuse, such as fee for service, episodes and bundled episodes, pay for performance, shared savings and global payment.</p>
DOI	<p>http://www.rwjf.org/en/research-publications/find-rwjf-research/2013/01/doing-better-by-doing-less--approaches-to-tackle-overuse-of-serv.html</p>

Distraction and interruption in anaesthetic practice

Campbell G, Arfanis K, Smith AF

British Journal of Anaesthesia 2012;109(5):707-715.

International Anesthesiology Clinics

Winter 2013 - Volume 51 - Issue 1. Patient safety in the operating room.

Notes	<p>Anaesthesia is generally considered relatively safe. These items reveal that there are still areas of concern.</p> <p>The first item is an addition to literature on the potential dangers of interruptions and distractions. In observing 30 entire anaesthetics in a variety of surgical settings (with a total observation time of 31 h 2 min) 424 distracting events were identified. The authors report that “average frequency of distracting events, per minute, was 0.23 overall, with 0.29 during induction, 0.33 during transfer into theatre, 0.15 during maintenance, and 0.5 during emergence. Ninety-two (22%) events were judged to have a negative effect, and 14 (3.3%) positive. Existing strategies for managing distractions included ignoring inappropriate intrusions or conversation; asking staff with non-urgent matters to return later at a quieter time; preparation and checking of drugs and equipment ahead of time; acting as an example to other staff in timing their own potentially distracting actions; and being aware of one's own emotional and cognitive state.” They conclude that “Distractions are common in anaesthetic practice and managing them is a key professional skill which appears to be part of the tacit knowledge of anaesthesia. Anaesthetists should also bear in mind that the potential for distraction is mutual and reciprocal and their actions can also threaten safety by interrupting other theatre staff.”</p> <p>The second item notes that the current issue of <i>International Anesthesiology Clinics</i> is a special issue on the theme of <i>Patient safety in the operating room</i> that includes articles including:</p> <ul style="list-style-type: none">• Medication Errors in Anesthesia: A Review (Cooper, Lebron; Nossaman, Bobby)• Implementation of a Comprehensive Drug Safety Program in the Perioperative Setting (Stratman, Rachel C.; Wall, Michael H.)• Intraoperative Handoffs (Tan, Jens A.; Helsten, Daniel)
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	<ul style="list-style-type: none"> • Handovers From the OR to the ICU (Bonifacio, Alberto S.; Segall, Noa; Barbeito, Atilio; Taekman, Jeffrey; Schroeder, Rebecca; Mark, Jonathan B.) • Best Practices for Central Line Insertion (Tung, Avery) • Hand Hygiene and Anesthesiology (Munoz-Price, L. Silvia; Birnbach, David J.) • Environmental Hygiene in the Operating Room: Cleanliness, Godliness, and Reality (Wahr, Joyce A.; Abernathy, James H. III) • Decision Making, Situation Awareness, and Communication Skills in the Operating Room (Vannucci, Andrea; Kras, Joseph F.) • Prevention of Hospital-acquired Pressure Ulcers in the Operating Room and Beyond: A Successful Monitoring and Intervention Strategy Program (Lupe, Lori; Zambrana, David; Cooper, Lebron) • Quality in Pediatric Ambulatory Anesthesia: Its Recognition, Measurement, and Improvement (Samol, Nancy B.; Wittkugel, Eric P.) • Patient Safety in Pediatric Anesthesia: Developing a System to Improve Perioperative Outcomes (Kreeger, Renee N.; Spaeth, James P.) • The Use of Checklists as a Method to Reduce Human Error in Cardiac Operating Rooms (Spiess, Bruce D.)
DOI	Campbell et al. http://dx.doi.org/10.1093/bja/aes219 http://journals.lww.com/anesthesiaclinics/toc/2013/05110

BMJ Quality and Safety online first articles

Notes	<p><i>BMJ Quality and Safety</i> has published a number of ‘online first’ articles, including:</p> <ul style="list-style-type: none"> • High performance teamwork training and systems redesign in outpatient oncology (C A Bunnell, A H Gross, S N Weingart, M J Kalfin, A Partridge, S Lane, H J Burstein, B Fine, N A Hilton, C Sullivan, E E Hagemester, A E Kelly, L Colicchio, A H Szabatura, E P Winer, M Salisbury, S Mann) • Harnessing the cloud of patient experience: using social media to detect poor quality healthcare (Felix Greaves, Daniel Ramirez-Cano, Christopher Millett, Ara Darzi, Liam Donaldson) • Going DEEP: guidelines for building simulation-based team assessments (James A Grand, Marina Pearce, Tara A Rench, Georgia T Chao, Rosemarie Fernandez, Steve W J Kozlowski)
URL	http://qualitysafety.bmj.com/onlinefirst.dtl

International Journal for Quality in Health Care online first articles

Notes	<p><i>International Journal for Quality in Health Care</i> has published a number of ‘online first’ articles, including:</p> <ul style="list-style-type: none"> • The use of a standard design medication room to promote medication safety: organizational implications (H. Rozenbaum, L. Gordon, M. Brezis, and N. Porat) • Inequality in 30-day mortality and the wait for surgery after hip fracture: the impact of the regional health care evaluation program in Lazio (Italy) (P. Colais, N. Agabiti, D. Fusco, L. Pinnarelli, C. Sorge, C.A. Perucci, and M. Davoli) • Validity and reliability on three European language versions of the Safety Organizing Scale (Dietmar Ausserhofer, Maria Schubert, Mary Blegen, Sabina De Geest, and René Schwendimann)
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	<ul style="list-style-type: none"> • Compliance with the WHO Surgical Safety Checklist: deviations and possible improvements (Christofer Rydenfält, Gerd Johansson, Per Odenrick, Kristina Åkerman, and Per Anders Larsson) • Can incident reporting improve safety? Healthcare practitioners' views of the effectiveness of incident reporting (Janet E. Anderson, Naonori Kodate, Rhiannon Walters, and Anneliese Dodds) • Prospects for comparing European hospitals in terms of quality and safety: lessons from a comparative study in five countries (Susan Burnett, Anna Renz, Siri Wiig, Alexandra Fernandes, Anne Marie Weggelaar, Johan Calltorp, Janet E. Anderson, Glenn Robert, Charles Vincent, and N Fulop) • Validating the Danish adaptation of the World Health Organization's International Classification for Patient Safety classification of patient safety incident types (Kim Lyngby Mikkelsen, Jacob Thommesen, and Henning Boje Andersen)
URL	http://intqhc.oxfordjournals.org/content/early/recent?papetoc

Online resources

[USA] *Patient Safety 7/365*

Patient Safety Awareness Week, 3–9 March 2013

<http://www.npsf.org/events-forums/patient-safety-awareness-week/>

For 11 years, the [US] National Patient Safety Foundation has led hospitals and health care organizations in demonstrating their commitment to patient safety by recognizing the first week in March as Patient Safety Awareness Week. According to the NPSF, “This is the perfect time to re-energize staff, educate and engage patients, and demonstrate your organization’s commitment to patient safety.”

This year’s theme is **Patient Safety 7/365: 7 days of recognition, 365 days of commitment to safe care**. “This is a week to recognize the advancements that have been made in the patient safety arena, while acknowledging the challenges that remain—and committing to working on them, every day. Patient Safety 7/365 reminds us that providing safe patient care requires constant dedication and effort, 365 days a year.”

[USA] *Prevent Surgical Site Infection for Hip and Knee Arthroplasty*

<http://www.ihl.org/explore/SSIHipKnee/Pages/default.aspx>

Project JOINTS (Joining Organizations IN Tackling SSIs) is a US initiative to spread evidence-based practices to prevent surgical site infections (SSIs) after hip and knee replacement surgery. The (US) Institute for Healthcare Improvement (IHI) and its partners have assembled various tools and resources that organisations can use to improve the safety of surgeries that are becoming increasingly common. These tools and resources, including a How-to Guide, are now freely available on IHI.org.

Key changes for improvements include:

- Use an alcohol-containing antiseptic agent for preoperative skin preparation
- Instruct patients to bathe or shower with chlorhexidine gluconate soap for at least three days before surgery
- Screen patients for *Staphylococcus aureus* and decolonize carriers with five days of intranasal mupirocin and bathing or showering with chlorhexidine gluconate soap for at least three days before surgery
- Appropriate use of prophylactic antibiotics
- Appropriate hair removal.

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