On the Radar

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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.

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**On the Radar**
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Contributors: Niall Johnson, Luke Slawomirski

**Journal articles**

**Quality of care and patient safety in the UK: the way forward after Mid Staffordshire**

Jarman B

| Notes | Commentary piece by Brian Jarman (Director of the Dr Forster Unit) on how the failings of various hospitals could have been responded to earlier if more attention had been paid to various ‘flags’, including HSMR data. However, rather than focusing on how there was a failure to recognise and respond to those flags — many of which he was trying to draw to the attention of various regulators, etc — he expresses a hope that there is a way forward that means an improvement in the safety and quality in the NHS. Among the things he sees as contributing are “continuous learning and improvement, monthly mortality alerts, adjusted death rates, regular patient and staff feedback, and targeted, skilled hospital investigations.” He also suggests that “training [be] introduced for the boards of trusts and for them to have equal representation of patients, clinicians, finance, and managers.” |
| DOI | http://dx.doi.org/10.1016/S0140-6736(13)61726-2 |
**Project BOOST: Effectiveness of a multihospital effort to reduce rehospitalisation**


**Using Four-Phased Unit-Based Patient Safety Walkrounds to Uncover Correctable System Flaws**

Taylor AM, Chuo J, Figueroa-Altmann A, DiTaranto S, Shaw KN

*Joint Commission Journal on Quality and Patient Safety* 2013;39(9).

**A Comprehensive Patient Safety Program Can Significantly Reduce Preventable Harm, Associated Costs, and Hospital Mortality**


*The Journal of Pediatrics* 2013 [epub].

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**Notes**

A number of papers or case studies reporting on how safety and/or quality improvements have been made in ‘real world’ settings.

Hansen and colleagues report on the results of 11 US hospitals that participated in the BOOST (Better Outcomes for Older adults through Safe Transitions) program aimed at reducing 30-day rehospitalisation rates. The 11 hospitals implemented this program, with the aid of an external quality improvement mentor, the authors report that the **average rate of 30-day rehospitalisation** was **14.7% prior to implementation** and **12.7% 12 months later**, reflecting an absolute reduction of 2% and a relative reduction of 13.6%.

Taylor and colleagues report on how a US children’s hospital implemented **structured walkrounds** (Patient Safety Leadership Walkrounds™) by nursing and medical leaders and had an **increased staff engagement in safety efforts**, the **identification of ‘hidden’ system flaws** (including nurse-medical team relationship, work-flow flaws, equipment defects, staff education, and medication safety), and contributed to other quality improvement projects.

Brilli and colleagues also report on an intervention in a US children’s hospital. In this instance, they report on what was a **hospital-wide initiative** to improve patient safety by “implementing high-reliability practices as part of a quality improvement (QI) program aimed at reducing all preventable harm.” They report that between 2010 and 2012, the **“serious safety event rate” decreased from 1.15 events to 0.19 event per 10,000 adjusted hospital-days, an 83.3% reduction** and that **“preventable harm events decreased by 53%”**, from a quarterly peak of 150 in the first quarter of 2010 to 71 in the fourth quarter of 2012” while observed hospital mortality decreased from 1.0% to 0.75%, although “severity-adjusted expected mortality actually increased slightly, and estimated harm-related hospital costs decreased by 22.0%.” As they conclude: **“Substantial reductions in serious safety event rate, preventable harm, hospital mortality, and cost were seen after implementation of our multifaceted approach. Measurable improvements in the safety culture were noted as well.”**

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<th>Authors</th>
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<tr>
<td>Hansen et al</td>
<td><a href="http://dx.doi.org/10.1002/jhm.2054">http://dx.doi.org/10.1002/jhm.2054</a></td>
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It is asserted that the costs of providing care vary, even after adjusting for casemix. What is less known is to what extent costs are related to the quality of care and patient outcomes. One of the problems is an apparent lack of reliable measures of quality, with researchers often relying on rates of failure (mortality, readmissions, adverse events) as substitute or proxy measures.

Patient reported outcome measures (PROMs) have been collected in the NHS since 2009 for patients undergoing knee and hip replacements, varicose vein surgery and groin hernia repairs. This paper explores to what extent variation in casemix-adjusted costs are associated with variation in patient-reported health outcomes for these four procedures. The commonly held assumption of a U-shaped relationship between cost and quality is tested, and the sensitivity of condition-specific versus generic PROMs instruments is compared.

Costs of care for the four procedures vary considerably. Interestingly, no statistically significant cost differences exist between teaching and non-teaching hospitals (except for hernia repair which is cheaper in the latter), and there is no conclusive evidence of economies of scale or scope.

The other important empirical and theoretical finding is that marginal, or incremental, cost of quality (MCQ) is non-linear, and negative or positive depending on (a) position on the curve, and (b) what instrument is used. For hip replacement, MCQ is negative at low levels of outcome, but turns positive after a certain point. This has important implications for pay-for-performance programs, which should acknowledge changing incremental costs that, in addition, vary between procedures.

A preferred PROM instrument cannot be identified here and the authors recommend using both generic and condition-specific ones. This is a useful preliminary study, one of the limitations of which is that it uses ‘top-down’ costing that does not provide a true indication of patient level costs. It may be interesting to conduct a similar analysis using Australian, bottom-up or activity-based cost data.

Patient Safety in the Cardiac Operating Room: Human Factors and Teamwork: A Scientific Statement From the American Heart Association
Circulation 2013 [epub].

The American Heart Association has published this 32-page scientific statement in their journal, Circulation. The AHRQ synopsis of the statement paper noted that it “reviews the current state of knowledge on safety issues in the operating room (OR) and provides detailed recommendations for hospitals to implement to improve safety and patient outcomes. These recommendations include using checklists and formal handoff protocols for every procedure, teamwork training and other approaches to enhance safety culture, applying human factors engineering principles to optimize OR design and minimize fatigue, and taking steps to discourage disruptive behavior by clinicians.”
### Redefining the clinical gaze

**Lachman P, BMJ Quality & Safety 2013 [epub].**

Using Michel Foucault’s concept of the medical gaze as his organising device, Lachman draws together a number of threads in patient safety thinking, including **systems approaches**, **human factors**, balancing **teamwork** and **autonomy**, **reliability** and **resilience**. He notes that “**Healthcare designed for safety integrates human and environmental factors, and then works on improving the processes.**” He adds that the reliability and resilience of the individual can be strengthened using concepts such as mindfulness and situational awareness. These can be taken beyond the individual and shared across a team using interventions such as **huddles**. Lachman considers that huddles can help bring “a change in the medical ethos, a flattening of hierarchy, promotion of teamwork and clear lines of accountability and responsibility in a transparent system of care.” Further, “Besides the benefits of improving safety, there is the additional advantage that huddles offer a way to improve flow and deliver greater value. Huddles may increase clinical mindfulness and decrease cognitive bias, leading to the reduction of missed and delayed diagnosis. … The development of a team approach to the huddle allows the fragmentation of care to be remedied and for a rebalancing of the clinical gaze, which was clinician focused, to one which is person centred with a collegial approach to healthcare. It makes **integrated care** a distinct reality and offers promise for the future.”

**DOI** [http://dx.doi.org/10.1136/bmjqs-2013-002322](http://dx.doi.org/10.1136/bmjqs-2013-002322)

### Risks (and Benefits) in Comparative Effectiveness Research Trials

**Feudtner C, Schreiner M, Lantos JD**

New England Journal of Medicine 2013 [epub].

The authors of this Perspective piece in the *NEJM* started by noting that “**Comparative effectiveness research (CER) aims to provide high-quality evidence to help patients and clinicians make informed clinical decisions and to assist health systems in improving the quality and cost-effectiveness of clinical care.**” Clearly such evidence should have great potential, but as this piece points out conducting comparative effectiveness research is not quite the same as conducting more “traditional” research. The authors discuss a number of the risks (and benefits), particularly as they pertain to patients/consumers.

**DOI** [http://dx.doi.org/10.1056/NEJMp1309322](http://dx.doi.org/10.1056/NEJMp1309322)

### Why Your TeamSTEPPS™ Program May Not Be Working

**Clapper TC, Ng GM**


**Teamwork** is widely regarded as a way of enhancing safety and quality of care. Consequently various frameworks or programs for developing teams and teamwork have emerged. One of the more prominent has been Team STEPPS™. This item examines some of the **barriers** to implementing TeamSTEPPS, including **limited resources**, **inadequate training**, and poor understanding of the effect of **hierarchy** on safety. The authors also such some approaches to overcoming these, including “providing command and health care agency emphasis for the TeamSTEPPS program, providing adequate material and personnel resources, designing training that is geared to trainer implementation at the departmental level, prioritizing and saturating training, and striving toward a just culture.”
It may well be that the importance of local context and the importance of understanding context and how solutions may be fitted into an organisation are among the lessons.

**BMJ Quality and Safety** online first articles

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<td>- <strong>Estimating risk</strong> when zero events have been observed (John Quigley, Matthew Revie, Jesse Dawson)</td>
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**URL** [http://qualitysafety.bmj.com/onlinefirst.dtl](http://qualitysafety.bmj.com/onlinefirst.dtl)

**International Journal for Quality in Health Care** online first articles

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<td>- Quality in practice: preventing and managing <strong>neonatal sepsis</strong> in Nicaragua (Sergio López, Yudy Wong, Luis Urbina, Ivonne Gómez, Flavia Escobar, Bernarda Tinoco, and Alba Parrales)</td>
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<td>- A systematic review of instruments that assess the <strong>implementation of hospital quality management systems</strong> (Oliver Groene, Daan Botje, Rosa Suñol, Maria Andrée Lopez, and Cordula Wagner)</td>
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<td>- Are the Dutch <strong>long-term care</strong> organizations getting better? A trend study of <strong>quality indicators</strong> between 2007 and 2009 and the patterns of regional influences on performance (S. Winters-van der Meer, R. B. Kool, N.S. Klazinga, and R. Huijsman)</td>
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<td>- Hospital <strong>readmission</strong> and parent perceptions of their child's hospital <strong>discharge</strong> (Jay G. Berry, Sonja I. Ziniel, Linda Freeman, William Kaplan, Richard Antonelli, James Gay, Eric A. Coleman, Stephanie Porter, and Don Goldmann)</td>
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**URL** [http://intqhc.oxfordjournals.org/content/early/recent?papetoc](http://intqhc.oxfordjournals.org/content/early/recent?papetoc)

**Online resources**

[USA] **Treatment Options**


The Effective Health Care Program of the US Agency for Healthcare Research and Quality (AHRQ) has developed resources to help educate patients about the importance of exploring their treatment options, comparing the benefits and risks of each, and preparing to discuss these options with their health care providers.

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