

## **The Dawning of an Open Culture**

**By David U**

The Letter to the Editor of the New England Journal of Medicine (Vol.346, No.15, April 11, 2002) by Dr. Kozer and his colleagues has drawn much attention from the health-care system and the media. In the letter, Dr. Kozer reported a total of 20 medication errors involving a 10-fold overdose of drugs at the Hospital for Sick Children from April to November 2000. Most of the drugs involved were potent medications. In six of the 20 cases, they were potentially deadly. In nine other cases, the errors could cause serious harm. Immediately after the publication, two media reporters contacted me to comment on the article. I would like to share my observations with the readers in this column.

First of all, let me congratulate Dr. Kozer and his colleagues on their openness to discuss errors and their recognition that only through reporting and sharing information can we hope to learn how to avoid recurrences in our hospitals. I hope this open culture and the desire to make more changes and improvement will serve as a model for others to follow. It is only through identifying potential problems and sharing our lessons that we can learn from mistakes and ultimately make our medication systems safer. The Hospital for Sick Children is making patient safety a top priority. Specifically, they are one of very few hospitals in Canada using a computerised physician order entry system.

It is important to measure patient safety improvement efforts. One such measurement is through scientifically designed observational or chart review error detection methods. Alternatively, a good voluntary reporting program that does not 'benchmark' the numbers but does review aggregate data and takes the time to consider 'root causes' of accidents can be an effective approach. Ultimately, the measurement can then take the form of 'system improvements implemented' and outcome evaluations of the improvements. Accumulating statistics that become benchmarks can be misleading and is proven to discourage reporting of errors. The important thing is that we need to encourage reporting of errors and potential errors so that we can learn from them. Such a goal can be accomplished through open and non-blaming cultures.

Hospitals use continuous improvement projects to make the medication use systems safer and to prevent harm and injuries to our patients. The fact that the Hospital for Sick Children has a unit dose drug distribution system, a computerised physician order entry system (CPOE), as well as having clinical pharmacists available on patient care areas to monitor and provide consults to physicians and nurses, demonstrates their concern for medication safety. Indeed, their checking system had intercepted 15 of the 20 described 10-fold over-dosing errors.

The author of the Letter in the journal also suggests that despite implementing some of the newer technology such as CPOE, these errors still occurred. It should be recognized that technology is not a panacea. In fact, some automation technology is a more complex than a manual system. It needs to be implemented with care and used appropriately. Effective analysis tools such as failure mode and effects analysis can be used to identify potential new problems. With any new system intervention, there can be new

opportunities for error. All staff need to be trained to be on guard for weaknesses in the system and opportunities for system improvements. Specifically, in the case of CPOE, the technology should be augmented by a clinical decision support system, which aids physicians to select the most appropriate drug and dose for the patient. It is good news to learn that presently such as clinical system is being implemented at the Hospital.

Reaching the ultimate goal of a 'culture of safety' requires dedicated employees, caring and alert pharmacists, nurses and physicians, as well as, organisational leadership. The Hospital for Sick Children is demonstrating all these attributes for quality care and patient safety.

*David U is the President of the Institute for Safe Medication Practices Canada.*