# **Medication Safety Alerts**

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This column draws on US and Canadian experience and includes, with permission, material from the *ISMP Medication Safety Alert!*, a biweekly bulletin published by the Institute for Safe Medication Practices (ISMP), Huntingdon Valley, Pennsylvania.

### HOSPITAL MEDICATION SAFETY SELF-ASSESSMENT: A TOOL TO REDUCE MEDICATION ERRORS

Since the release of the Institute of Medicine report *To Err is Human: Building a Safer Health System*,<sup>1</sup> in December 1999, many health care institutions and professional organizations in the United States have taken steps to make patient safety a high priority. Hospitals have created patient safety committees, developed standards and indicators, and set goals and objectives related to reducing health care and medication errors. However, despite an overwhelming amount of available information, many hospitals and practitioners are uncertain exactly how to start and how to measure progress.

Many keen health care providers are looking for effective tools to help implement patient safety strategies and to attain quality improvement goals. Recently, the Regional Medication Safety Program for Hospitals (RMSPH) in southeastern Pennsylvania attracted 65 regional hospitals to participate in its innovative program. The unique aspect of this program is the establishment of 16 "action goals" and the availability of a set of tools (the MEDICATION SAFETY SOLUTIONS KIT) that the participating hospitals can use to meet those goals. The action goals and the tools were jointly developed and are being coordinated by the Institute for Safe Medication Practices (US), the Emergency Care Research Institute (ECRI), and the Health Care Improvement Foundation of the Delaware Valley Healthcare Council.

The following are examples of the action goals to reduce medication errors:

• Promote greater use of clinical pharmacists in high-risk areas.

- Establish mechanisms to ensure availability of critical medication information to all members of the patient's care team.
- Eliminate dangerous abbreviations and dose designations.
- Implement safety checklists for high-alert medications.
- Implement safety checklists for infusion pumps.

The MEDICATION SAFETY SOLUTIONS KIT contains a videotape on error reporting, materials to train hospital staff in error prevention, posters, and a 22-section binder with supporting information on how to meet the action goals.<sup>2</sup> This kit is available through ECRI. Order forms can be obtained by contacting ISMP (ismpinfo@ismp.org).

Also available in the United States has been a Medication Safety Self-Assessment tool, which was developed and published by ISMP. The Institute for Safe Medication Practices Canada (ISMP Canada) has developed a Canadian version of the ISMP (US) Medication Safety Self-Assessment. This comprehensive tool can help hospitals to assess the safety of medication practices in their facilities and to identify opportunities for improvement. An essential first step in building a safer medication-use system is honest self-assessment to identify processes and organizational infrastructures that place patients at risk. The characteristics included in the safety self-assessment represent medication-system improvements that have been proven through research or demonstrated in practice to reduce medication errors. The characteristics are also derived from recommendations made during on-site consultations to hospitals, as conducted by ISMP (US).

The Hospital Medication Safety Self-Assessment consists of the 10 major elements that most influence

safe medication use. Each major element is defined by one or more core distinguishing characteristics of a safe medication system. Under each of the core distinguishing characteristics are the representative self-assessment characteristics, to allow evaluation of success in achieving the core distinguishing characteristics.

Here are some examples of the major elements and their core distinguishing characteristics.

#### **Element II. Drug Information**

*Core distinguishing characteristic:* Essential drug information is readily available in useful form and considered when ordering, dispensing, and administering medication.

*Representative self-assessment characteristic:* Current protocols, guidelines, dosing scales, and/or checklists for high-alert drugs (e.g., chemotherapy, anticoagulants, opiates, insulin, electrolyte replenishment with potassium, magnesium, sodium, and phosphate) are readily accessible to physicians, pharmacists, and nurses and are used when indicated.

## Element III. Communication of Drug Orders and Other Drug Information

*Core distinguishing characteristic:* Methods of communicating drug orders and other drug information are standardized and automated to minimize the risk of error.

*Representative self-assessment characteristic:* Medication administration records are taken to the bedside for reference during drug administration.

### Element V. Drug Standardization, Storage, and Distribution

*Core distinguishing characteristic:* IV solutions, drug concentrations, doses, and administration times are standardized whenever possible.

The Canadian version of the Medication Safety Self-Assessment tool is being used by 36 Ontario hospitals as part of a research project funded by the Ontario Ministry of Health and Long-Term Care. The graded responses to the assessment will be weighted and scored by ISMP Canada, and the results will be returned to individual hospitals. Hospitals that conduct the self-assessment for the first time will use the initial assessment score as a baseline.

Since medication use is complex, the characteristics of the system must be assessed by a multidisciplinary group of health care practitioners. The process of performing the self-assessment thus becomes an educational tool for heightening awareness of safe medication systems within an organization and across various disciplines.

The safety self-assessment can be used as part of a strategic planning process for medication-system improvements in individual hospitals. The characteristics that define safety within the system can guide the development of specific improvement goals and objectives for an organization. Because the Hospital Medication Safety Self-Assessment tool is a measure of the level of medication safety within a hospital system, the scoring of each of the characteristics and the major elements, as well as the aggregate data, can be used as a health care quality indicator for patient safety. Performing the self-assessment periodically (e.g., annually) will document progress toward medication-system improvements. The assessment could also be used to measure the impact of a specific intervention. For example, selected characteristics could be measured before and after the addition of a decentralized pharmacist to a patient care area. After a 1-year period, the changes in selected characteristics could be measured to determine the impact of the additional pharmacist services.

If you are interested in obtaining a copy of the Hospital Medication Safety Self-Assessment and directions for use, send a message to ISMP Canada (info@ismp-canada.org).

[Note: References appear on p. 54.]

The information presented below is taken directly from *ISMP Medication Safety Alert!*, volume 6, issue 16, August 8, 2001.

#### It's Time for a New Model of Accountability

Healthcare is struggling to come to terms with the role of accountability in a non-punitive, systembased approach to error reduction. Even when we seem to understand the system-based causes of errors, it's still hard to let individuals off the hook. We ask, "How can we hold individuals accountable for their actions without punishment?" Some have even suggested that a non-punitive approach to error reduction could lead to increased carelessness as people learn that they will not be punished for their mistakes. In our recent survey on perceptions about a non-punitive culture, 21% of respondents agreed with this premise and another 16% felt that a non-punitive approach to errors absolves staff of



personal responsibility for patient safety (see our next issue [of *ISMP Medication Safety Alert!*] for a full report about our survey findings). However, a non-punitive, system-based approach to error reduction does not diminish accountability; it redefines it and directs it in a much more productive manner.

Typically, when an error happens, all accountability falls on individuals at the sharp end of an error where the caregiver/patient interaction occurs. But accountability — not for zero errors, but for making patient safety job one — should be equally shared among all healthcare stakeholders. In part, Webster's defines "accountability" as an obligation to provide a satisfactory explanation, or to be the cause, driving force, or source. These definitions offer a glimpse at a more appropriate patient safety accountability model. In this model, accountability lies not in performing perfectly, but in identifying safety problems, implementing system-based solutions, and inspiring and embracing a culture of safety. Below are examples.

Individuals in the workforce should be held accountable for speaking out about patient safety issues, voluntarily reporting errors and hazardous situations, and sharing personal knowledge of what went wrong when an error occurs. On the other hand, healthcare leaders should be held equally accountable for making it safe and rewarding for the workforce to openly discuss errors and patient safety issues. They must hold regular safety briefings with staff to learn about improvement needs, discuss strategic plans, and identify new potential sources of error. When the workforce recommends error prevention strategies, leaders must support them and provide the means necessary within a reasonable timeframe to implement technology and other system enhancements to improve efficiency and safety. Leaders should be held accountable for understanding and addressing barriers to safe practice such as distractions and unsafe workloads. Likewise, the workforce must be empowered to ask for help when needed and be willing to change practices to enhance safety and quality. Leaders should position patient safety as a priority in the organization's mission and engage the community and staff in proactive CQI [continuous quality improvement] efforts, including an annual self-assessment of patient safety. The workforce should be held accountable for working together as a team, not as autonomous individuals. Finally, leaders and staff alike need to follow the safety literature continuously and offer visible support to their colleagues who have been involved in errors.

This model of shared accountability spreads far beyond the walls of individual healthcare settings to encompass licensing, regulatory and accrediting bodies; the federal government and public policy makers; the pharmaceutical industry; medical device and technology vendors; schools for medical training; professional associations; and even the public at large. These oftenoverlooked participants share equal accountability for doing their part to error-proof healthcare. For example, regulatory, accrediting, and licensing bodies should be held accountable for adopting standards related to error reduction recommendations that arise from expert analysis of adverse events and scientific research. Purchasers of healthcare should provide incentives and rewards for patient safety initiatives. Companies that produce medical devices, pharmaceutical products, healthcare computers and software, and other health-related products should be held accountable for pre-market evaluation and continuous improvement in the design of devices, products, and labels and packages. Educators should seek out patient safety information and use it in curriculum design. Professional organizations should support local and national voluntary reporting systems and disseminate important patient safety information to their members. The public should ask questions and stay informed about their care and ways to avoid errors.

Who can argue with the multidimensional nature of medical care? Isn't it time to accept a multidimensional, shared accountability model for patient safety? Organizational leaders and other stakeholders who simply hold the workforce accountable when an error happens are inappropriately delegating their own responsibility for patient safety. We must stop blaming and punishing those closest to an error, and instead accept a model of shared accountability to collectively translate our sincere concern for patient safety into effective system-based error solutions.

#### References

- Kohn LT, Corrigan JM, Donaldson MS, editors. *To err is human: building a safer bealth system*. Washington (DC): National Academy Press; 1999.
- Voelker R. Hospital collaborative creates tools to help reduce medication errors. *JAMA* 2001;286:3067-9.

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