

US creates blame-free adverse event reporting

New legislation that allows clinicians to disclose mistakes anonymously is expected to increase reporting of medical errors in the United States.

The Patient Safety and Quality Improvement Act of 2005 enshrines in federal law what many hospital systems and organizations already have in place, a “root cause analysis” that scrutinizes critical incidents, reports and shares findings, and makes improvements without pointing fingers at doctors and others.

The law also prohibits employers and accrediting organizations from taking action against health care providers who disclose errors, except in cases where the law may have been broken.

The American Medical Association applauds the Act. “When physicians can report errors in a voluntary and confidential manner, everyone benefits,” says President Dr. J. Edward Hill. “This law strikes the proper balance between confidentiality and the need to ensure responsibility throughout the health care system.”

The Act, which was signed July 29, 2005, comes 6 years after the landmark Institute of Medicine (IOM) report estimated between 44 000 and 98 000 people die in US hospitals each year because of preventable medical mistakes. *To Err is Human: Building a Safer Health System* recommended a mandatory nationwide medical error reporting system.

Although such a system is still not in place, the IOM report did prompt the federal government to earmark more than \$50 million for patient safety research. Health associations in about 24 states now have medical error reporting systems, which served as a template for the federal legislation.

Breaking through the so-called “wall of silence” of the American medical system hasn’t been easy, say those who are trying to institute changes.



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Errors involving pharmaceuticals are among the most common in US hospitals.

“Denial is a powerful defence mechanism,” says Jim Conway, who was hired by the Dana-Farber Cancer Institute in Boston as its chief operating officer in 1995 to implement new institutional practices.

“Leaders who fail to examine the ugly mistakes that occur in their hospitals every day allow these ulcers to fester and miss the opportunity to learn and heal. Executives who believe that accidents and injuries are confidential and hidden from the troops are deeply misguided.”

In 1994, a number of media reports exposed grievous instances of medical errors, including the case of Betsy Lehman, a 39-year-old health columnist for *The Boston Globe*, who died at Dana-Farber after an overdose of chemotherapy. Instead of a specific total dose over 4 days, Lehman received the entire dose on each of the 4 days.

Dana-Farber invested US\$11 million in new safety measures, including a computerized drug-ordering system that triggers alarms when doctors punch in potential overdoses. Conway, who now works at the non-profit Institute of Healthcare Improvement (IHI) in Boston, says convincing the staff that they wouldn’t be fired or punished for admitting mistakes was a major hurdle.

Other industries, such as airlines, that have substantially reduced errors have all created a blame-free environ-

ment for reporting mistakes.

“We’ve learned that it’s not that people are causing the error; it’s the system,” says Charlene Hill, spokeswoman for the Joint Commission on Accreditation of Healthcare Organizations.

And systems fail for many reasons, says Robert Helmreich, a human factors expert who’s led studies of aviation error at the University of Texas at Austin. Systemic failures, in aviation as in medicine, can arise from inadequate equipment, flawed procedures and fatigue-inducing schedules.

Individuals in the 2 professions also have a similar difficulty in coming to terms with imperfection, Helmreich says. Admitting fallibility is a first step in error prevention.

Dr. Jan Davies, a consultant to the Calgary Health Region on reporting patient harm, agrees with Helmreich.

In addition to physician’s beliefs, there are practical reasons for not reporting incidents, she says. In many places it is used as a tool for performance assessment, which is a disincentive to report.

“Canada may need to start with anonymous reporting to encourage people to do it,” says Davies, a professor of anesthesiology at the University of Calgary.

“This sort of legislation is definitely a step in the right direction — as long as the results will be used to identify and

correct system safety deficiencies,” she adds. In Canada, similar legislation would have to originate on a provincial/territorial basis.

Whether laws and lessons will create a safer and more open medical system in the US remains to be seen.

The Massachusetts Department of Public Health is leading the way with its new Betsy Lehman Center for Patient Safety and Medical Error Reduction. The centre collects and publicizes reports of medical error, employs an ombudsman to help patients and families harmed by medical mistakes and educates health care providers about the best ways to prevent errors. — Patricia Guthrie, Atlanta, Georgia

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Provinces providing more childhood vaccines

The Public Health Agency’s National Immunization Strategy has moved closer to its goal of ensuring equitable access to childhood vaccines, following a \$300-million injection from Ottawa.

In 2004 the federal government committed the money, to be spent over 3 years, to help provinces and territo-

ries introduce new childhood and adolescent vaccines for pneumococcal conjugate, meningococcal conjugate, varicella and pertussis.

As of June 2005, an additional 250 000 infants and 200 000 adolescents had access to 1 or more of the publicly funded

new vaccines, says Dr. Theresa Tam, associate director of respiratory illness with the Public Health Agency’s Immunization and Respiratory Diseases Division.

Publicly funded coverage of vaccines has increased among the jurisdictions (see Table 1). For example, in 2003 only 3 jurisdictions provided the pneumococcal vaccine. Now every jurisdiction except the Northwest Territories covers. The vaccine against *Streptococcus pneumoniae*, a major cause of bacteremic pneumonia, earaches and meningitis, reduced the infection rate by 81.6% in children under age 2 in the 2 years since Alberta covered the vaccination (*CMAJ* 2005;173[10]: 1149-51).

All the provinces except PEI also cover influenza vaccines for children aged 6–23 months. All jurisdictions except Quebec and the Yukon Territory provide varicella

vaccine for children between 12–18 months, and every jurisdiction except Nunavut covers meningococcal conjugate either for infants or adolescents.

The National Immunization Strategy includes a committee of federal and provincial/territorial representatives

who discuss future vaccination needs, coverage requirements, new vaccines, existing gaps and the need for studies.

The committee also examines potential public health threats such as the anti-immunization lobby. Public and professional education is key to dealing with the concerns some parents have that vaccinating their children will lead to adverse events or serious illnesses.

“We have to take these concerns seriously, and providing safe, effective vaccines is key to the whole strategy,” says Tam.

The Public Health Agency is also developing strategies to target under-immunized populations such as First Nations and immigrant communities. — Laura Eggertson, *CMAJ*

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Publicly funded vaccine coverage has increased across Canada.

Table 1: Change in vaccination programs funded by Canadian jurisdictions, 2003 to 2005

Province/Territory	Childhood vaccines*	Meningococcal conjugate	Adolescent pertussis	Pneumococcal conjugate	Varicella	Influenza
British Columbia	■	●	●	●	●	●
Alberta	■	■	●	■	●	■
Saskatchewan	■	●	●	■	■	●
Manitoba	■	●	●	●	●	●
Ontario	■	■	●	●	●	●
Quebec	■	■	●	■		●
New Brunswick	■	■	●	●	●	●
Nova Scotia	■	●	●	●	■	●
Prince Edward Island	■	■	●	■	■	
Newfoundland and Labrador	■	●	■	●	●	●
Yukon Territory	■	●	●	●		●
Northwest Territories	■	●	■		■	●
Nunavut	■		■	■	■	●

Note: ■ = vaccines publicly administered as of 2003; ● = additional vaccines publicly administered as of September 2005.

*Diphtheria, hepatitis B, *Haemophilus influenzae* type b, measles, mumps, pertussis, polio, rubella and tetanus.

Sources: Health Canada (Jan. 6, 2003) and Canadian Nursing Coalition on Immunization (September 2005).