



On the Radar

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On the Radar

Editor: Niall Johnson. Contributors: Niall Johnson

This week's content

Reports

Designing for Patient Safety: Developing Methods to Integrate Patient Safety Concerns in the Design Process

Joseph A, Quan X, Taylor E, Jelen M
Concord, CA. Center for Health Design, 2012:127.

Notes	Report from a project aimed at establishing a consensus around patient safety issues to be considered during various stages in the healthcare design process and to identify key activities, methodologies, and tools for improving facility design in terms of patient safety. One of the key findings reported is that it is critical to focus on patient safety issues during the pre-design phase of a healthcare facility building project . This then affects all key decisions made in the project. High-priority design activities for patient safety identified include: articulation of project mission/vision, operational/future state planning, simulation, process-led design, measurable goals/metrics, ongoing check-in, post occupancy evaluation, and safety reviews..
URL	http://www.healthdesign.org/sites/default/files/chd416_ahrqreport_final.pdf
TRIM	70295

Journal articles

An Observational Study of the Frequency, Severity, and Etiology of Failures in Postoperative Care After Major Elective General Surgery

Symons NR, Almouadaris AM, Nagpal K, Vincent CA, Moorthy K

Annals of Surgery 2012 [epub].

Notes	<p>Paper describing an observational study at a large UK teaching hospital that found that process failures in post-operative care were common causes of patient harm/adverse events, and that much of this was preventable.</p> <p>The study sought to “investigate the nature of process failures in postoperative care, to assess their frequency and preventability, and to explore their relationship to adverse events” by observing 50 patients undergoing major elective general surgery from the first post-operative day until discharge. The patients were observed daily by an independent surgeon. The 50 patients were observed for a total of 659 days of postoperative care. A total of 256 process failures were identified, of which 85% were preventable and 51% directly led to patient harm. Process failures occurred in all aspects of care, the most frequent being medication prescribing and administration, management of lines, tubes, and drains, and pain control interventions. Process failures accounted for 57% of all preventable adverse events. Communication failures and delays were the main aetiologies, leading to 54% of process failures.</p> <p>The authors conclude that “Process failures are common in postoperative care, are highly preventable, and frequently cause harm to patients. Interventions to prevent process failures will improve the reliability of surgical postoperative care and have the potential to reduce hospital stay.”</p>
DOI	http://dx.doi.org/10.1097/SLA.0b013e31826d859b

Health Care Professionals as Second Victims After Adverse Events: A Systematic Review

Seys D, Wu AW, Van Gerven E, Vleugels A, Euwema M, Panella M, et al

Evaluation & the Health Professions 2012 [epub].

Notes	<p>It’s been long-recognised that adverse events can have both the primary victim (the harmed patient) and secondary victims. This paper reports on a systematic review on health care workers as second victims.</p> <p>Based on 32 research articles and 9 non-research articles the study sought to determine definitions of the concept, research the prevalence and the impact of the adverse event on the second victim, and coping strategies.</p> <p>According to the authors the second victim phenomenon was first described 2000, with a detailed definition appearing in 2009. They also report that the prevalence of second victims after an adverse event varied from 10.4% up to 43.3% and that reactions can be emotional, cognitive, and behavioural. Coping strategies are reported have an impact on their patients, colleagues, and themselves. After the adverse event, defensive as well as constructive changes have been reported in practice. The authors suggest that as “second victim phenomenon has a significant impact on clinicians, colleagues, and subsequent patients” and that “it is important to offer support for second victims. When an adverse event occurs, it is critical that support networks are in place to protect both the patient and involved health care providers.”</p>
DOI	http://dx.doi.org/10.1177/0163278712458918

Smartphone use during inpatient attending rounds: Prevalence, patterns and potential for distraction

Katz-Sidlow RJ, Ludwig A, Miller S, Sidlow R
Journal of Hospital Medicine 2012;7(8):595-599.

Notes	<p>It has been suggested that smartphones (and other mobile devices) may be a means to enhance the quality and safety of care. Such suggestions have included providing access to references, tools and guidance to clinicians at the point of care. This paper problematizes the presence of these devices with possibility of their becoming a further sources of interruption and distraction.</p> <p>This paper is based on a survey of all housestaff and inpatient faculty in the departments of Medicine and Pediatrics at a US university-affiliated public teaching hospital. The participants were asked about smartphone ownership, usage patterns during attending rounds, and whether team members had ever missed important data during rounds due to distraction from smartphones.</p> <p>The survey had a high response rate (73%) and revealed a very high level of ownership (89% residents, 98% faculty), and use of smartphones during inpatient rounds (57% residents, 28% attendings). According to self-reports, smartphones were used during rounds for patient care (85% residents, 48% faculty), reading/responding to personal texts/e-mails (37% residents, 12% faculty), and other non-patient care uses (15% residents, 0% faculty). Nineteen percent of residents and 12% of attendings believed they had missed important information because of distraction from smartphones. Residents and faculty agreed that smartphones “can be a serious distraction during attending rounds,” and nearly 80% of faculty believed that smartphone policies should be established.</p>
DOI	<p>http://dx.doi.org/10.1002/jhm.1950</p>

Measuring Adverse Events and Levels of Harm in Pediatric Inpatients With the Global Trigger Tool

Kirkendall ES, Kloppenborg E, Papp J, White D, Frese C, Hacker D, et al
Pediatrics 2012 [epub].

Notes	<p>A paper on discussing how (again) the use of the IHI’s Global Trigger Tool has revealed a greater number of adverse events than existing methods had. This paper discusses an attempt to “evaluate and characterize the Global Trigger Tool’s utility in a pediatric population; to measure the rate of harm at our institution and compare it with previously established trigger tools and benchmark rates; and to describe the distribution of harm of the detected events.”</p> <p>The authors report that “240 random inpatient charts were retrospectively reviewed over a 12-month pilot period for the presence of 53 predefined safety triggers. When triggers were detected, the reviewers investigated the chart more thoroughly to decide whether an adverse event occurred. A total of 404 triggers were detected (1.7 triggers per patient), and 88 adverse events were identified. Rates of 36.7 adverse events per 100 admissions and 76.3 adverse events per 1000 patient-days were calculated. Sixty-two patients (25.8%) had at least 1 adverse event during their hospitalization, and 18 (7.5%) had >1 event identified. Three-quarters of the events were category E (temporary harm). Two events required intervention to sustain life (category H).”</p> <p>In this study, the Global Trigger Tool “identified a rate of harm 2 to 3 times higher than previously published pediatric rates”.</p>
DOI	<p>http://dx.doi.org/10.1542/peds.2012-0179</p>

Comparison of traditional trigger tool to data warehouse based screening for identifying hospital adverse events

O'Leary KJ, Devisetty VK, Patel AR, Malkenson D, Sama P, Thompson WK, et al
 BMJ Quality & Safety 2012 [epub].

Notes	<p>Another item discussing a trigger tool. This paper reports on a comparison between a trigger tool and a enterprise data warehouse (EDW) approach to identifying adverse events.</p> <p>In their study the authors found both methods identified adverse events (AEs), including preventable events, in their data set. However, they report that there was actually relatively little agreement between the two methods (the proportion of AEs identified by both methods). Thus it would appear that the EDW method is not a cheaper option to replace the more laborious trigger tool, but rather, as the authors suggest a “combination of complementary methods is the optimal approach to detecting AEs among hospitalised patients”.</p>
DOI	http://dx.doi.org/10.1136/bmjqs-2012-001102

Thirty-Day, All-cause Readmissions for Elderly Patients Who Have an Injury-related Inpatient Stay

Spector WD, Mutter R, Owens P, Limcangco R
 Med Care 2012;50(10):863-869.

Notes	<p>Re-admission, and the reduction of re-admission rates, have been an area of some attention. This may have as much to do with cost reduction as questions of quality of care. The authors of this paper note that much of this has focussed on re-admission following initial (or index) admissions for conditions such as heart failure, acute myocardial infarction, and pneumonia, while relatively little attention has been given to readmissions of patients whose index admission was necessitated by injury. To examine this, the authors undertook a retrospective cohort study of elderly patients who were admitted to a community hospital with a principal diagnosis of injury using the 2006 Healthcare Cost and Utilization Project State Inpatient Databases and State Emergency Department Databases from 11 US states. The authors report that “About 1 in 7 elderly patients with an injury-related admission were readmitted in 30 days (13.7%)”</p> <p>The authors also report that severe injuries had higher predicted readmission rates and that patients receiving transfusions, experiencing a Patient Safety Indicator event, and with infections had higher readmission rates. They also found that patients discharged to nursing homes or home health care had higher readmission rates compared with patients discharged to the community.</p>
DOI	http://dx.doi.org/10.1097/MLR.0b013e31825f2840

Developing capable quality improvement leaders

Kaminski GM, Britto MT, Schoettker PJ, Farber SL, Muething S, Kotagal UR
 BMJ Quality & Safety 2012;21(11):903-911.

Notes	<p>Paper describing how the Cincinnati Children's Hospital Medical Center have developed and delivered a training course, the Intermediate Improvement Science Series (I²S²) training course, to “develop organisational leaders to do improvement, lead improvement and get results on specific projects”. The course includes 12 class days over 6 months. The paper describes the learning theory, course content and structure and reports on feedback and outcomes from participants.</p>
DOI	http://dx.doi.org/10.1136/bmjqs-2012-000890

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"> • The collaborative communication model for patient handover at the interface between high-acuity and low-acuity care (Giulio Toccafondi, Sara Albolino, Riccardo Tartaglia, Stefano Guidi, Antonio Molisso, Francesco Venneri, A Peris, F Pieralli, E Magnelli, M Librenti, M Morelli, P Barach) • Medication discrepancies in integrated electronic health records (Amy Linsky, Steven R Simon) • Conducting a multicentre and multinational qualitative study on patient transitions (Julie K Johnson, Paul Barach, Myrra Vernooij-Dassen, on behalf of the HANDOVER Research Collaborative) • Why traditional statistical process control charts for attribute data should be viewed alongside an <i>xmr</i>-chart (Mohammed A Mohammed, Peter Worthington)
URL	<p>http://qualitysafety.bmj.com/onlinefirst.dtl</p>

BMJ Quality and Safety

November 2012, Vol 21, Issue 11

Notes	<p>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:</p> <ul style="list-style-type: none"> • Editorial: Quality improvement collaboratives in the age of health informatics—new wine in new wineskins (Patrick O'Connor) • Diagnostic errors in the intensive care unit: a systematic review of autopsy studies (Bradford Winters, Jason Custer, Samuel M Galvagno, Jr, Elizabeth Colantuoni, Shruti G Kapoor, HeeWon Lee, Victoria Goode, Karen Robinson, Atul Nakhasi, Peter Pronovost, David Newman-Toker) • Developing capable quality improvement leaders (Geraldine M Kaminski, Maria T Britto, P J Schoettker, S L Farber, S Muething, U R Kotagal) • Interruption handling strategies during paediatric medication administration (Lacey Colligan, Ellen J Bass) • Uncharted territory: measuring costs of diagnostic errors outside the medical record (Alan Schwartz, Saul J Weiner, Frances Weaver, Rachel Yudkowsky, Gunjan Sharma, Amy Binns-Calvey, Ben Preyss, Neil Jordan) • Avoiding handover fumbles: a controlled trial of a structured handover tool versus traditional handover methods (Christina E Payne, Jason M Stein, Traci Leong, Daniel D Dressler) • Adverse drug events caused by serious medication administration errors (Abhivyakti Kale, C A Keohane, S Maviglia, T K Gandhi, E G Poon) • Designing for distractions: a human factors approach to decreasing interruptions at a centralised medication station (Lacey Colligan, Stephanie Guerlain, Susan E Steck, Tracey R Hoke) • Improving primary care in Australia through the Australian Primary Care Collaboratives Program: a quality improvement report (Andrew W Knight, Claire Caesar, Dale Ford, Alison Coughlin, Colin Frick) • The Australian Primary Care Collaboratives Program: improving diabetes care (Andrew W Knight, Dale Ford, R Audehm, S Colagiuri, J Best) • Viewpoint: More quality measures versus measuring what matters: a call for balance and parsimony (Gregg S Meyer, Eugene C Nelson, David B
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	Pryor, Brent James, Stephen J Swensen, Gary S Kaplan, Jed I Weissberg, Maureen Bisognano, Gary R Yates, Gordon C Hunt • Viewpoint: Quality measures: bridging the cultural divide (Liam J Donaldson, Ara Darzi)
URL	http://qualitysafety.bmj.com/content/vol21/issue11/

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