

## IN THIS ISSUE

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USP Patient Safety CAPSLink™

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This message has been sent to you as a service of the U.S. Pharmacopeia, Center for the Advancement of Patient Safety (CAPS). USP is a non-government organization that promotes the public health by establishing state-of-the-art standards to ensure the quality of medicines and other health care technologies. CAPS is part of one of USP's core public health programs - Patient Safety. USP's new Center for the Advancement of Patient Safety was created to encourage medication error reporting, conduct data analysis and research, develop educational programs, and propose standards, recommendations, and guidelines that ultimately improve the safety and quality of patient care.

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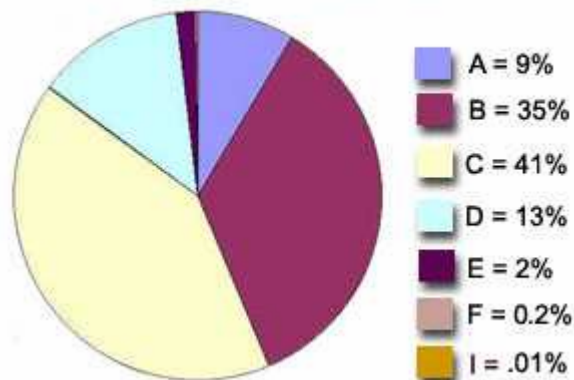
#### 1) Wrong Patient Errors

“Wrong patient” errors are a potentially serious type of error meriting special attention. Medications that are prescribed, dispensed, or administered to the wrong patient can occur for

many reasons including an incorrect imprint of the patient's name on the order, incorrect selection from a computer screen, or an incomplete identification of the patient prior to drug administration. One of JCAHO's six new patient-safety goals (becoming effective 1/1/03) is improving the accuracy of patient identification.

Data collected between 1999-2001 through the MedMARx<sup>SM</sup> program included 8,996 *wrong patient* errors; 56% of these actually reach the patient (Categories C-I) and 2% cause harm (Categories E-I). However, the data also show that 9% of the time, *wrong patient* type errors are recognized before they result in an actual error and 35% of the time they are intercepted before reaching the patient. Facilities should examine their patient-identification procedures and consider implementing certain technology (e.g., bar coding) that may reduce the occurrence of these errors.

Wrong Patient by Error Categories; N = 8,996



## 2) House Ways and Means Committee Approves Voluntary Medical Error Reporting Bill

The House Ways and Means Committee recently approved a bill (HR 4889) that would establish "confidential, voluntary data banks" to store and study medical error data and help error-prevention efforts. The bill calls for doctors, nurses and other health professionals to voluntarily report medical errors to data banks called patient safety organizations. The organizations would analyze the reports and suggest ways to prevent future errors. All reports would remain confidential and could not be used in malpractice lawsuits. The confidentiality stipulations were included to address serious concerns that hospitals and other caregivers would not use the data bank due to fears of lawsuits against those who made errors. However, the bill also would not stop individuals from filing legal "discovery" actions under current law "to get information directly from hospitals and other caregivers." Testimonies from Lucian Leape, M.D., Professor of Health Policy at Harvard School of Public Health and Kenneth T. Segel, Director, Pittsburgh Regional Healthcare Initiative respectively remarked how USP's two medication-error reporting programs (the **Medication Error Reporting Program**, operated in conjunction with the Institute for Safe Medication Practices, and **MedMarx<sup>SM</sup>**) have helped advance patient safety.

[http://www.kaisernetwork.org/daily\\_reports/rep\\_index.cfm?DR\\_ID=13553](http://www.kaisernetwork.org/daily_reports/rep_index.cfm?DR_ID=13553)

### 3) Study Finds Many Drug Errors Occur in Hospitals

A recent study by researchers at Auburn University shows hospitals make an average of 40 potentially harmful medication errors each day. The study, in the September 9 issue of the journal *Archives of Internal Medicine*, tracked drug orders in 36 hospitals and nursing homes in Colorado and Georgia. Researchers found that medication errors occurred in approximately 20% of the doses administered in a typical 300-bed hospital. The most common drug administration errors made by nurses and other hospital staff members included giving patients the medication at the wrong time or not giving the drug at all. The study did not address death or injury data. [http://www.kaisernetwork.org/daily\\_reports/rep\\_index.cfm?DR\\_ID=13344](http://www.kaisernetwork.org/daily_reports/rep_index.cfm?DR_ID=13344)

### 4) Drugs to be Labeled for Children's Dosages

Drugs administered to children are now being tested on the age groups that use them, according to a new federal directive. Appropriate dosage information also is to begin appearing on drug labels to take some of the previous guesswork out of prescribing drugs to children. According to the FDA, other conditions including depression, epilepsy, severe pain, gastrointestinal problems, allergic reactions, and high blood pressure are areas where more pediatric drug information is still needed. The Agency also noted that safety and efficacy information is especially sparse on many drugs used in children under the age of 2. <http://www.washingtonpost.com/wp-dyn/articles/A51758-2002Sep7.html>

### 5) Recipients of Patient Safety Awards are Announced

The National Quality Forum (NQF) and the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) announced the first recipients of the annual John M. Eisenberg Patient Safety Awards, which will be presented at the NQF's annual meeting in Washington on October 1. Julianne Morath, R.N., M.S., will receive the Individual Lifetime Achievement Award for her efforts to introduce a culture of patient safety at Children's Hospitals and Clinics in Minneapolis; Concord Hospital in New Hampshire and the Veterans Health Administration National Center for Patient Safety in Ann Arbor, MI, are co-winners of the System Innovation Award; Veterans Affairs Medical Center in Lexington, KY, will receive the Advocacy Award; and David W. Bates, M.D., M.Sc., Brigham and Women's Hospital in Boston will receive the Research Award for his cutting-edge research in using information technology to measure and improve medication safety. Dr. Bates is a member of USP's Safe Medication use Expert Committee and Chair of its newly formed project team on CPOE. <http://www.jcaho.org/news+room/latest+news+release/eisenberg+award+winners.htm>

### 6) Online Pharmacies Not Without Risk

A study conducted in Cleveland, Ohio shows that online pharmacies can be as dangerous as the diseases they are supposed to treat. The study, which appears in a recent issue of *the American Journal of Medicine*, discovered 59 Web sites over a two-week period last October selling the

antibiotic ciprofloxacin without a prescription, with 23 of the sites created in the days following the first reported case of anthrax in Florida. According to researchers from case Western Reserve University, forty-nine of the sites simply asked the customer to supply a brief medical history. The remaining sites didn't even require that.

[http://www.cleveland.com/news/plaindealer/index.ssf?/xml/story.ssf/html\\_standard.xsl?/base/news/1031909456250460.xml](http://www.cleveland.com/news/plaindealer/index.ssf?/xml/story.ssf/html_standard.xsl?/base/news/1031909456250460.xml)

#### 7) JCAHO To Provide Information on Future Accreditation Processes

In the October issue of *Joint Commission Perspectives*, goals of JCAHO's future accreditation process (beginning January 2004) will be outlined. Articles will provide details on each of the initiatives including self-assessment of standards compliance, analysis of organization systems, and a new on-site survey process. <http://www.jcrinc.com/periodicals>

#### 8) Stray Marks on Medication Orders Create Errors

According to the Institute for Safe Medication Practices in its most *recent ISMP Medication Safety Alert*, checkmarks and other extraneous notations on handwritten medication orders can be misread by pharmacy personnel, leading to the administration of incorrect doses and drugs. Errors related to order transcription can be reduced with computerized prescriber order entry systems but until such systems are in place, ISMP warned nurses and unit secretaries to recognize that initials, letters, checkmarks, and other incidental marks used during transcription of handwritten orders can obscure or change how a medication order appears. ISMP also recommends that any notations to signal order transcription has been completed or verified should be made at the bottom of the order form to avoid any misinterpretation.

<http://www.ismp.org/MSAarticles/bad.htm>

#### 9) More Documents Needed for JCAHO Review of Hospitals

Surveyors from the Joint Commission on Accreditation of Healthcare Organizations want to see more documents, including the "description of an orientation process that emphasizes specific job-related aspects of patient safety," during the document review session at a hospital, according to recently updated guidelines from the accrediting group. Other new documents that will be examined include the facilities protocol for involving patients and families in measures to promote safe health care delivery and the addition of the patient's role in safety in the facilities patient rights and responsibilities handbook.

<http://www.jcaho.org/accredited+organizations/hospitals/survey+process/preparing+for+survey/guidelines+for+document+review.htm>

#### 10) The Medical Error Ripple Effect

Although much of the medical error research has been hospital-based, a recent study examining errors that occur within physician offices illustrates the frequent occurrence of errors in other areas of health care delivery. Of the 344 errors reported by 42 primary care physicians between May 9 and Sept. 26, 2000, 82.6% were considered system malfunctions. Lead researcher, Dr. Dovey, said many errors appear trivial on the surface, but some had serious consequences (e.g., one death was linked to a mishandled message). [http://www.ama-assn.org/sci-pubs/amnews/pick\\_02/pr110923.htm](http://www.ama-assn.org/sci-pubs/amnews/pick_02/pr110923.htm)

#### 11) Integration of Different IT Strategies Reduces Errors by 26%

A recent study in the *Journal of the American Medical Informatics Association* (JAMIA) shows that clinical information systems are cost-effective means of reducing medical errors, especially in conjunction with other strategies such as CPOE and bar coding. Researchers from Purdue and Indiana University studied the impact on medical error rates of five different IT strategies including computer-based dosing information at point of care, CPOE, an automated pharmacy dispensing system, a bar-coding system, and an integrated system encompassing all strategies. An integrated medication delivery system reduced medical errors and resulting adverse drug events by as much as 26%-more than any other strategy on its own. Moreover, researchers estimate that the reduction in medical errors resulting from an integrated system translates into a decline in patient hospital stays of more than 1,200 days per year and related annual cost savings of \$1.4 million. By comparison, the study shows that CPOE alone would reduce medical errors by only about 4%, reduce hospital stays by about 600 days, and cut costs related to medical errors by as much as \$700,000 annually. <http://www.jamia.org/cgi/content/abstract/9/5/479>

In another study, CPOE and electronic medication administration tracking systems were found to improve safety and timeliness of care. Use of both systems eliminated all transcription errors in an inpatient nursing unit, and CPOE alone reduced the time for several clinical processes. Researchers documented a 64% reduction in average medication turn-around time, from five-and-a-half hours to just under two hours. CPOE and electronic medication tracking combined also eliminated all physician and nursing transcription errors. <http://www.jamia.org/cgi/content/abstract/9/5/529>  
<http://www.jamia.org/cgi/content/abstract/9/5/540>

#### 12) The Medical Librarian's Role in Patient Safety

Medical librarians, with their expertise in acquiring and evaluating data, can provide the knowledge-based resources needed by the patient safety team. Medical librarians are trained to ensure that decision-makers (scientists, physicians, health consumers, administrators) have accurate and timely information. The librarian can help manage information overload and separate good quality information from bad. Medical librarians have: (1) Formal knowledge of information resources and how to access them; (2) The ability to ensure that information is relevant and complete by knowing strategies to ascertain that a search is both efficient and thorough; (3) The skill to weigh conflicting information and reconcile differences; (4) Training in critically reviewing published research and grading the levels of evidence; (5) The

professional habit of making decisions based on evidence rather than opinion; (6) The ability to discriminate between types of information sources in terms of their currency, format, authority, relevance and availability; and (7) A knowledge of copyright and intellectual property issues, especially with materials retrieved electronically.

Including the medical librarian on the facilities patient safety or quality assurance committee is one important way they can contribute to the organization's patient safety initiative.

[http://www.healthleaders.com/news/feature1.php?contentid=38058&CE\\_Session=fa2cbc75b7bbd9cd01fe6a051a8ace0d](http://www.healthleaders.com/news/feature1.php?contentid=38058&CE_Session=fa2cbc75b7bbd9cd01fe6a051a8ace0d)



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USP operates two complementary error reporting programs; the **Medication Errors Reporting Program** which operates in cooperation with the Institute for Safe Medication Practices and **MedMARx<sup>SM</sup>**. MedMARx is an Internet-accessible, anonymous medication error reporting program and quality improvement tool used to track and trend medication errors. For more information, visit [www.usp.org](http://www.usp.org)

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