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Current Awareness Literature Alert

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1. **A Critical Review of the Research Literature on Six Sigma, Lean and StuderGroup's Hardwiring Excellence in the United States: The Need to Demonstrate and Communicate the Effectiveness of Transformation Strategies in Healthcare.**
   Vest JR, Gamm LD.
   Implement Sci. 2009(Jul 1); 4(35).
   Available at: http://www.implementationscience.com/content/4/1/35
   This study examined existing evidence concerning the effectiveness of three widely used organizational improvement methods in the healthcare context. Twenty eligible studies identified through systematic literature review were analyzed with respect to research design and outcomes. While the authors found that these studies uniformly reported positive effects associated with the intervention, they note that further and more rigorous studies are needed in this area. One table is included.

2. **Assessing Organisational Culture for Quality and Safety Improvement: A National Survey of Tools and Tool Use.**
   Mannion R, Konteh FH, Davies HTO.
   Qual Saf Health Care. 2009(Apr); 18(2):153–156.
   This study explored the use of tools for the assessment of organizational culture among National Health Service (NHS) facilities in England. The authors conducted a national survey of NHS organizations to identify culture assessment tools currently in use and to assess use of and satisfaction with these tools. They found that a third of the surveyed organizations reported using a culture assessment tool, with a few widely used tools accounting for the majority of use. While they found that respondents were highly satisfied with the tools they used, the authors suggest that there are still opportunities for improvement, and that assessment tools addressing a more comprehensive range of clinical governance issues than do existing tools would be of benefit. Four tables are included.

3. **Between Choice and Chance: The Role of Human Factors in Acute Care Equipment Decisions.**
   Nemeth C, Nunnally M, Bitan Y, Nunnally S, Cook RI.
   J Patient Saf. 2009(Jun); 5(2):114–121.
   This article describes the design and implementation of a human factors approach to guide the selection of new IV infusion equipment at an urban teaching hospital. The authors describe in detail the testing process, which involved extensive evaluation by human factors engineers and by hospital clinicians, and argue for the benefits of such an approach as a means of enhancing clinician performance and patient safety. Four tables and three figures are included.

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4. **Beyond Information: Exploring Patients' Preferences.**
Epstein RM, Peters E.
JAMA. 2009(Jul 8); 302(2):195–197.
Understanding and honoring patients' treatment preferences is a cornerstone of patient-centered care. This commentary discusses how patients form preferences when faced with complicated medical decisions and what clinicians can do to incorporate the principles of patient-centeredness in the decision-making process.

5. **Beyond the Count: Preventing Retention of Foreign Objects.**
Pennsylvania Patient Safety Authority.
Pa Patient Saf Advis. 2009(Jun); 6(2):39–45.
Available at: http://patientsafetyauthority.org/ADVISORIES/AdvisoryLibrary/2009/Jun6(2)/Pages/39.aspx
This article reviews current data concerning the incidence and impact of post-surgical retained foreign objects (RFOs), discusses risk factors for RFOs, and outlines risk prevention strategies. The authors suggest that the routinely employed strategy of surgical counts may need to be supplemented by additional safeguards, and that the use of multiple preventive techniques together is likely the most effective approach.

6. **Composite Measures for Predicting Surgical Mortality in the Hospital.**
Dimick JB, Staiger DO, Baser O, Birkmeyer JD.
Health Aff. 2009(Jul/Aug); 28(4):1189–1198.
This article describes the construction and validation of a composite measure for surgery-related hospital mortality. The resulting measure, derived through analysis of Medicare outcomes data from a 3-year period for a set of six surgical procedures, expresses estimated surgical mortality as a function of observed mortality and volume of surgeries performed. The authors found that the composite measure was effective at predicting hospitals' future performance on each of the six procedures, suggesting that such measurements may provide a useful source of information for prospective surgical patients as well as healthcare payers. Four tables are included.

7. **Effects of an Integrated Medicines Management Program on Medication Appropriateness in Hospitalized Patients.**
Burnett KM, Scott MG, Fleming GF, Clark CM, McElnay JC.
Am J Health-Syst Pharm. 2009(May 1); 66(9):854–859.
Ensuring that patients do not receive contraindicated medications is an important component of medication safety. This study examined the impact of a community-and-hospital collaborative medication management program on medication appropriateness among patients at a Northern Ireland hospital. The authors rated medication appropriateness on admission and at discharge for 117 patients randomized to receive either medication management services or standard pharmaceutical care. Results showed that medication appropriateness increased between admission and discharge for patients in both groups, but was significantly greater for patients in the intervention group, suggesting that organized medication management can favorably influence prescribing-related medication safety. Two tables, one figure, and two appendices are included.

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8. **Exploring the Harmful Effects of Health Care.**
Kilo CM, Larson EB.
JAMA. 2009(Jul 1); 302(1):89–91.
This commentary discusses healthcare-related harm and the need for a better understanding of the net impact of healthcare on the health of the populations it serves. Whether the overall effect of healthcare is positive or negative, the authors point out, is difficult to determine. As a foundation for further discussion of this issue, the authors present a taxonomy of healthcare-related harm including direct and indirect harm, along with examples of each type.

9. **Fourth Annual Nursing Leadership Congress: "Driving Patient Safety Through Transformation" Conference Proceedings.**
Pinakiewicz D, Smetzer J, Thompson P, Navarra MB, Lambert M.
J Patient Saf. 2009(Jun); 5(2):109–113.
This article summarizes proceedings of the September 2008 fourth annual Nursing Leadership Congress, which focused on the role of nurse leaders in creating and realizing profound changes to improve patient safety within their organizations and in the healthcare system as a whole. Included in the article are synopses of all plenary presentations and roundtables; the reader is referred to the conference website for full proceedings.

10. **Implementing a Team-Based Daily Goals Sheet in a Non-ICU Setting.**
Holzmueller CG, Timmel J, Kent PS, Schulick RD, Pronovost PJ.
Jt Comm J Qual Patient Saf. 2009(Jul); 35(7):384–388.
This article describes the design and implementation of the Team-Based Daily Goals Sheet, a tool designed to help improve communication and coordination among members of a patient's care team in the medical-surgical inpatient setting. The tool derives from the original ICU-based goals sheet developed by Pronovost et al. and consists of a form listing the day's procedures, treatment goals, and issues or concerns. Preliminary results and possibilities for further application of the tool are discussed. Three figures are included.

11. **Improved Operating Room Teamwork via SAFETY Prep: A Rural Community Hospital's Experience.**
Paige JT, Aaron DL, Yang T, Howell DS, Chauvin SW.
World J Surg. 2009(Jun); 33(6):1181–1187.
This study assessed the impact of structured preoperative briefing on surgical staff's teamwork at a community hospital in rural Alaska. The briefing protocol included verification processes from the Joint Commission's Universal Protocol as well as steps designed to promote team coordination and communication. Evaluation using a pre- and post-intervention questionnaire showed that OR staff rated the quality of preoperative briefing and teamwork more positively following implementation of the protocol (although the sample size was too small to establish statistical significance). Four tables are included.

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12. Improving Patient Safety: Effects of a Safety Program on Performance and Culture in a Department of Radiology.
Donnelly LF, Dickerson JM, Goodfriend MA, Muething SE.
Am J Roentgenol. 2009(Jul); 193(1):165–171.
This study assessed the impact of a multifaceted patient safety program on safety culture and incidence of serious safety events in the radiology department of a pediatric hospital. The program comprised a variety of components including staff training, the use of "safety coaches" to provide leadership and support, operational rounds with senior radiology staff, and regular feedback and rewards for good performance. The authors found that use of the program was associated with improved safety culture as measured by the Agency for Healthcare Research and Quality's safety culture survey, and may have contributed to an observed post-implementation decrease in the frequency of serious safety events. One table and two figures are included.

13. National Healthcare Quality Report 2008.
Rockville, MD: Agency for Healthcare Research and Quality; March 2009. AHRQ Publication No. 09-0001.
Available at: www.ahrq.gov/qual/qrdr08.htm
This annual report from the AHRQ assesses healthcare quality in the US and monitors progress and trends in performance over time with respect to effectiveness, patient safety, timeliness, and patient centeredness. This seventh installment of the report found that overall performance improved slightly versus the previous year, continuing a gradual upward trend. However, the authors note that the extent of improvement varied significantly depending on type and setting of care, and while progress was evident in the development of event reporting and safety measurement systems, overall performance with respect to patient safety declined from the previous year's level. Detailed findings and further information on data sources and methods are available with the online version of the report cited above.

14. Omitted and Unjustified Medications in the Discharge Summary.
Perren A, Previsdomini M, Cerutti B, Soldini D, Donghi D, Marone C.
Qual Saf Health Care. 2009(Jun); 18(3):205–208.
This study sought to determine the frequency and clinical significance of medication discrepancies in the discharge orders of patients at a teaching hospital in Bellinzona, Switzerland. The authors examined discharge summaries for a total of 577 patients over a 3-month period and identified all instances in which an appropriate medication was omitted or an inappropriate medication was prescribed. They found that such errors were common, occurring in almost two-thirds of the discharge summaries examined, and were potentially harmful in a significant number of cases (the study assessed only potential harm and did not examine actual clinical outcomes). Three tables are included.

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15. Refocusing the Lens: Patient Safety in Ambulatory Chronic Disease Care.
Sarkar U, Wachter RM, Schroeder SA, Schillinger D.
Jt Comm J Qual Patient Saf. 2009(Jul); 35(7):377–383.
This article examines patient safety in ambulatory chronic disease care and emphasizes the need for increased research and policy attention to this issue. The authors propose a theoretical framework based on Wagner's model of chronic disease care and present a series of clinical vignettes illustrating its application. Finally, they comment on recent research developments and offer recommendations for further work in this area. One figure is included.

16. Review of Patient Safety for Children and Young People.
London, England: National Patient Safety Agency; 2009.
Available at: http://www.npsa.nhs.uk/nrls/improvingpatientsafety/children-and-young-people/
This report from the National Patient Safety Agency (NPSA) presents a review and analysis of current issues in pediatric and neonatal patient safety in UK healthcare facilities, drawing upon data from a variety of published quantitative studies, the agency's national incident reporting system, and NPSA-commissioned interviews with patients and family members. Also included is a summary of related collaborative initiatives in which the NPSA is participating.

17. Safety in the MR Environment: Ferromagnetic Projectile Objects in the MRI Scanner Room.
Pennsylvania Patient Safety Authority.
Pa Patient Saf Advis. 2009(Jun); 6(2):56–62.
Available at: http://patientsafetyauthority.org/ADVISORIES/AdvisoryLibrary/2009/Jun6(2)/Pages/56.aspx
Serious accidents and injuries can occur when the MRI magnetic field interacts with ferromagnetic objects in its proximity. In this article, the authors review reported incidents involving ferromagnetic objects in the MR environment and discuss screening procedures and other strategies that can reduce the risk of such events. Three tables and three figures are included.

18. Selection of Indicators for Continuous Monitoring of Patient Safety: Recommendations of the Project 'Safety Improvement for Patients in Europe.'
Kristensen S, Mainz J, Bartels P.
Int J Qual Health Care. 2009(Jun); 21(3):169–175.
This article describes the establishment of a set of indicators designed to facilitate organization-level patient safety assessment in European hospitals. The authors discuss the methodological basis for and mechanics of the selection process. The resulting list of indicators is presented in the article. Four tables are included.

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19. **Substantial Reduction of Inappropriate Tablet Splitting with Computerised Decision Support: A Prospective Intervention Study Assessing Potential Benefit and Harm.**
Quinzler R, Schmitt SPW, Pritsch M, Kaltschmidt J, Haefeli WE.
BMC Med Inform Decis Mak. 2009(Jun 12); 9(30).
Available at: http://www.biomedcentral.com/1472-6947/9/30
This study investigated whether a health IT application could help to reduce certain prescribing errors at a university hospital in Heidelberg, Germany. The intervention involved the introduction of decision support software that alerted prescribers whenever a prescription as entered into the system would entail inappropriate splitting of capsules or tablets to achieve the specified dosage. Comparison of pre- and post-intervention data showed that the intervention was associated with a substantial decrease in prescriptions requiring inappropriate splitting of drugs. Two tables are included.

20. **The Role of Nurses in Improving Hospital Quality and Efficiency: Real-World Results.**
Needleman J, Hassmiller S.
Health Aff. 2009(Jul/Aug); 28(4):w625–w633.
This article argues that nurse staffing plays a crucial role in the quality, safety, and efficiency of care that a hospital delivers, and that this connection should be reflected in the design of hospital policies and quality improvement programs. The authors review the growing body of evidence concerning the impact of nurse staffing on patient safety, quality, and cost of care, and discuss programs, such as the Magnet accreditation program and Transforming Care at the Bedside, that have demonstrated the value of involving nurses and frontline staff in the work of performance improvement.

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