



## On the Radar

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### This week's content

#### Journal articles

*Personal accountability in healthcare: searching for the right balance*

Wachter RM

BMJ Quality & Safety 2012 [epub].

Notes	<p>Balancing the organisational approach is this paper on the need to retain accountability with the individual. Robert Wachter, who has written on this theme previously, reminds us that even while there is virtue in a blame-free approach, there is still an important role for accountability. He discusses relative roles of <b>personal versus institutional accountability</b>, and the degree to which personal accountability may be enforced by outside parties (such as peers, patients, healthcare systems or regulators) versus professionals themselves ('professionalism'). He suggests that:</p> <p>"In calibrating 'no blame' versus accountability, and then further determining the locus of accountability, we should aim for the approach that best answers a series of crucial questions:</p> <ul style="list-style-type: none"> <li>• <b>Do patients</b> and their representatives <b>feel that professionals</b>— both clinicians and leaders—<b>have attacked medical errors with the seriousness they deserve?</b></li> <li>• <b>Do individuals</b> in the systems—both clinicians and leaders—<b>feel that they are being treated fairly?</b></li> <li>• Most importantly, <b>have we made care safer?'"</b></li> </ul>
DOI	<a href="http://dx.doi.org/10.1136/bmjqs-2012-001227">http://dx.doi.org/10.1136/bmjqs-2012-001227</a>

*A Safety Culture Transformation: Its Effects at a Children's Hospital*  
 Peterson TH, Teman SF, Connors RH  
 Journal of Patient Safety 2012;8(3):125-130.

*Addressing healthcare-associated infections and antimicrobial resistance from an organizational perspective: progress and challenges*  
 Murray E, Holmes A  
 Journal of Antimicrobial Chemotherapy 2012;67(suppl 1):i29-i36.

Notes	<p>A couple of items looking at organisational approaches to safety and quality, one on organisational culture and the other on an organisational approach to infection control.</p> <p>Peterson et al describe how a US tertiary, 200-bed children's hospital undertook a two-year initiative aimed at improving the safety culture of the hospital. Strategies included “safety-based staff training, training in root cause analysis, failure mode classification of events and safety behaviour, integration of and collaboration between risk management and clinical staff, consistent coding and classification of serious safety events and adoption of multiple safety metrics, creating a new safety leadership infrastructure, and fostering transparency of data and safety event details.”</p> <p>The authors report “an estimated <b>68% decrease in the number of serious safety events</b> and adoption of a serious safety event metric reported monthly. In addition, compliance with the ventilator-associated pneumonia bundle rose from 2% to 96%; hand hygiene compliance rates rose from 56% to 95%” with a range of other improvements also noted.</p> <p>They conclude that the “initiative led to <b>key improvements in safety culture</b> and patient safety and also had a broad impact on several clinical quality outcome measures. Using <b>safety metrics improves transparency</b> and enables future <b>benchmarking</b> with peer institutions to help improve pediatric patient safety nationwide.” The initiative has since been extended across the entire health organisation of more than 16,000 staff.</p> <p>Murray et al. look at the how an organisation-wide approach can address issues of healthcare associated infection and antimicrobial resistance. They state that an organisational perspectives involves “examination of the design, structure, culture, processes and behaviours evident in the organization”. The authors consider the questions of changing organisations, the drivers of change and the challenges. Their conclusion of a “<b>focus on achieving a sustainable and resilient approach</b>” is one that applies beyond HAI and antimicrobial stewardship.</p>
DOI	<p>Peterson et al <a href="http://dx.doi.org/10.1097/PTS.0b013e31824bd744">http://dx.doi.org/10.1097/PTS.0b013e31824bd744</a>          Murray et al <a href="http://dx.doi.org/10.1093/jac/dks200">http://dx.doi.org/10.1093/jac/dks200</a></p>

*Adherence to the Australian National Inpatient Medication Chart: the efficacy of a uniform national drug chart on improving prescription error*

Atik A

Journal of Evaluation in Clinical Practice 2012.

Notes	<p>A snap-shot audit conducted in Gosford hospital (a regional hospital in NSW, Australia) investigated the rate of errors in prescribing regular medications on the National Inpatient Medication Chart (NIMC).</p> <p>Using the NIMC Audit Tool, the author assessed the NIMC safety features of ordering regular medications which included date, generic drug name, route of administration, dose, frequency, and administration times, indication and prescriber's contact details.</p> <p>Of 1877 regular prescriptions audited, the most common medication errors were the absence of prescribers' contact details (88% of prescriptions) and recording the indication (87%). Hospital-wide staff education resulted in small improvements in prescription error rates.</p> <p>The author recommends strategies to address the causes of medication errors and assist in reducing the risk of potential harm to patients.</p> <p>The Australian Commission on Safety and Quality in Health Care coordinates NIMC national audits annually from 1 August to 30 September. In 2011, 147 hospitals participated in the NIMC 2011 National Audit.</p> <p>For information about the NIMC audit and audit reports, see <a href="http://www.safetyandquality.gov.au/our-work/medication-safety/medication-chart/support-material/">www.safetyandquality.gov.au/our-work/medication-safety/medication-chart/support-material/</a></p>
DOI	<p><a href="http://dx.doi.org/10.1111/j.1365-2753.2012.01847.x">http://dx.doi.org/10.1111/j.1365-2753.2012.01847.x</a></p>

For information on the Commission's work on medication safety, including the National Inpatient Medication Chart, see <http://www.safetyandquality.gov.au/our-work/medication-safety/>

For information on medication charts specifically, see <http://www.safetyandquality.gov.au/our-work/medication-safety/medication-chart/>

*Learning curves, taking instructions, and patient safety: using a theoretical domains framework in an interview study to investigate prescribing errors among trainee doctors*

Duncan EM, Francis JJ, Johnston M, Davey P, Maxwell S, McKay GA, McLay J, Ross S, Ryan C, Webb DJ, Bond C and PROTECT Study Group

Implementation Science 2012, 7:86

Notes	<p>A study of hospital-based prescribing from the UK, using semi-structured interviews with 22 trainee doctors and applying the Theoretical Domains Framework (TDF) to analyse the responses. The trainee doctors were asked about their views, opinions, and experiences of prescribing and prescribing errors.</p> <p>The researchers found that seven theoretical domains met the criteria of relevance. These were: 'social professional role and identity', 'environmental context and resources', 'social influences', 'knowledge', 'skills', 'memory, attention and decision making', and 'behavioral regulation'. The researchers then used critical appraisal of the interview data to identify two additional domains: 'beliefs about consequences' and 'beliefs about capabilities'. These results can be used when designing interventions to tackle prescribing errors in this cohort.</p>
DOI	<p><a href="http://dx.doi.org/10.1186/1748-5908-7-86">http://dx.doi.org/10.1186/1748-5908-7-86</a></p>

*The Unappreciated Challenges of Between-Unit Handoffs: Negotiating and Coordinating Across Boundaries*

Hilligoss B, Cohen MD

Annals of Emergency Medicine 2012 [epub]

*Task uncertainty and communication during nursing shift handovers*

Mayor E, Bangarter A, Aribot M

Journal of Advanced Nursing 2012;68(9):1956-1966.

Notes	<p>A pair of items on clinical handover, each describing areas of potential complexity or requiring additional effort.</p> <p>Hilligoss and Cohen note that handoffs or <b>handovers between units can have quite a different character to those within units</b>, e.g. at shift change. They identify 2 distinguishing structural features of between-unit transitions and how these create negotiation and coordination challenges. They argue that “[b]etween-unit handoffs are distinguished from within-unit handoffs because the former are triggered by patient conditions as opposed to shift schedules and entail working across organizational boundaries rather than within them. ... between-unit handoffs are challenged by several contextual factors, including inter-professional differences, unequal distributions of power among units, frequent lack of established relationships among the involved parties, infrequent face-to-face communication, a lack of awareness of the other unit's state, and the fact that responsibility and control of patients are transferred separately.”</p> <p>However, even within units there may be challenges to address in safe handovers. Mayor et al. examined variations in handover duration and communication in nursing units. Possibly the key message here is that standardisation of processes such as handover, needs to ensure that there a degree of <b>flexibility</b> and <b>context-sensitivity</b> that allow for effective and safe communication in each case.</p>
DOI	<p>Hilligoss and Cohen: <a href="http://dx.doi.org/10.1016/j.annemergmed.2012.04.009">http://dx.doi.org/10.1016/j.annemergmed.2012.04.009</a></p> <p>Mayor et al. <a href="http://dx.doi.org/10.1111/j.1365-2648.2011.05880.x">http://dx.doi.org/10.1111/j.1365-2648.2011.05880.x</a></p>

For information on the Commission’s work on clinical communications, including clinical handover, see <http://www.safetyandquality.gov.au/our-work/clinical-communications/>

*Colleges call for screening of all hospital patients to cut toll from venous thromboembolism*

Wise J

BMJ 2012;345:e6269

Notes	<p>News item from the UK reporting a joint position statement by royal colleges backing the current NICE guidelines on preventing hospital acquired venous thromboembolism. The NICE guidelines, published in 2010, recommend screening on admission for all patients.</p> <p>According to the president of the Royal College of Physicians, Richard Thompson: “Screening should be a routine part of practice, and robust systems [should be] put into place at every hospital so that patients at risk of VTE do not slip through the net.”</p>
DOI	<p><a href="http://dx.doi.org/10.1136/bmj.e6269">http://dx.doi.org/10.1136/bmj.e6269</a></p>

For information on the Commission’s work on medication safety, including the pilot of a draft National Inpatient Medication Chart with a pre-printed venous thromboembolism (VTE) risk assessment and prescribing section, see <http://www.safetyandquality.gov.au/our-work/medication-safety/>

*Cost of archaic care*

Westbrook J

MJA InSight 17 September 2012

Notes	Comment from Professor Westbrook on the state of medication management systems used in aged care facilities, which are “archaic, paper-based” and “chaotic”, and the common medication errors made in these situations. Westbrook describes the systems as “at high risk of failure” and argues that it is time to introduce electronic information systems throughout the aged care system.
URL	<a href="http://www.mjainsight.com.au/view?post=Johanna+Westbrook%3A+Cost+of+archaic+care+&amp;post_id=10821&amp;cat=comment">http://www.mjainsight.com.au/view?post=Johanna+Westbrook%3A+Cost+of+archaic+care+&amp;post_id=10821&amp;cat=comment</a>

*Reasons to be hopeful: streams of renewal in healthcare*

Moynihan R

BMJ 2012;345:e6042

Notes	Moynihan presents some hopeful thoughts on the future direction of health care, highlighting ten “streams of change” which he feels “may ultimately coalesce to form a coherent vision of radical renewal”. These are: <b>Evidence informed approach</b> , equity based medicine, <b>citizen centred collaborative care</b> , palliative care as a model, independence from industry influence, <b>preventing medical harm</b> , critiques from outside, social media and wider networks, social and environmental determinants of health, and greening of healthcare.
DOI	<a href="http://dx.doi.org/10.1136/bmj.e6042">http://dx.doi.org/10.1136/bmj.e6042</a>

*Factors associated with failure to follow up with a general practitioner after discharge from the emergency department*

Qureshi R, Asha SE, Zahra M, Howell S.

Emergency Medicine Australasia 2012 [epub].

Notes	<p>The importance of safe discharge, around communication and continuity of care, is agreed. This paper looks at some of the reasons that see patients not being seen by GPs after being discharged from emergency departments.</p> <p>The authors undertook a prospective cohort study of 247 adult patients who had been discharged and were asked to see their GP to complete their medical care. The participants were contacted by phone after 2 weeks to determine GP follow-up status.</p> <p>217 patient had complete outcome data. Four variables remained significantly associated with follow-up status. Compared with participants who did follow up, <b>those who failed to follow up were less likely to have an EMU admission, a regular GP, health insurance or awareness of the reason</b> why they were supposed to follow up.</p> <p>The most common reason for failure to follow up (65%) was that the participant did not consider it necessary.</p> <p>The authors conclude that “<b>good patient communication is important</b> for successful follow up, and that alternative avenues for completion of management need to be explored for patients without health insurance or a regular GP.”</p>
DOI	<a href="http://dx.doi.org/10.1111/j.1742-6723.2012.01610.x">http://dx.doi.org/10.1111/j.1742-6723.2012.01610.x</a>

*Physician patient communication failure facilitates medication errors in older polymedicated patients with multiple comorbidities*

Mira JJ, Orozco-Beltrán D, Pérez-Jover V, Martínez-Jimeno L, Gil-Guillén VF, et al. Family Practice 2012 [epub].

Notes	<p>This Spanish study sought understand the frequency of mistakes in communication between physicians and the patient and their incidence in errors in self-administered drugs. This was a descriptive, cross-sectional study based on interviews with a random sample of 382 patients older than 65 years who were poly-medicated (five or more drugs) and had multiple comorbidities.</p> <p>The authors report that <b>287 patients (75%) reported a medication error in the past year</b>, and 16 patients (4%) reported four or more errors. Most cases concerned the dosage, similar-looking medications or a lack of understanding of the physician’s instructions. Very severe consequences occurred in 19 cases (5%). Multiple comorbidities and a greater number of treatments were associated with errors.</p> <p>Frequent changes in prescription, not considering the prescriptions of other physicians, inconsistency in the messages, being treated by various different physicians at the same time, a feeling of not being listened to (P &lt; 0.001) or loss of trust in the physician were all report.</p> <p>Clearly, the errors “that poly-medicated patients with multiple comorbidities represent a real risk” and the authors suggest that processes to address these should be encouraged.</p> <p>As with the item on GP follow-up after discharge, one of the findings of this paper is the key role of communication. Indeed various aspects of <b>communication</b>, between clinicians, between patients and clinicians, <b>lie at the heart of so much of safety and quality in health care.</b></p>
DOI	<a href="http://dx.doi.org/10.1093/fampra/cms046">http://dx.doi.org/10.1093/fampra/cms046</a>

*Inappropriateness of Medication Prescriptions to Elderly Patients in the Primary Care Setting: A Systematic Review*

Opondo D, Eslami S, Visscher S, de Rooij SE, Verheij R, Korevaar JC, et al PLoS ONE 2012;7(8):e43617.

Notes	<p>This systematic review also looked at medication errors in older patients. Here the authors sought to quantify the extent of inappropriate prescription to elderly persons in the primary care setting</p> <p>Following a systematic database search the project examined 19 studies. The <b>median rate of inappropriate medication prescriptions (IMP) was 20.5%</b>. Medications with largest median rate of inappropriate medication prescriptions were propoxyphene 4.52%, doxazosin 3.96 %, diphenhydramine 3.30% and amitriptiline 3.20 %</p> <p>These figures led the authors to suggest that “Approximately one in five prescriptions to elderly persons in primary care is inappropriate” and that those medications most commonly inappropriately used “are good candidates for being targeted for improvement e.g. by computerized clinical decision support.”</p>
DOI	<a href="http://dx.doi.org/10.1371/journal.pone.0043617">http://dx.doi.org/10.1371/journal.pone.0043617</a>



*High-priority drug–drug interactions for use in electronic health records*

Phansalkar S, Desai AA, Bell D, Yoshida E, Doole J, Czochanski M, et al

Journal of the American Medical Informatics Association 2012;19(5):735-743.

Notes	Further to the conclusion of previous piece is this report of a consensus-based approach to developing a list of drug interactions that should be included in e-prescribing systems to enhance safety of their use. From the ARHQ PS Net: “The impact of clinical decision support systems on improving medication safety has been limited by a lack of standardized and tailored alerts to warn prescribing clinicians about dangerous drug–drug interactions. ... This study reports on the development of a consensus list of 15 high-severity, clinically significant drug–drug interactions... The authors recommend that alerts to prevent these interactions should be implemented”.
DOI	<a href="http://dx.doi.org/10.1136/amiainl-2011-000612">http://dx.doi.org/10.1136/amiainl-2011-000612</a>

For information on the Commission’s work on medication safety, see

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

*‘Why is there another person's name on my infusion bag?’ Patient safety in chemotherapy care – A review of the literature*

Kullberg A, Larsen J, Sharp L

European Journal of Oncology Nursing 2012.

Notes	Another paper on medication safety is this literature review focusing on chemotherapy. The authors sought to identify and evaluate interventions for improved patient safety in chemotherapy care by reviewing the literature. In the studies selected they found that the best evidence was that <b>computerised chemotherapy prescriptions were significantly safer</b> than manual prescriptions.
DOI	<a href="http://dx.doi.org/10.1016/j.ejon.2012.07.005">http://dx.doi.org/10.1016/j.ejon.2012.07.005</a>

*BMJ Quality and Safety online first articles*

Notes	<i>BMJ Quality and Safety</i> has published a number of ‘online first’ articles, including: <ul style="list-style-type: none"> <li>• Evaluation of a predevelopment service delivery intervention: an application to improve <b>clinical handovers</b> (Guiqing Lily Yao, N Novielli, S Manaseki-Holland, Y-F Chen, M van der Klink, P Barach, P J Chilton, R J Lilford on behalf of the European HANDOVER Research Collaborative)</li> <li>• Using Healthcare Failure Mode and Effect Analysis to reduce <b>medication errors</b> in the process of drug prescription, validation and dispensing in hospitalised patients (Manuel Vélez-Díaz-Pallarés, Eva Delgado-Silveira, María Emilia Carretero-Accame, Teresa Bermejo-Vicedo)</li> <li>• Editorial: <b>Disciplining doctors for misconduct</b>: character matters, but so does competence (Robert M Wachter)</li> <li>• ‘Matching Michigan’: a 2-year stepped interventional programme to minimise central venous <b>catheter-blood stream infections</b> in intensive care units in England (Julian Bion, Annette Richardson, Peter Hibbert, Jeanette Beer, Tracy Abrusci, Martin McCutcheon, Jane Cassidy, Jane Eddleston, Kevin Gunning, Geoff Bellingan, Mark Patten, David Harrison, THE MATCHING MICHIGAN COLLABORATION &amp; WRITING COMMITTEE)</li> </ul>
URL	<a href="http://qualitysafety.bmj.com/onlinefirst.dtl">http://qualitysafety.bmj.com/onlinefirst.dtl</a>

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