



**July (1) 2007**  
Volume 11, Issue 7:1

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**1. A Cluster Randomized Clinical Trial to Improve Prescribing Patterns in Ambulatory Pediatrics.**

Davis R.L., Wright J., Chalmers F., et al.

Public Library of Science Clinical Trials. 2007 (May); e25:0001–0011.

Available at: [http://clinicaltrials.plosjournals.org/archive/1555-5887/2/5/pdf/10.1371\\_journal.pctr.0020025-L.pdf](http://clinicaltrials.plosjournals.org/archive/1555-5887/2/5/pdf/10.1371_journal.pctr.0020025-L.pdf)

*This study investigated whether an intervention involving the use of a computerized clinical decision support system (DSS) could improve prescribing practices for a variety of common pediatric conditions. The DSS used pop-up messages containing evidence-based information in support of or against a given prescription decision that appeared in response to providers' choices during the prescribing process. The study consisted of a cluster randomized controlled trial in which a total of 44 pediatric health care providers at two clinics either received or did not receive the intervention. Results showed improvement in prescribing practices to be significantly greater among providers who received the intervention than in the control group. Several tables and one figure are included.*

**2. A Plan for Achieving Significant Improvement in Patient Safety.**

Johnson K., Maultsby C.C.

J Nurs Care Qual. 2007 (Apr–June); 22(2):164–171.

*This article discusses the development and implementation of a patient safety improvement process at Forsyth Medical Center. Results of an initial survey assessing the organization's patient safety culture led to the development of a multifaceted action plan. The article describes the survey tool and the components of the improvement process, which included patient safety-related policy changes, education and team training for staff, development of patient safety indicators, and technological improvements. Results and plans for future improvements are discussed. Examples of video vignettes used in staff training and a table of survey results are included.*

**3. Cost-Effective Enhancement of Claims Data to Improve Comparisons of Patient Safety.**

Jordan H.S., Pine M., Elixhauser A., et al.

J Patient Saf. 2007 (June); 3(2):82–90.

*This study evaluated the cost-effectiveness of adding clinical data to administrative claims data as a means of improving the validity of the Agency for Healthcare Research and Quality (AHRQ) Patient Safety Indicators (PSIs). The authors argue that although the AHRQ indicators are increasingly used in comparisons of hospitals, the fact that the PSIs are derived exclusively from hospital claims data may call into question their validity in measuring quality of hospital care. Hospital discharge data and clinical data from the Pennsylvania Health Care Cost Containment Council were used to construct multiple risk-adjustment models, which were analyzed for cost-effectiveness. Results showed the addition of a present-on-admission (POA) code and certain numerical laboratory values to be cost-effective means of enhancing administrative claims data. Multiple tables and figures are included.*

- 4. Health Literacy: The Cornerstone of Patient Safety.**  
Rao P.R.  
The ASHA Leader. 2007 (May 8); 12(6):8–9, 20–21.  
Available at: <http://www.asha.org/about/publications/leader-online/archives/2007/070508/f070508a.htm?print=1>  
*This article gives an overview of issues concerning health literacy from the perspective of a speech language pathologist. Items discussed include the prevalence of low health literacy, its associated risks and costs, and steps that practitioners can take to improve patient understanding. Health literacy concerns and suggestions of particular relevance to the fields of audiology and speech-language pathology are touched upon throughout the article. A list of health literacy resources is included.*
- 5. Improving Patient Safety and Communication Through Care Rounds in a Pediatric Oncology Outpatient Clinic.**  
Blough C.A., Walrath J.M.  
J Nurs Care Qual. 2007 (Apr–June); 22(2):159–163.  
*This article discusses the implementation of care rounds at the Outpatient Pediatric Oncology Clinic of Johns Hopkins Hospital. Care rounds were introduced as part of a larger quality improvement program, initiated in 2004 in response to survey results suggesting the need for improved clinical communication to address a variety of issues. Care rounds are conducted daily and provide a framework for structured communication of patient information among members of the care team. Details of the care rounds procedure, results of a post-implementation study, and possibilities for future improvements are discussed.*
- 6. Improving Safety With Barcode-Enabled Medication Administration.**  
Perry A., Englebright J.  
Pat Saf & Qual Healthcare. 2007 (May/June); 4(3):26–30.  
Available at: <http://www.psqh.com/mayjun07/improvingsafety.html>  
*This article discusses the Hospital Corporation of America (HCA) electronic Medication Administration Record (eMAR) & Bar Coding system. Launched in 2002, the system has since been implemented in all HCA-affiliated facilities. The authors provide an overview of the eMAR & Bar Coding system, including the rationale for its use, project structure, pre-implementation preparation and user training, and lessons learned. The integration of computerized physician order entry (CPOE) with eMAR & Bar Coding is discussed as a possible future enhancement of the system.*

7. **Making the Most of Data for Patient Safety: How Dose-Tracking Software, a Customized Drug Library, and Expert, In-Depth Analysis Provide Safer, Data-Driven Dosing.**

Raso R., Velletri J., DiCrescento S.

Pat Saf & Qual Healthcare. 2007 (May/June); 4(3):32–35.

Available at: <http://www.psqh.com/mayjun07/data.html>

*This article reports on a hospital-wide upgrade of infusion pump technology undertaken at Lutheran Medical Center in Brooklyn, NY. In an effort to address the recognized risk of error associated with manual programming of infusion pumps, the hospital implemented “smart pumps” with dose-limiting and dose-tracking software, and developed a customized infusion pump drug library to determine facility-appropriate dosing parameters and clinical protocols for overrides of the established limits. Results after three months’ usage of the system are discussed; in addition, a significant reduction in infusion-related medication events is reported for the first year following implementation versus the previous year. One table and one figure depicting dose alert and override data are included.*

8. **Medication Errors in Inpatient Pharmacy Operations and Technologies for Improvement.**

Kuiper S.A., McCreadie S.R., Mitchell J.F., Stevenson J.G.

Am J Health-Syst Pharm. 2007 (May 1); 64(9):955–959.

*This commentary addresses the topic of medication errors in the inpatient pharmacy setting. The complexity of processes performed in this area may contribute to its being an error-prone part of the medication-use system: according to several studies cited, drug preparation and dispensation—two major components of inpatient pharmacy operations—are involved in a significant percentage of medication errors. Common types of errors, possible technological solutions, and the potential benefits and pitfalls of these solutions are discussed. The authors stress the importance of drawing upon theories such as human factors engineering and normal accident theory in considering technological solutions to the complex processes involved in inpatient pharmacy operations.*

**9. Pay for Performance, Quality of Care, and Outcomes in Acute Myocardial Infarction.**

Glickman S.W., Ou F-S., DeLong E.R., et al.

JAMA. 2007 (June 6); 297(21):2373–2380.

*This study investigated the influence of pay for performance on quality of care and patient outcomes for acute myocardial infarction among hospitals participating in the Centers for Medicare & Medicaid Services (CMS) pilot project launched in 2003. Both the effect on processes of care subject to financial incentives under pay for performance and any potential unintended effect on care processes not subject to incentives were examined. Researchers analyzed data collected from hospitals participating in the CRUSADE initiative to compare trends in care processes and patient outcomes between hospitals participating and not participating in the CMS project. Results showed that among the study group, participation in pay for performance was not significantly associated with improvement in quality of care or outcomes for myocardial infarction, nor was it associated with detriment to processes of care not subject to incentives. The authors conclude that further research is needed to determine how pay for performance may best be used as a tool for quality improvement.*

**10. Red Rules: An Error-Reduction Strategy in the Culture of Safety.**

Scharf W.R.

Focus on Patient Safety. 2007; 10(1):1–2.

Available at:

<http://npsf.org/paf/npsfp/fo/pdf/Focus%20Volume%2010%20%20Issue%201%20--%20Final.pdf>

*This article discusses the use of Red Rules as a technique for reducing error and fostering a culture of safety. Red Rules, first used in the nuclear power industry, employs a hierarchical classification of rules as part of a strategy for promoting adherence to institutional or industry-wide standards. In this system, Red Rules are standards that may not be deviated from except under extraordinary circumstances, such as the requirement that proper attire be worn in the operating room. In contrast, Blue Rules represent procedural guidelines that help an organization run smoothly, but that may be disregarded in certain situations without negative consequences. The implementation of four Red Rules at the author's institution, OSF St. Francis Medical Center in Peoria, IL, is presented as an example of their successful application.*

**11. Rosiglitazone and Cardiotoxicity—Weighing the Evidence.**

Nathan D.M.

N Engl J Med. 2007 (July 5); 357(1):64–66.

*This editorial comments on the results of an unplanned interim analysis from the Rosiglitazone Evaluated for Cardiac Outcomes and Regulation of Glycaemia in Diabetes (RECORD) clinical trial, as reported by Home, et al., in an article appearing in the same issue of New England Journal of Medicine (also included in this issue of Current Awareness). The recent meta-analysis by Nissen and Wolski has prompted much debate and led to significant concern over the possible association of rosiglitazone treatment with increased risk of myocardial infarction. Nathan discusses the limitations of the RECORD interim analysis; he argues that the results of this analysis, although inconclusive, do not provide countermending evidence for the safety of rosiglitazone treatment.*

Note: Results from the RECORD interim analysis and three accompanying editorials appear in the July 5, 2007 issue of *New England Journal of Medicine*; these four items are included in this issue of *Current Awareness* (items 11-13, 18).

**12. Rosiglitazone—Continued Uncertainty About Safety.**

Drazen J.M., Morrissey S., Curfman G.D.

N Engl J Med. 2007 (July 5); 357(1):63–64.

*This editorial remarks on the results of the interim analysis from the Rosiglitazone Evaluated for Cardiac Outcomes and Regulation of Glycaemia in Diabetes (RECORD) clinical trial published in the same issue of New England Journal of Medicine. The author comments on the inconclusiveness of the interim analysis data and the implications of the resulting continued uncertainty about the safety of rosiglitazone.*

Note: Results from the RECORD interim analysis and three accompanying editorials appear in the July 5, 2007 issue of *New England Journal of Medicine*; these four items are included in this issue of *Current Awareness* (items 11-13, 18).

- 13. Rosiglitazone Evaluated for Cardiovascular Outcomes—An Interim Analysis.**  
Home P.D., Pocock S.J., Beck-Nielsen H., et al.  
N Engl J Med. 2007 (July 5); 357(1):28–38.  
*This article reports results of an unscheduled interim analysis from the Rosiglitazone Evaluated for Cardiac Outcomes and Regulation of Glycaemia in Diabetes (RECORD) clinical trial. The RECORD study is an ongoing large-scale, multicenter, randomized clinical trial investigating the effects of rosiglitazone on cardiovascular outcomes and glycemic control when used as part of a multi-drug treatment regimen for type 2 diabetes. A recent meta-analysis by Nissen and Wolski prompted concern about a possible association between rosiglitazone treatment and increased risk of myocardial infarction and cardiovascular mortality. Results of the interim analysis showed no statistically significant association between rosiglitazone treatment and increased risk of either myocardial infarction or death due to cardiovascular causes or any cause. Rosiglitazone was found to be associated with an increased risk of heart failure—a result which, the authors note, is consistent with previous findings concerning this class of drugs. Results in several areas were found to be inconclusive; constraints of the interim analysis and other factors contributing to this outcome are discussed. Multiple tables and figures are included.*
- 14. State Nursing Shortages and Patient Satisfaction: More RNs—Better Patient Experiences.**  
Clark P.A., Leddy K., Drain M., Kaldenberg D.  
J Nurs Care Qual. 2007 (Apr-June); 22(2):119–127.  
*This study examined the relationship between state nurse supply and patient satisfaction with hospital care. The detrimental effect of nurse shortages on quality of care has been well documented within individual units and facilities, but few studies have investigated whether the effects of nurse staffing rates are also perceived on a regional or statewide level. Data from a post-discharge survey of over 800,000 patients from 733 facilities in 25 states were analyzed correlatively with state nursing employment data. A significant positive correlation was found between a state's supply of working nurses per patient and patients' satisfaction with nursing care and with their overall hospital experience. The authors discuss the implications of this result for health policy and for hospitals, particularly in light of the potential impact on hospital performance ratings. Two tables and one figure are included.*

**15. Stepping Out of the Classroom: Simulate to Educate.**

Logan Z., Conner E.

Pat Saf & Qual Healthcare. 2007 (May/June); 4(3):46–49.

Available at: <http://www.psqh.com/mayjun07/simulate.html>

*This article discusses the use of simulation-based training in the education of healthcare professionals, and describes a simulation training study conducted at Piedmont Hospital in Atlanta, GA. In this study, new nurse graduates and more experienced nurses new to the hospital participated in high-fidelity simulation training as a supplement to traditional lecture-based training. Results of pre- and post-tests showed a significant increase in nurses' understanding and retention of clinical information following completion of the simulation training. The authors propose that simulation training, in particular the use of hands-on, high-fidelity simulation techniques, can be a valuable tool for improving patient safety. The authors are clinical education specialists for Medical Simulation Corporation, which produces the simulation system used at Piedmont Hospital and described in the article.*

**16. Strategic Work-Arounds to Accommodate New Technology: The Case of Smart Pumps in Hospital Care.**

McAlearney A.S., Vrontos J., Schneider P.J., Curran C.R., Czerwinski B.S., Pedersen C.A.

J Patient Saf. 2007 (June); 3(2):75–81.

*This study explored nurses' perceptions of computerized IV infusion pumps, or smart pumps, and their experiences using smart pumps in clinical practice. Researchers conducted a series of focus groups with nurses from the Ohio State University Health System (OSUHS), where smart pump technology has been in use since 2002. Themes that emerged from the discussion are discussed, including nurses' appreciation of the pumps' ease of use and decision-support capabilities, challenges in using the pumps, and work-arounds devised to address common challenges. The authors conclude that overall nurses are strongly positive regarding the use of smart pumps. They note, however, that the frequent use of work-arounds suggested by this study may be cause for concern, in that use of the pumps in unanticipated ways may represent a new source of potential error.*

**17. Teaching Health Literacy: Building a Foundation for Safer Health Care.**

Harper W.

Focus on Patient Safety. 2007; 10(1):5–6.

Available at:

<http://npsf.org/paf/npsfp/fo/pdf/Focus%20Volume%2010%20%20Issue%201%20--%20Final.pdf>

*This article offers advice on the development of health literacy curricula for healthcare providers. Both the Institute of Medicine (IOM) and the Joint Commission have recommended that health literacy training be included as part of required education for healthcare professionals. The author argues that the goals of health literacy training can best be accomplished by teaching core communication skills to be used in all provider-patient interactions; the AMA-recommended six tools for communicating health information are outlined. The University of Chicago Pritzker School of Medicine's clinical skills course, which includes extensive training in communication techniques, is described as an example of the incorporation of health literacy education in a medical school curriculum.*

**18. The Record on Rosiglitazone and the Risk of Myocardial Infarction.**

Psaty B.M., Furberg C.D.

N Engl J Med. 2007 (July 5); 357(1):67–69.

*This editorial gives an overview of the regulatory history and ongoing investigation concerning the safety of rosiglitazone, in light of the Rosiglitazone Evaluated for Cardiac Outcomes and Regulation of Glycaemia in Diabetes (RECORD) interim analysis published in the same issue of New England Journal of Medicine. The author comments on the RECORD study's strengths and weaknesses and discusses implications of its results when considered in combination with other studies. The author criticizes several aspects of the study design and conduct of RECORD and other manufacturer-sponsored trials, and argues that the developments in the case of rosiglitazone indicate the need for increased FDA authority in postmarket drug evaluation.*

Note: Results from the RECORD interim analysis and three accompanying editorials appear in the July 5, 2007 issue of *New England Journal of Medicine*; these four items are included in this issue of *Current Awareness* (11-13, 18).

**19. What Crew Resource Management Training Will Not Do for Patient Safety: Unless...**

Salas E., Wilson K.A., Murphy C.E., King H., Baker D.  
J Patient Saf. 2007 (June); 3(2):62–64.

*This commentary offers recommendations for the successful application of Crew Resource Management (CRM) training in the healthcare setting. The authors caution that although the adaptation of CRM to healthcare has great potential, certain steps must be taken to ensure its appropriate use in this context. The authors describe briefly the various conditions that, they feel, are prerequisites for the success of a CRM program, including: physician support; adoption of teamwork-promoting attitudes as part of the organizational ethos; use of evidence-based methods and systematic design; structured evaluation and reward and reinforcement for positive results; organizational readiness; and inclusion of patients as part of the team.*

**20. “What Did the Doctor Say?:” Improving Health Literacy to Protect Patient Safety.**

No Author.

Joint Commission. 2007:64 pages.

Available at:

[http://healthpolicy.missouri.edu/Health%20Literacy/improving\\_health\\_literacy.pdf](http://healthpolicy.missouri.edu/Health%20Literacy/improving_health_literacy.pdf)

*This white paper, a product of the Joint Commission’s health literacy Roundtable discussions, represents a call to action concerning the issue of health literacy. The focus of the report is on the use of better communication as a means of addressing health literacy issues and improving patient safety. Three sections, based on the Roundtable’s three recommendations, make up the report: 1. Make Effective Communications an Organizational Priority to Protect the Safety of Patients; 2. Address Patients’ Communication Needs Across the Continuum of Care; 3. Pursue Policy Changes that Promote Improved Practitioner-Patient Communications. Multiple tables are included, including several showing selected National Patient Safety Goals, relevant health literacy and communication issues, and suggested solutions.*

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<http://www.npsf.org/rc/pubs/ca/>

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