



## IN THIS ISSUE

### USP Patient Safety CAPSLink™

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. Genetic Differences May Cause Varied Reactions to Medicines

A recently published study points out that when treating minority patients, physicians and other health care providers must be mindful of genetic differences that lead to uncommon responses or unexpected side effects from medicines. Initially, what appears as a medication adverse event may actually be the result of a genetic response. Appropriate dosage adjustments and/or a change in therapy may be necessary to ameliorate the side effects. Practitioners should stay abreast of developments in pharmacogenomics, the growing field that studies the genetic basis of differences in patients' response to drugs to avoid classifying genetic responses as suspect adverse events. [http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=AAHP\\_HEA.story&STORY=/www/story/09-25-2002/0001806487&EDATE=WED+Sep+25+2002,+09:30+AM](http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=AAHP_HEA.story&STORY=/www/story/09-25-2002/0001806487&EDATE=WED+Sep+25+2002,+09:30+AM)

## 2. Should Questionable Clinical Decisions Be Considered Preventable Medical Errors?

Authors of a recent article in *Annals of Internal Medicine* presented their perspectives on the difficulties associated with determining whether and when a preventable medical error has occurred. The authors detailed the case of a patient in whom multiple complications developed from the diagnostic and therapeutic procedures that were performed during her hospitalization. With that case as an example, the authors explained that there are problems in routinely undertaking a root-cause analysis as a patient safety strategy when the investigation is unlikely to reveal remediable errors or suggest better systems of care that will prevent errors. <http://www.annals.org/issues/v137n5/abs/200209030-00008.html>

## 3. Verbal Orders Introduce Error Risks

Verbal orders carry the risk of introducing an error from many sources and, therefore, should be minimally used. Verbal orders can be misunderstood, misinterpreted, or miswritten. Beginning in 2003, JCAHO will examine an organization's process for taking verbal orders as part of its recommendation to improve the effectiveness of communications among caregivers. The Medmarx database has reports of nearly 4,000 medication errors involving verbal orders. The following is a case example from Medmarx of a verbal order gone awry:

A verbal order for digoxin 0.125 mg IV Push was transcribed as digoxin 1.25 mg IV Push. The higher dose of the medication was given to the patient who subsequently developed bradycardia which resulted in prolonged hospitalization. The error was discovered the following day upon review of the medication administration record.

Medmarx can help track problems with verbal orders. The error description field allows the reporter to document the context of the error. The **Cause of Error** pick list allows the recorder to select "Verbal Order" as a cause. Healthcare systems are encouraged to investigate ways of reducing verbal orders. The National Coordinating Council for Medication Error Reporting and Prevention has developed recommendations on verbal orders. [www.nccmerp.org](http://www.nccmerp.org)

#### 4. JCAHO Open to Alternatives to its Patient Safety Goals

Organizations that want to propose alternative approaches to the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) recommendations associated with the 2003 National Patient Safety Goals (NPSG) can do so by submitting the "Request for Review of an Alternative Approach to a NPSG Recommendation" form. The form is available on the Joint Commission's Web site, and can be submitted electronically or by fax or mail. A form should be submitted for each alternative, and it must be submitted by the accredited organization or health care system. The form should be submitted to JCAHO no less than 60 days before a scheduled survey.

[http://www.jcaho.org/accredited+organizations/patient+safety/npsg/npsg\\_alt.htm](http://www.jcaho.org/accredited+organizations/patient+safety/npsg/npsg_alt.htm)

[http://www.jcaho.org/About+Us/News+Letters/JCAHOnline/JO\\_9\\_02.htm#1](http://www.jcaho.org/About+Us/News+Letters/JCAHOnline/JO_9_02.htm#1)

#### 5. Survey Released on Medical Errors

A study in the Archives of Internal Medicine says most physicians believe that reducing medical errors should be a national priority, but are much less likely than the public to believe quality of care is a problem. The study also found that nearly all physicians believe fear of medical malpractice is a barrier to reporting errors. The study was conducted with a mail survey of 1,000 Colorado physicians and 1,000 other physicians across the United States, as well as a telephone survey of 500 Colorado households. Nearly all physicians believe fear of medical malpractice is a barrier to reporting of errors, and that greater legal safeguards are needed for reporting systems to be effective. <http://www.healthleaders.com/news/newspage1.php?contentid=39362>

#### 6. Five Simple Questions Patients Should Ask

Today's medications are more powerful and complex than ever before. Health-system pharmacists should remind hospital patients to ask their caregivers five simple questions to help avoid drug interactions or other medication problems.

<http://www.ashp.com/public/news/releases/ShowRelease.cfm?id=3143>

#### 7. ISMP Alerts Problems with Ratios, Percentages

The current issue of *ISMP Medication Safety Alert* explains how easy it is for health care providers to mistakenly use 1:1,000 (1mg/mL) epinephrine injection instead of the more dilute 1:10,000 (0.1mg/mL) formulation. Studies have shown these expressions are error-prone because many practitioners are not knowledgeable about concentrations expressed as a ratio or percentage. More alarming is the fact that these ratio or percentage expressions are prevalent with drugs used for resuscitation (e.g., calcium, epiheprine, lidocaine, magnesium sulfate, neostigmine, sodium bicarbonate). <http://www.ismp.org/MSAarticles/pay.htm>

## 8. Shortage of Pharmacists May Have Led to Patient's Death

State health department investigators stated that the death of a six-day old infant last February may be, in part, attributed to a shortage of staff pharmacists at a New York hospital.

<http://www.ashp.org/public/news/breaking/ShowArticle.cfm?id=3144>

## 9. Shortage of Nurses May Lead to Increased Deaths

The Journal of the American Medical Association published a study that suggests surgery patients had a greater chance of dying after procedures in hospitals where nurses have heavier patient loads. The study's author says as many as 20,000 deaths each year could be linked to staffing levels. <http://www.healthleaders.com/news/newspage1.php?contentid=39229>

## 10. Health Officials Find Florida Hospital Infection Control Lacking

Numerous infection-control problems were found at a Florida medical center during a recent inspection by state health officials. It was reported that infections had killed or injured more than 100 patients following open-heart surgery at the hospital. Inspectors found that the hospital improperly stored surgical instruments, some stretchers and intravenous pumps were dirty; and the hospital failed to treat patients with post-operative staphylococcus infections.

<http://www.healthleaders.com/news/newspage1.php?contentid=38566>

## 11. Quality Forum Approves Hospital-Care Standards

The National Quality Forum (NQF) has approved the first component of the initial set of national performance measures for hospital care. Approval by NQF means that the measures have the legal status of “voluntary consensus standards” and thus can be readily adopted for use by Medicare and other health care programs funded by the federal government.

<http://www.qualityforum.org/txhospGrp1publicweb.pdf>

## 12. Six Sigma Case Study of Medication Safety

The online series on quality features a two-part case study on a favorite topic of pharmacy managers: medication safety. Authors Chip Caldwell, Karen Miller, and Charleston Area Medical Center pharmacy director Jeff Hess outline the use of Six Sigma in this initial article on a medication safety project at the West Virginia facility.

<http://www.healthleaders.com/news/feature1.php?contentid=39102>

## 13. Upcoming Educational Programs

October 30 (Chicago Marriott O'Hare): The American Medical Association and AHRQ are sponsoring the Clinical Quality Improvement Forum. This 1-day forum will allow physicians and others to discuss the issues surrounding the impact of health information technology and electronic medical systems on performance measurement, quality enhancement, and practice management. <http://www.ama-assn.org/ama/pub/category/3700.html>

Nov 21-Nov 22 (Palm Beach, FL): Medical Executive Committee Institute: The essential training program for all medical staff leaders. (800) 801-6661 <http://www.greeley.com>

Dec 7-Dec 8 (Las Vegas, NV): Institute for Quality Improvement (IQI) National Quality Forum for Ambulatory Health Care. (847) 853-6060 <http://www.aaahciqi.org>

Dec 8-Dec 11 (Orlando, Fla.): Institute for Healthcare Improvement (IHI) National Forum on Quality Improvement. (888) 320-6937 <http://www.ihl.org>

Dec 8-12 (Atlanta, GA) ASHP Midyear Clinical Meeting. [www.ashp.org](http://www.ashp.org)

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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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