

Primum non nocere (First, do no harm): How do we improve patient safety?



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In Canada, more deaths occur from adverse events in hospitals than from breast cancer, motor vehicle accidents, and AIDS combined,¹ and many of these adverse events have been judged preventable.² Every day, thousands of errors occur in the Canadian health care system. Fortunately, most do not result in serious harm. Only a small proportion of these errors cause injury, disability, or death and are brought to public attention. We do not commit these errors intentionally, but with the increasing complexity of health care delivery, our patients are increasingly exposed to actions or non-actions that cause harm. So what can we do about this huge problem?

Our traditional approach has been to identify the people making the error and to punish them; however, it has become increasingly clear that we can be more productive focusing on the systems used to provide care. If these systems can be set up in ways that make errors less likely and that catch those errors that do occur, the safety of our patients will be substantially improved.

While much attention has been focused on errors that occur in hospitals,² errors are by no means limited to hospital settings. Errors in follow-up and diagnosis are especially important in nonhospital settings, where the number of patient encounters considerably exceeds those in hospital settings and the number of errors is like-

ly to be greater.³ Opportunities to improve health outcomes in the outpatient setting are likely to exceed those seen in hospitals.

In this issue on patient safety, we have highlighted the extent of the problem and some of the possible solutions. In the first article, Drs Ross Baker and Peter Norton build on their landmark 1994 paper and discuss adverse events in Canadian hospitals. While it is oddly reassuring that Canada is as bad as everywhere else, it is also plain that we do not have enough evidence yet to solve the problem.

In the second article, Dr Bruce Carleton and Ms Anne Smith consider errors associated with the administration of medication. This has long been recognized as a leading cause of adverse events (second most common in the Canadian Adverse Events Study), and that the problem goes much further than just accidentally administering the wrong drug or wrong dose of a drug. Adverse drug reactions can have debilitating and lethal consequences, and rank as one of the top 10 causes of death and illness in the developed world,⁴ claiming 100 000 to 218 000 lives in the United States annually.⁵

The third article in this issue describes the launch and the progress to date of the Canadian Patient Safety Institute (CPSI)—a significant federal initiative to provide real improvement in patient safety. The institute is now responding to the need for a clear

expression of national goals and standards, and a significantly enhanced investment in training, technology, and the expansion of research into the complex field of patient safety. CPSI staff and stakeholders know there are unlikely to be simple solutions to current safety problems.

While advancing technology is one of the causes of increasing complexity in health care, it may also offer part of the solution to error prevention. In the final article in this issue, Dr Mark Ansermino takes a rather philosophical look at how technology may have an impact on patient safety in the long term. Reducing errors requires that clinicians be made aware of the magnitude of the problem and recognize that this is a normal risk of fallible human behavior. We need to change the way we work and to recognize that we *are* able to make things better.

Patient safety can only be achieved by working toward a culture of safety that focuses first on patients, and by completing more research to determine which interventions actually change outcomes.⁶ Improvement in patient safety requires a new mindset capable of recognizing that real solutions will come from an understanding of the hidden opportunities behind the errors.

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